RETHINKING WIND ENERGY IN ITS SOCIAL CONTEXT: CONFLICTING PERSPECTIVES AND PLANNING PROBLEMS – THE KARABURUN EXPERIENCE

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ABSTRACT

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As a result of global concerns about energy related environmental problems, the use of renewable energy resources has gained great importance. The renewables are widely recognized as an effective tool for limiting energy related emissions and a fundamental component of sustainable development. Among these, especially wind energy has considerable involvement. Due to this, major national policies intend to support wind energy and wind energy installations have also started to grow with an expanding rate. Likewise in Turkey, wind energy policies have gained importance as wind emerges as a favourable domestic resource which gives the opportunity to Turkey for providing energy for its developing country. Therefore, the investments supported by national government started to increase and installations started to spread around certain cities mainly choosing location from rural areas. In this sense, Karaburun appears as one of the important targets of large-scale wind energy investments. However, the expansion of wind energy has launched a major controversy on wind energy and its implementation. Even though the developments are environmentally friendly, they started to intrude into unspoiled natural and rural areas. So, rapidly expanding developments have attracted some segments of the local

community and leads to strong oppositions. As a result, a debate started to grow between people who think differently about the issue and leads to a conflictual situation about wind power.

As wind energy is an important energy resource, wind farm conflict becomes an important problem waiting to be solved. Understanding the nature of conflicts by assessing the problem in terms of both technical and social aspects can contribute to the solution by enabling selection of most effective ways for conflict resolution. The purpose of this thesis is to understand the reasons of support and opposition more deeply, therefore to understand main reasons behind the major controversy between agents. By this, it aimed at answering why conflicts are emerged in wind farm development processes in Karaburun and how this controversy can be minimized or resolved.

Keywords: Renewable energies, Wind energy, Wind farm conflict, Conflict resolution, Planning processes, Karaburun, Turkey

ÖZ

RÜZGAR ENERJİSİNİ SOSYAL BAĞLAMINDA YENİDEN DÜŞÜNMEK:
ÇATIŞAN PERSPEKTİFLER VE PLANLAMA PROBLEMLERİ
– KARABURUN DENEYİMİ

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Enerji ile ilgili çevre sorunları hakkında küresel kaygıların bir sonucu olarak, yenilenebilir enerjilerin kullanımı büyük önem kazanmıştır. Yenilenebilir enerjiler yaygın bir şekilde enerji kaynaklı emisyonları sınırlandırmak için etkili bir araç ve sürdürülebilir kalkınmanın temel bileşeni olarak kabul edilmektedir. Bunların arasında, özellikle rüzgar enerjisinin dikkate değer bir yeri vardır. Buna bağlı olarak, başlıca ulusal politikalar rüzgar enerjisini desteklemeye ve rüzgar enerjisi tesisleri de büyüyen bir oran ile artmaya başlamıştır. Aynı şekilde Türkiyede de, rüzgarın gelişmekte olan Türkiye için enerji sağlayan elverişli bir yerli kaynak olması, rüzgar enerjisi politikalarının önem kazanmasına neden olmuştur. Dolayısıyla, devlet destekli yatırımlar artmaya ve rüzgar enerjisi tesisleri belirli şehirlerin genellikle kırsal alanlarında yayılmaya başlamıştır. Bu anlamda Karaburun da büyük ölçekli rüzgar enerjisi yatırımlarının önemli hedeflerinden biri olarak karşımıza çıkmaktadır. Fakat, rüzgar enerjisinin yayılımı, rüzgar enerjisi ve uygulanmasında önemli bir tartışmaya neden olmuştur. Bu yatırımlar çevre dostu olsa da, bozulmamış doğal ve kırsal alanlara nüfuz etmeye başlamıştır. Dolayısıyla, hızla genişleyen yatırımlar yerel toplumun bazı kesimlerinin dikkatini çekmiş ve rüzgar enerjisi karşısında güçlü

muhalefete yol açmıştır. Sonuç olarak, konu ile ilgili farklı düşünen aktörler arasında bir tartışma büyümeye başlamış ve rüzgar enerjisi konusunda çatışmaya yol açmıştır.

Rüzgar enerjisi önemli bir enerji kaynağı olduğu için, rüzgar enerjisi çatışması çözülmeyi bekleyen önemli bir problem olmaktadır. Hem teknik hem de sosyal açıdan sorunu değerlendirerek çatışmaların doğasını anlamak, çatışmanın çözümü için en etkili yolların seçimini sağlayarak çözüme katkıda bulunabilir. Bu tezin amacı, destek ve muhalefetin nedenlerini daha derinden anlamak ve alanda yaşanan tartışmanın arkasındaki temel nedenleri anlamaktır. Bu sayede, Karaburunda rüzgar enerjisi süreçlerinde çatışmaların neden ortaya çıktığı ve bu tartışmanın nasıl minimize edileceği veya çözülebileceği sorularını cevaplamak amaçlanmıştır.

Keywords: Yenilenebilir enerjiler, Rüzgar enerjisi, Rüzgar enerjisi çatışması, Çatışma çözümü, Planlama süreçleri, Karaburun, Türkiye

To my grandmother,

who taught me to stand strong

against anything in life

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LIST OF ABBREVIATIONS

EC	: European Commission
EIA	: Environmental Impact Assessment
EMRA	: Energy Market Regulatory Authority
EU	: European Union
EWEA	: European Wind Energy Association
GHG	: Greenhouse Gas
GWEC	: Global Wind Energy Council
IDA	: Izmir Development Agency
IEA	: International Energy Agency
IMM	: Izmir Metropolitan Municipality
IPCC	: Intergovernmental Panel on Climate Change
KCC	: Karaburun City Council
MENR	: Ministry of Environment and Natural Resources
MEU	: Ministry of Environment and Urbanisation
MFA	: Ministry of Foreign Affairs
NGO	: Non-Governmental Organisation
NIMBY	: Not In My Back Yard
SEPA	: Special Environmental Protection Area
TWEA	: Turkish Wind Energy Association
UNFCCC	: United Nations Framework Convention on Climate Change

CHAPTER I

INTRODUCTION

1.1. Aim of the Thesis

As a result of global concerns about energy related problems, the need for energy production from renewable energy resources comes into prominence. There is an increasing global support for shifting from fossil fuels to renewables in the world and wind energy has an important role in this sense. However, even though there is a general support for wind power, there is also an increasing problem of local oppositions for particular wind farm developments as a result of local concerns. These strong local oppositions started to be a significant barrier to further wind power installations and causes conflictual situation both for wind energy developments and local environments. Therefore, this conflictual situation, which is called wind farm conflict, appears to be an important issue faced by many countries and a very important problem waiting to be solved.

The same problem is seen in Turkey and in Karaburun district of Izmir Province, as an important problem to deal with. In recent years, Turkey is trying to increase the share of wind energy in its energy production and electricity generation hence, wind energy investments started to increase. However, rapidly expanding developments started to collect local oppositions. Karaburun too, stands out as an area with strong oppositions towards wind farm developments with the concern of preserving local environment and the unique natural characteristics it has.

This thesis mainly concerns with the conflicts behind wind farm developments in general and behind wind energy investments in Karaburun in particular. As there is strong opposition to wind energy in Karaburun, the main aim

of the thesis is to understand the reasons behind the conflicts on wind farm developments in Karaburun and to find out possible solutions to resolve or minimize these conflicts. Following the aim, the research will try to construct the rationale behind the conflicts by taking into consideration all aspects of the situation.

For this purpose, main indicators of the thesis are defined as the negative externalities of wind farm developments on the area, the development processes (including planning and implementation processes) and the positions and intentions of each agent involved in the process. The negative externalities of wind energy developments can be defined as the impacts of wind turbines on residents, on environment and on main economic activities of local people in Karaburun, which are determined as agriculture, husbandry and alternative tourism. Relating to this, the concerns of local residents come forward as another important indicator which can help to understand the reasons of conflicts. These concerns can be related to the negative externalities of wind turbines, but they can also be resulted from visual disturbance (Wolsink, 2000), different values added on landscape and environment (Gipe, 1995, Wolsink, 2007), procedural problems (Toke, 2007) and different perspectives on nature (Woods, 2003). Therefore, considering all dimensions becomes important in order to understand the reasons of oppositions. As Karaburun is an area with highly qualified environment, and wind energy is referred to as environmentally friendly technology, different perspectives of different interest groups become very important in this conflict. Consequently, taking all these into account, this thesis will demonstrate the reasons of the conflicts on wind farm developments in Karaburun.

1.2. Justification

Meeting increasing energy demand of the world's growing population and level of urbanization in a sustainable way is a major issue in the world's most recent agenda. Renewable energies, especially wind energy became very important in this manner. The renewables started to be seen as alternatives to fossil fuels as they can fulfil the energy demand without harming the environment (Aydın, Kentel, Düzgün,

2013). Therefore, a shift from fossil fuels to renewable energy resources started in many national and international agendas and renewables are expected to become a significant component of many national energy plans of both developed and developing countries (Gipe, 1995; Aydın et al., 2013). In these renewable energy resources, wind energy appears as an important type of energy having the most impressive growth in many countries (Wüstenhagen, Wolsink, Bürer, 2007) and the investments supported by incentives are increasing.

However, wind energy investments come across with a powerful barrier which are defined as local oppositions and resistance. Even though the overall support for wind energy is high, there are local oppositions to particular wind farm projects (Gipe, 1995; Bell, Gray, Haggett, 2005) which create a conflicting situation for both locality and wind energy investments.

One common answer for the reason of this kind of opposition in literature is NIMBY (Not in My Back Yard) syndrome (Wolsink, 2000; Burningham, Barnett, Thrush, 2007). In relation with wind power developments, the term NIMBY refer to oppositional attitude of people towards particular wind energy developments, while they are in favour of wind power in general. However, the term has been found insufficient to explain the situation because of generalising local opposition by only taking into account the behaviours motivated by selfishness and individual utility (Wolsink, 2000, Van der Horst, 2005, Wolsink, 2007a). Most of the researchers agree that, there are many reasons of local oppositions and NIMBY can only be one in many possible explanations.

In response to this NIMBY explanation, there are several statements from scholars emphasising other determinants in local oppositions. According to Wolsink (2000; 2007a) the externalities of wind farms such as noise pollution, visual disturbance, hazard to natural areas and species have impact on the public attitudes and the visual disturbance and aesthetical concerns on landscape is dominant factor of the attitudes towards wind power developments. The change caused by wind turbines can be evaluated as objectionable. Relating to this, Devine-Wright (2009) linked this situation to place-protective action which occurs when place attachment and place identity are damaged. The change occurred by a wind farm development

causes threat to symbolic meaning associated with a place in a particular area and leads to an emotional response and opposition.

According to other explanations, institutional factors gain importance. Planning and decision making processes has an important role in local oppositions (Toke et al, 2008) especially if they constitute top-down and hierarchical way of decision-making on particular developments. Related to this, siting decisions which seek local concerns about wind turbine location determine higher success rate of investments (Wolsink, 2007). Furthermore, trust and justice issues in development processes are important determinants of acceptance in locality. Wüstenhagen et al. (2007) emphasises the role of distributional justice, procedural justice and community trust in development processes for community acceptance of wind energy investments.

Alternatively, there are other explanations approaching to the debate from a different perspective. Woods (2003) argues that, in rural areas or in environmentally valued places, concept of development divides local groups and agents into two, and both sides has different environmentalist visions on nature and rural. The conflict mainly based on different perceptions of nature and rural; preserving the pure environment or rural as it is or to use the environment or rural for development purposes. These two different perspectives confront local residents and developers and leads conflict on the issue.

As briefly mentioned above, there are many explanations in literature on the reasons of wind farm conflicts and local oppositions, however every particular case will still have its own dynamics. Generalizing the reasons for conflicts can be misleading in most cases (Walker, 1995). The attitudes can be highly variable and depends on very different conditions that each case has specifically therefore, more research is needed to gather a clearer and more sensitive understanding of the formation and development of public attitudes in different cases (Walker, 1995).

The case for Turkey is not very different from what the world is experiencing about wind energy. As being one of the developing countries, Turkey is a country with high energy demand and accordingly is a country that needs more energy production. Producing energy from renewables seems important for Turkey

because of being favourable domestic resource. However, locality shows strong oppositions to these intense wind energy investments with the intention of protecting their local environment. This problem comes into question in recent years in Turkey, however there isn't any research done to investigate the reasons of local oppositions. That's why it is very important to have a deeper understanding on local oppositions against wind energy developments in Turkey, as wind energy investments are spreading rapidly.

The case of Karaburun selected for this thesis comes to the forefront with its natural and rural characteristics that needs to be protected however, there are dense wind farm investments in the area including both existing and proposed ones. The externalities of wind turbines on natural environment and landscape and the externalities of close turbines to the villages and living environments pose a threat to the valued environment of Karaburun. Depending on this, there are strong oppositions against both existing and proposed wind farm investments. Besides, Karaburun case has the importance of being the first case in Turkey in which local residents started legal struggle against wind energy projects in the area and influence other local oppositions against wind farm developments in other regions. Therefore, it seems a very unique case in Turkey waiting to be understood and to be solved. It is very important to understand the main reasons behind local oppositions to wind farm developments in Karaburun to be able to solve the problem both for the future of Karaburun and the future of wind energy investments in Turkey.

1.3. Methodology

The research will focus on the reasons of the conflicting situation in Karaburun so the research question of the thesis is formed as: "What are the main reasons behind the conflicts on wind farm developments in Karaburun district?" The research question is also supported by the sub-questions in the following;

- "What are the factors that influence local oppositions against wind farm developments in Karaburun?"

- “What are the externalities of wind farm developments and how local people are affected from these externalities?”
- “What are the positions and intentions of local people and each agent involved in the process?”

Thereafter, with the question of “How can this conflict be resolved or minimized?” possible solutions for this conflicting situation will be investigated.

The research of the thesis tends to be more concerned with interpreting the situation and gaining an understanding on its reasons. The study will inquire subjective data such as opinions, concerns, perspectives of people involved in the process of conflict and will try to have in-depth understanding of underlying factors of the situation. That’s why; the research stands as qualitative and exploratory. Additionally, since the thesis focuses on a particular case; the study design will be case-study design in which the research will try to analyse specific case in its own social context and provides in-depth understanding of it.

On this basis; the research formulated mainly in three steps;

First - Literature review: To be able to have a theoretical understanding on the issue, literature review has been done. In literature review part, the aim was to understand the conflicts related to wind energy and have a general idea on the field. Related literature was collected to find explanations for the reasons of conflicts from prior works. Also with the literature, the externalities of wind energy investments and their relations with conflicts were reviewed. Lastly, the literature focusing on resolving or minimizing wind farm conflicts was scanned to find out possible solutions.

The literature includes mainly articles related with wind farm conflicts and books and book chapters about wind energy in general. The literature was searched with keywords such as; “wind energy”, “windfarm conflicts”, “windfarm oppositions” and “public attitudes”, additionally “impacts of wind energy”.

Also the previous theses from Turkey related to the study were searched from the archive of National Thesis Centre of Council of Higher Education. However, there aren’t any thesis studied wind farm conflicts found in the database. Only two theses on environmental impacts of wind energy was found, and collected.

Second - Preliminary data collection: To be able put a general information about wind energy in the world and in Turkey, preliminary data was collected from national or international web-based sources like international energy agencies, wind energy associations, etc. Additionally, to draw a frame for wind energy status of Turkey, statistical information, reports and other information were collected from related national web-based sources.

Third - Case study: As the research focuses on a particular case for wind farm conflict in Turkey, data collection in the third step is an important phase of the thesis. As previously mentioned, the subjective opinions, concerns, perspectives of people involved in the process is an important determinant of the conflict, that's why methods of collecting subjective inputs are selected. This qualitative data collection process will give an insight of the situation and provides profound analysis of it.

I. In-depth interviews: This is the primary method of collecting information. In order to understand the situation in its own context, in-depth interview method is selected as it is an efficient way of gathering subjective information. The interviews were designed as semi-structured interviews with open-ended questions which allows to conduct in-depth analysis. As the information from each agent is special, interviews were designed appropriate for each interviewee accordingly. That is why, an interview guide with list of questions and topics to be covered was prepared. In this phase, 35 interviews were conducted. The interviewees are the actors involved in wind farm conflict process in Karaburun and they can be grouped as follows;

- Local residents (natives and new comers)
- Representatives of influential local and external NGOs
- Representatives of wind farm developers
- Representatives of central and local governmental institutions
- Intermediary institutions such as universities, chambers, etc.

II. Participant observation: This method was used to observe situations that might give insight into major question of the study with the role of observer as participant. As the process is very conflicting in Karaburun, there are many events related to the issue such as protests, meetings of City Council or other institutions

which should be observed. Additionally, there are public participation meetings organised in the process of EIA (environmental impact assessment) which should be observed as well, since all the stakeholders take part in these meetings. The main topics emphasised or causes conflict in these events were observed, collected and analysed with this method.

III. Media search: In this phase, the web-based archives of a national newspaper (Hürriyet) and a website of a local organisation (Karaburun City Council) were searched. The news about wind farm conflict in Karaburun were collected and scanned to be able to have a general idea on the issue.

IV. Collecting secondary data: By this method of data collection, the written documents such as EIA reports of the projects, expert reports presented to the lawsuits and court decisions was collected. Additionally, written documents obtained from Municipality and other institutions was also collected and used for analysis.

V. Collecting visual documents: This collection process was used to present the existing situation in Karaburun, mainly the location of wind turbines. This phase includes taking photos of wind turbines, their positions on landscape or on agricultural land, gathering photos that have already taken by other people in the process and gathering satellite photos from Google Earth.

1.4. Content

This thesis is organised as seven chapters including Introduction part presenting the core of the thesis by introducing aim, justification and methodology and Conclusion part presenting a summary of the findings from the case selected.

Each chapter tries to give detailed information about the facts related to wind energy and wind farm conflicts. After the Introduction part, Chapter II is formulated as ‘General Framework’ which gives general information about wind energy developments. The first part of the Chapter II explains the importance of wind energy developments while giving emphasis to global concern and second part of the Chapter II explains possible problems caused by wind energy developments in particular areas while giving emphasis to local concern. Therefore, this part provides

basic information for the main problem of the thesis; conflictual situation resulted from different concerns at different levels. Afterwards, 'Theoretical Framework' was given for wind farm conflicts in Chapter III which discusses theoretical findings in the literature about the reasons of conflicts in wind energy issues. This Chapter provides an understanding on the issue; how the situation is realized in different conditions and in different contexts. Later, starting from an understanding on the issue, second part of the Chapter III provides theoretical explanations on possible solutions for achieving conflict resolution or minimisation.

After giving fundamental information, the Case selected for this thesis is represented in the following chapters. In Chapter IV, there will be detailed information on the Case selected. First part of the Chapter IV presents general characteristics of Karaburun district with particular emphasis on the important features of the district and the villages. Second part of the Chapter IV presents the current situation of wind farm developments in Karaburun. Following these, Chapter V represents positions and intentions of each agent involved in the process while constructing the rationale behind the different views on wind energy developments in the area. Main aim of this chapter is to find out fundamental reasons of conflicts related to different actor positions on the issue. Lastly, Chapter VI provides an overview of fundamental reasons for the wind farm conflict experienced in the area by summarising and integrating the findings from all previous chapters of the thesis.

CHAPTER II

GENERAL FRAMEWORK FOR WIND FARM DEVELOPMENTS

Over the past few decades, the importance of using alternative energy resources in meeting world's increasing energy demand has increased. The conventional energy resources cause a global concern in general as their usage is triggering a major threat called global warming. But on the contrary, renewables are considered as alternatives to conventional resources as they are clean and environmentally friendly. As a result, they have global support due to their potential to addressing climate change and the situation has prompted the world to increase the share of renewables in energy production. After all, renewables constitute a new market for the growing economy of the countries. Wind energy, in this sense, seems to have the leading position.

While all the renewables and wind energy have received a global support, local concerns have showed up in where particular wind energy developments have taken place. It is accepted that the benefits of renewables and wind energy is global and national however, the benefits at local level is a controversial issue. Allied with the uncertain benefits, wind energy developments have also some negative externalities on local level. Therefore, local concerns start to increase. These concerns are mainly structured on the negative impacts of wind energy developments on the environment, on humans and on the community.

This chapter mainly provides an insight on the global concern on global warming and the importance of wind energy developments then, local concerns and the impacts of wind energy investments on local environments. Therefore, it aims to draw a general framework by setting forth the grounds of the concerns of both sides.

2.1. Global Concern

Many people in the world have a common concern called global warming which is mainly resulted by the increasing rates of greenhouse-gas (GHG) emissions from anthropogenic activities. These GHG emissions have increased since the pre-industrial era and now they have reached at the highest level. Climate change resulted by increasing GHG emissions started to have widespread impacts on natural systems and it is recognized as the most important problem of today (IPCC, 2014).

Therefore, against the threat of global warming, whole world has been taking measures and at the core of the discussion energy has major place as energy related emissions represent the two-third of total GHG emissions (IEA, 2015a).

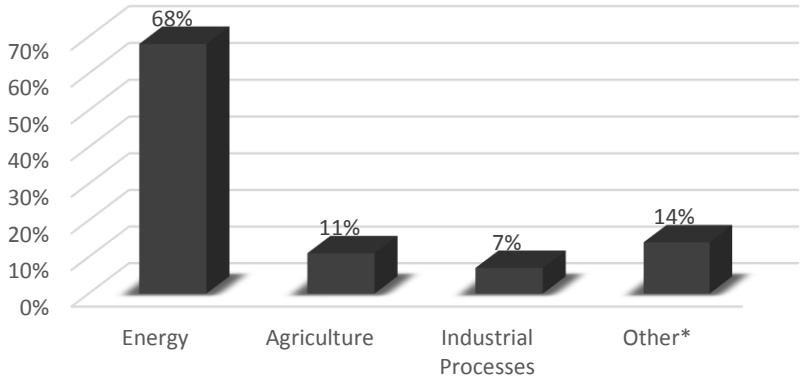


Figure 1: Shares of global anthropogenic GHG emissions (IEA, 2015b)

* Others include large-scale biomass burning, indirect N2O emissions from waste and etc.

Due to the development of industry and the fast increment of urbanisation and population in the world, the need for energy has rapidly increased in the last few decades (Yaniktepe, Savrun, Koroglu, 2013). From 1970s, the energy consumption (so as energy supply) has nearly doubled itself until 2013 and to date including today, most of the energy is supplied by fossil fuels. Consequently, the rate of fossil fuels has reached to 82% of total primary energy supply in 2013 (IEA, 2015b).

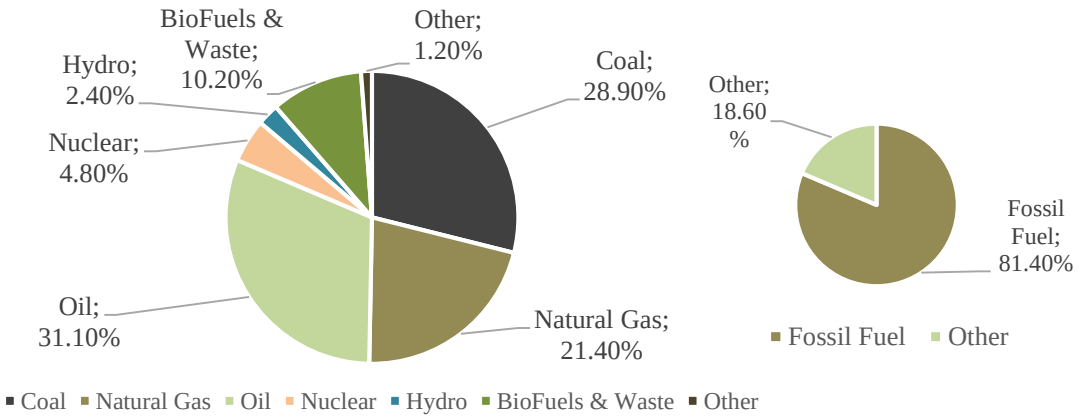


Figure 2: World total primary energy supply by fuel in 2013 (IEA, 2015a)

As it is already known that, fossil fuel combustion has high environmental impacts on our world such as pollution, depletion of resources and most importantly releasing high amount of CO_2 in the atmosphere which has the highest ratio among GHGs. Increasing energy production from fossil fuels led to an increase in CO_2 emissions in the atmosphere and over the past century emission levels have reached at highest levels. In the last 30 years, total CO_2 emissions from energy sector matched the total emission level of all previous years (IEA, 2015a). The increase in CO_2 emissions will lead towards a situation that threatens the world which is called global warming.

The energy demand continues to grow as the world is growing in terms of economy and population which two are the main determinants of energy consumption and production. Especially in developing countries there is a strong relationship between economic growth and emission growth as developing countries are very energy-intensive in terms of economic production (IEA, 2015a). The world's economy is estimated to grow in following years and the world's population is estimated to grow from 7.1 billion people in 2013 to 9 billion people in 2040 (IEA, 2015a). Accordingly, energy demand is increasing along with these two.

There are several projections on energy consumption and production made by the International Energy Agency by taking into account the government policies

of the countries. According to the Intended Nationally Determined Contributions (INDC) scenario which reflects the lower limits of the efforts of the countries, primary energy demand will grow by around 20% and energy-related CO_2 emissions by 8% in between the years 2013 and 2030. In the same years, the share of fossil fuels is expected to decline but stay around 75% in 2030 and the renewables are expected to have a major place in energy production (IEA, 2015a).

The International Panel on Climate Change (IPCC) has concluded that, in the absence of fully committed and urgent action, climate change will cause severe and irreversible impacts across the world (IPCC, 2014). That's why; beginning with international structures, many countries in the world are making an effort to take action for prevention of the world from climate change and reduction of its effects. The countries are trying to put an effort on limiting energy related emissions by expanding the use of low-carbon energy sources in energy production. Renewables in this sense have an expanding rate and they are seen as an important component of this international sustainable development process while they relieve global concern related to global warming at the same time.

2.1.1. International Agreements on Global Concern

The process of international action against climate change is fastened in 1990s with the foundation of the Intergovernmental Panel on Climate Change (IPCC) which prepares assessment reports on climate change and its effects. The first assessment report was released in 1990 and its primary message was the reality of global warming and the need for a global action against the threat of it (UNFCCC, 2014a). The report led to the foundation of the United Nations Framework Convention on Climate Change (UNFCCC) with the objective to stabilize greenhouse gas concentrations at a level that would ensure the world is not threatened (UNFCCC, 2014a). Later on, supranational agreements come to the fore in terms of taking international action towards the prevention of the world from the effects and they are still on the agenda of almost all national governments.

With the Kyoto Protocol adopted in 1997, international actions have fastened. The Kyoto Protocol, which is seen as a very important global step in the process of standing against the threat of climate change, entered into force on 16 February 2005 and become an important international agreement which legally binds the involved parties to set emission reduction targets in their countries. The Protocol was the first step towards global emission reduction programme that can stabilize GHG emissions, and it provides the basis for the future international agreements on climate change (UNFCCC, 2014b).

After the protocol, most current and an important action was taken in the Paris Agreement in 2015. The Paris Agreement seeks to strengthen the actions needed for a sustainable low carbon future. It acknowledges that climate change is a common concern of humankind and recognizes that the climate change is an urgent and irreversible threat to humanity and planet therefore, it requires an effective international response to accelerate the sustained reduction of GHG emissions. Main decision of the Agreement is to keep global average temperature increase to well below 2^{o} C above pre-industrial levels and to give effort to limit the temperature increase to 1.5^{o} C above pre-industrial levels (UNFCCC, 2015). To be able to achieve the goal of the agreement, significant investments are expected to be made especially in energy technologies.

Another international policy determinant of the world; the EU also determine its GHG emission reduction targets binding its member countries and concerning candidate countries. The EU has three targets on energy; short term targets by 2020, medium term targets by 2030 and long term targets by 2050. By 2020, the EU aims to reduce its greenhouse gas emissions by at least 20%, increase the share of renewable energy to at least 20% of consumption, and achieve energy savings of 20% or more. All EU countries must also achieve a 10% share of renewable energy in their transport sector. The long-term goal of the EU is to reduce GHG emissions by 80-95% when compared to 1990 levels by 2050 (EC, 2016).

Common emphasis of all these global actions and agreements is the reduction of energy related GHG emissions. The main motivation is mainly on the reduction of energy usage and decrease the level of energy production by fossil fuel

combustion. Therefore, in all agreements, there is strong emphasis on renewable energy deployment and energy efficiency. As the emphasis of these global outcomes is mainly on energy, the implications of these agreements are found mainly on energy policies of the countries.

2.1.3. The Rise of Renewables and Wind Energy

Main motivation behind the renewables is that they offer a way of meeting international obligations to reduce greenhouse gas emissions because of being clean and releasing very few amount of greenhouse gases. Therefore, they have a key role in the efforts to combat climate change. But at the same time, low-carbon technologies including renewables become an important economic sector serving for new investment types (Matthews & Paterson, 2005; Atlı, 2012). Because of all these, renewables have high public support and policy support and due to this, investments in renewables started to increase rapidly.

It is important to emphasise, climate policies in favour of renewables may mitigate climate change and its threats on the world, but at the same time they provide new sites for investment (Matthews & Paterson, 2005). The reason of the national and international support for shift in energy resources may be the challenges of existing energy preferences but, the reason is also very much related to the creation of new markets for economic growth in many countries. That is why, states are expected to support and stimulate renewable energy market creation with regulatory arrangements and incentive mechanisms (Atlı, 2012). Relatedly, emission policies create new markets around which firms can develop economic strategies and create new markets for investments (Matthews & Paterson, 2005). Renewables are a part of these policies and an important tool for new mode of capital accumulation in the existing capitalist order which has a legitimacy due to global concerns.

Development of climate change policies started to create a new market for renewables and with the positive policy moves in the world, the use of low-carbon energy sources in energy production is expanding rapidly. Investments in renewable energy technologies were high in the last years; renewable energy resources

corresponded to approximately 50% of all new power generation capacity in 2014 and investment rates in non-hydro renewables are 80% higher than the levels in 2000. In Europe as well, the demand for all fossil fuels declined and power generation from non-hydro renewables grew as they benefited from active low-carbon energy policies. In the whole world, investments are expected to grow with a growing rate and renewables are expected to become the leading source of energy especially of electricity by 2030 (IEA, 2015a).

With positive policy moves and support mechanisms, the market for wind energy is expanding; 37% of renewable based new power generation capacity in the world in 2014 was wind power, and in future investments, wind energy is expected to have a remarkable share (IEA, 2015a). Additionally, in the EU, wind power installations have the highest portion of 2015 installations with around 44% of the total (EWEA, 2016) and the EU is expected to become the world leader in wind power until 2030 (IEA, 2015a).

Wind power installations are expanding throughout the world and this expansion continued to be led mainly by onshore installations. China has the largest wind power market with the highest installed capacity in onshore in the world, USA and Germany follows China in terms of total installed capacity. Europe's first three leading countries in installed capacity in onshore are respectively Germany, Spain and the UK (GWEC, 2013). Denmark has the 7th place in terms of installed capacity however it is rising as pioneering country in Europe in terms of the share of wind energy in electricity consumption rate (EWEA, 2016). Offshore wind energy technology is also rising and the leading countries are respectively the UK and Denmark with highest installed capacity in the world (GWEC, 2013).

Wind power usage is rising among the other energy sources and other renewables. The fastest growing rate between renewables belongs to wind energy and wind energy has the leading position among renewables in terms of installed capacity (Yaniktepe, et. al., 2013). The energy generation is shifting towards generation from wind power in the world. Therefore, wind energy market become an important economic sector in many countries and wind energy installations and their importance is increasing rapidly day by day.

2.1.4. Turkey's Concern and Renewable Energy Policies

Turkey is a rapidly growing country in terms of economy and population leading to growing urbanization as well. As it is said before, these two are the main determinants of energy demand of a country. Because of being a rapidly developing country, Turkey's energy demand remains high and will likely to increase in the next decades. However, Turkey imports most of its energy supply, which makes the country foreign-dependent in terms of energy. Therefore, ensuring sufficient energy supply to a growing economy and growing population and reducing foreign dependency on energy happens to be Turkey's main concern.

Turkey has young and urbanizing population. The population was 78.7 million people in 2015, it is expected to grow and become 84.2 million people in 2023[i] (Turkstat, 2016). Furthermore, the economy has grown dynamically and is expected to grow for the next decades. As the two main determinants is growing in Turkey, the energy demand is also growing rapidly. From 1990 to 2008, the energy demand increased by 86% and residential usage together with industry created the highest share and transport shares followed as the third (IEA, 2009). Since urbanization and industrialization continues in Turkey, the need for energy continues to grow along with them. The energy demand which was approximately 121 Mtoe in 2012 is projected to be 218 Mtoe in the year 2023 (MENR, 2014). In other words, the energy demand of Turkey is expected to grow by 80% from 2012 until 2023.

Current primary energy demand of Turkey is met from various sources but the primary source is natural gas which has 35% of the total, while the second is coal and the third is oil (MFA, 2015). As it is seen from the Figure 3, the energy demand of Turkey is supplied by fossil fuels with an approximate rate of 90%. However, as being not very rich in terms of underground sources, Turkey's energy supply from fossil fuels are mainly imported.

[i] Most of the projections are made with reference to the year 2023 as it is the 100th year of Turkish Republic.

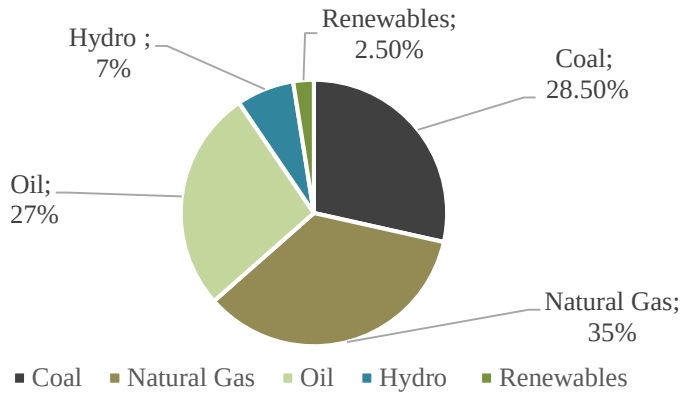


Figure 3: Turkey's total primary energy supply by fuel in 2014 (MFA, 2015)

According to IEA data; nearly 75% of total primary energy supply in 2013 was supplied by net imports (IEA, 2015b). Practically almost all of natural gas and oil is imported from other countries (MENR, 2014) and these imports may increase in the forthcoming years along with the increase in energy demand. Additionally, MFA stated that, only about 26% of the total energy demand is being met from domestic sources (MFA, 2015). Another important thing here is that, energy imports constitute a large part of the current account deficit (MFA, 2015). The energy demand so as energy imports will likely to increase in the following years. Which means; unless Turkey increases the rate of domestic sources in energy supply, it will continue to be foreign dependent. That's why, increasing diversity in energy supply and decreasing foreign dependency on energy are an important matter of fact in energy policies of Turkey.

The energy demand of Turkey is mainly determined by the electricity demand which is also growing fast. The electricity consumption has nearly doubled from 2000 until today and the electricity demand which was 257 TWh in 2014 is projected to be 414 TWh in 2023 (EMRA, 2015). This growing electricity demand of Turkey is mainly supplied by fossil fuels again; Natural gas has the highest share with 48% and coal is the second with a share of 26.5% (EMRA, 2015).

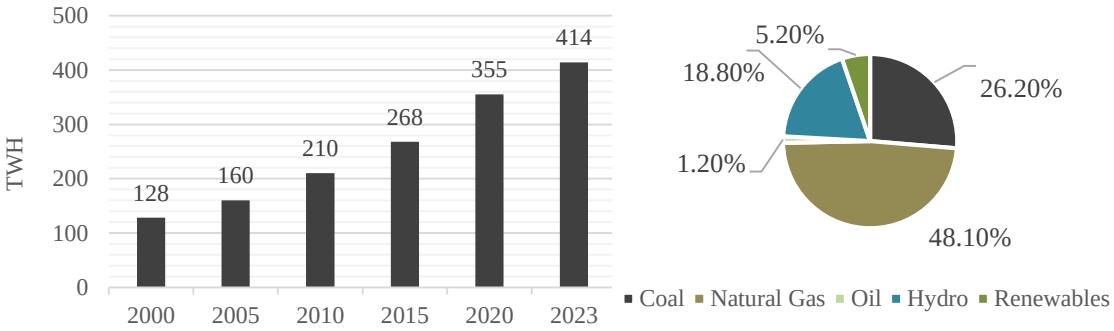


Figure 4: Growing electricity demand of Turkey from 2000 to 2023 and fuel shares in electricity consumption in 2015 (EMRA, 2015)

As being a Party to the UNFCCC and became a party to the Kyoto Protocol in 2009, Turkey is affected by all international agreements of UNFCCC. Moreover, as being a candidate country to EU, all energy policies determined by European Commission is binding Turkey's energy policies. Accordingly, both for achieving compliance with the policies of supranational structures and for reducing foreign dependency on energy, renewable energy policies have accelerated in Turkey. Besides, the renewables stimulates the development of existing market by creating cycle of new investments (Matthews & Paterson, 2005). In this sense, commissioning new energy investments, increasing diversity in energy production resources and maximizing energy efficiency stand out as key issues for Turkey. In terms of diversity, renewables have major role and promotion of alternative solutions based on renewable energy gain importance (MENR, 2014).

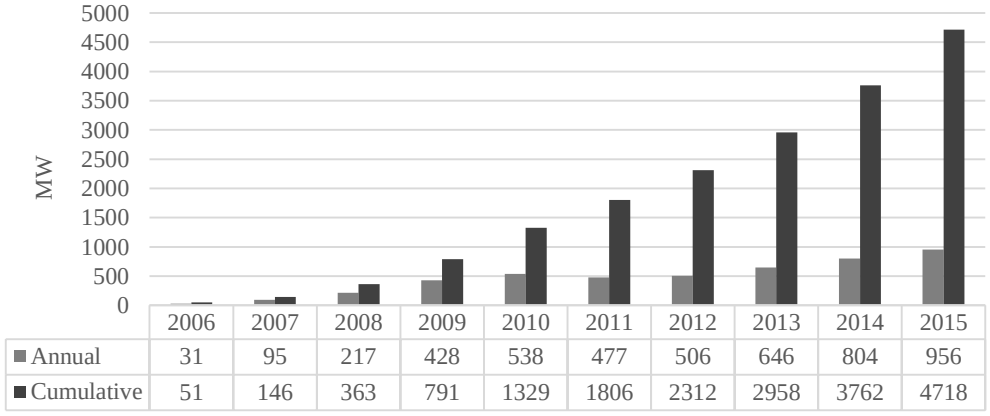
Because of having high potential in all renewable energy resources such as hydro, geothermal, wind and solar, Turkey has set determinant goals for the year 2023 for electricity production based on renewables. The administration aims to increase the share of renewables in electricity generation (together with hydroelectricity) to 30% by 2023 and wind energy has the second place after hydro with expected installed capacity of 20.000 MW. In addition, another aim is to raise the share of renewable energy in overall energy consumption at least to 20% as of

2023 (MENR, 2014). Following these, high capacity wind energy investments started to increase with an increasing rate.

2.1.5. Wind Energy Developments in Turkey

One of the most significant components in achieving energy goals of Turkey emerges as wind energy as being a favourable domestic resource and being an important market for new investments especially for energy sector. With these reasons, Turkey started to focus on wind energy. Relatedly, incentives and regulatory arrangements to promote market growth by increasing competitive advantage of wind energy over other investment models of energy have increased. With the support from government, large-scale investments have risen over the past few years. Towards the end of the 1990s, first small-scale investments started but the large-scale developments have accelerated since 2006 with the positive policy moves and regulatory arrangements such as the ninth development plan and Renewable Energy Law (Law No: 5346) entered into force in 2005 (Yaniktepe et al., 2013). Consequently, state policies supporting renewables have gained momentum in order to reduce energy-related problems as well as to create new market mechanisms for economic growth (Atlı, 2012).

Wind energy investments have increased considerably with the ratio of 25% between the years 2014 and 2015 as it is shown in Figure 5. Today (in 2016), there are 127 wind power plants under operation which have total installed capacity of 5.146 MW (TWEA, 2016). The total installed capacity of 2015 represents 5.2% of total energy supply (MW), and with this installed capacity, 3.2% of electricity consumption of Turkey can be met (EMRA, 2015). There are also 54 wind power plants under construction with total installed capacity of 1.485 MW and 86 licensed wind power plants with total installed capacity of 3.244 MW (TWEA, 2016). These numbers indicate that, there will be a significant increase in wind energy and its share in energy production.



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Annual	31	95	217	428	538	477	506	646	804	956
Cumulative	51	146	363	791	1329	1806	2312	2958	3762	4718

Figure 5: Annual and cumulative installation of wind power plants in Turkey (TWEA, 2016).

As the investments are done by private companies which seek profit maximization, the locations of almost all wind power plants took place in the same regions and in the same cities where wind energy potential is high. The ones in operation is densely located in the cities of Balıkesir and Izmir and the ones under construction is densely concentrated in the city of Izmir (TWEA, 2016). The licensed wind power plants also choose location in the same regions and cities. This situation leads to an accumulation of energy investments over certain cities (see; Figure 6)

As a consequence, it is a higher priority to invest in Turkey's own domestic resources in terms of both achieving compliance with energy policies in the world and reducing the foreign dependency on energy. It seems that, renewables and especially wind energy gives the opportunity to Turkey for decreasing its energy dependency while providing a new market for its developing economy. Accordingly, Turkey has proceeded on this issue and has begun to increase wind energy investments. To avoid any problems seems to be very important in this regard.

Figure 6: Wind power plants in Turkey

(Source: Produced by author with the data from TUREB, 2016)

2.2. Local Concern

As the importance given on the renewables has risen, renewable energy fields especially wind farms started to spread around the cities, mainly choosing location from rural and natural areas. Relatedly, with the spread of wind energy investments in particular local environments, local concerns have begun to increase. The main motivation for this is the adverse impacts of rapidly increasing wind energy developments on these particular local environments.

On the one hand, generation of wind energy has the potential to reduce environmental problems caused by fossil fuels. Wind energy is seen as one of the effective and sustainable ways to generate electricity as it is abundant, inexhaustible and affordable, which makes it viable and large-scale alternative to fossil fuels. Therefore, many national governments have promoted wind energy investments. On the other hand, there are adverse impacts of wind energy facilities on local environments such as impacts on humans and on ecosystems, including loss of habitats and species (National Academies Press, 2007).

The impacts of wind energy facilities on our environment have not been well-established and remain under debate. The effects of wind energy are claimed to be less than other anthropogenic developments (Leung & Yang, 2012). But still, it has some adverse impacts on living environments and these effects cannot be ignored. Besides, due to its expansive and large-scale nature, the adverse impacts of developments can be greater. Therefore, the impacts become an important issue in wind farm developments which should be further studied and solved.

2.2.1. Impact on Environment

One of the major concerns about wind farm developments is its negative impacts on environment. The construction and post-construction phases of a wind farm have some adverse impacts on environment where wind farm is sited. In the construction, landscapes and habitats can be disrupted by the construction activities and in the post-construction, rotating turbine blades causes mortality of birds.

In the construction phase of wind-energy facilities, site preparation activities can have some detrimental effects on environment. Landscape and habitat on where wind farm is sited have mainly been disrupted by site clearing for structures and roads. These clearings include especially clearings for roads and turbines and also for power lines and substations (National Academies Press, 2007).

Site clearing for construction has considerable environmental consequences, even though their impact has been neglected. For transportation of turbine elements with large vehicles, wide roads are opened which have the width of approximately 6 meters to 15 meters wide for large vehicles to pass. To carry the turbine components, especially large wings with up to 60 meters in size, large roads are needed. Site clearing for roads and for the construction of turbines has reached great sizes in total and causes great damage on the landscape. Additionally, for turbine siting, large areas have been opened; for a turbine with 3MV capacity, approximately 130 m^2 area has been opened for its construction. Therefore, for construction of one single turbine, site clearing can reach up to 5000 m^2 area (Yetiş, Kentel, Severcan, Türel, 2015). Together with site clearing for transmission lines and substations, all can have detrimental impacts on landscape and habitat via removal of vegetation and so disturbance in eco-system structure is inevitable (National Academies Press, 2007).

Figure 7: Site clearings for roads and turbine siting, examples from Turkey; Belen RES (right photo), Mordoğan RES (left photo) (Source: Companies website, 19.08.2016)

Although many of these activities are relatively short-term in practice, there may be substantial effects on habitat quality permanently. Besides, the extent of the damage depends on site specific characteristics; it is closely associated with the landscape and habitat quality. Even the construction phase has short term effects; it can have considerable impact on qualified landscapes. The impact will likely be detrimental to some species living in the habitat unique to the area (National Academies Press, 2007).

Another environmental disturbance caused by post-construction phase of wind farms is the effects on birds and bats. It is known that wind turbines and their rotor blades may cause to death of individual birds and bats as a result of collisions to turbine blades and turbine itself. The number of studies reports that collision fatality at operating onshore wind turbines has increased substantially over the years. Additionally, it is reported that bat fatality is mainly higher than bird fatality in these collision fatalities (AWWI, 2015). These fatalities resulted by wind turbines are associated with the location, layout and technology of wind farms. Issues such as turbine height and design, number and dispersion of turbines, location of turbine on the landscape and migration behaviours of each species are presented to influence fatality rates (National Academies Press, 2007). Again habitat characteristics of the site become significant. Especially for the habitats with endangered birds, the impact of wind energy developments can be substantial.

However, there is an uncertainty about the impact of wind turbines on birds; it is discussed that wind turbines have impact on bird fatality but when compared, the impact is not nearly as many as other anthropogenic activities (National Academies Press, 2007; Leung & Yang, 2012; AWWI, 2015). Even more, fatality rates do not appear likely to lead to population declines in most bird species (AWWI, 2015). But still, it is known that post construction phase of wind energy developments has impacts on bird and bat populations (National Academies Press, 2007) and although the impact is minor it cannot be ignored (Leung & Yang, 2012). The impact can be detrimental to some species especially for endangered ones. Therefore, there is need for more research on the impacts and more careful designs regarding bird habitats and routes.

In order to minimize these adverse impacts of wind farms on environment site selections becomes important. For naturally important areas there are different measures for site selection (see; Table 1) and these criteria is very important for minimizing negative impacts of developments on environment. However, another important thing about the impact of wind energy on environment is the size of the developments. Building wind-energy installations with large numbers of turbines can have greater impacts on environment. As wind energy development expands, the potential for the impacts on environment and species may increase (AWWI, 2015). Additionally, individual wind farms can have minor effects on environment but collectively the impact of many wind farm will be greater. Therefore, cumulative effect of many wind farms becomes considerable (Masden et al., 2010).

Table 1: Site selection criteria for wind energy developments for environmental areas (Aydın, 2009)

Environmental Context	Criteria
Acceptable in terms of natural areas	- 1000 m away from areas of ecological value - 400 m away from water reserves - 250 m away from ecologically sensitive areas
Acceptable in terms of bird habitat	- at least 500 m away from wildlife conservation areas - 300 m from nature reserves to reduce risk to birds

The environmental impacts of wind-energy facilities are complex, and associated with scale, location, ecosystem type, species and other factors. That's why more comprehensive and long-term analysis before the construction and proper site selection measures are needed in order to mitigate their adverse impact on environment (Aydın, 2009).

2.2.2. Impact on People

Another major concern about wind farms is that wind energy projects can create negative impacts on humans. It is widely debated that wind turbines have some impacts on human health especially on the people living in proximity to wind turbines. These impacts include mainly wind turbine noise and other impacts such as vibration and shadow flicker. Additionally, all these impacts are much related to the visual impacts of wind turbines. These issues are considered to be potential to health problems and together with these impacts wind turbines become a source of annoyance (Knopper & Ollson, 2011).

The most frequently mentioned impact on humans is the noise generated by wind turbines. It is mainly discussed that noise of wind turbines cause annoyance and hazard to human health and their well-being (National Academies Press, 2007). In terms of noise; audible noise with high pressure levels and inaudible noise as infrasound is associated with health impacts such as learning, sleep and cognitive disruptions and also stress and anxiety. These health problems and annoyance is related to the proximity to turbines, sound pressure levels (which is high in close distances) and subjective factors such as attitudes towards wind turbines and landscape (Knopper & Ollson, 2011).

Sound pressure level is an important factor in noise disturbance. The noise problem becomes significant at above sound pressure limits and sound levels are increasing with the proximity to turbines (Gipe, 1995). These noise limits are determined as 40 dB(A) for urban and 35 dB(A) for rural. The frequency of disturbance from noise increase in line with the increase in sound pressure levels. Additionally, about the disturbance, some health problems such as sleep disturbance,

headache and feeling tensed are reported by people (Knopper & Ollson, 2011). Therefore, in close proximity to turbines, where sound pressure level exceeds limits, noise becomes more disturbing and causes some health problems.

In the study of Knopper and Ollson (2011), it is also stated that the health problems occur above the noise limits but annoyance from wind turbines is more important predictor for health problems than noise itself. The noise annoyance is high when the sound pressure levels are higher but this annoyance is also related to subjective factors such as attitudes and visual perceptions. The noise both audible and inaudible (infrasound) causes learning, sleep and cognitive disruptions but the health problems such as stress and anxiety is related to noise annoyance. Therefore, annoyance is mainly related to the way people perceive wind turbines and noise from wind turbines and reported health problems are more strongly associated with subjective factors rather than audible and inaudible noise itself.

Other problems such as vibration and shadow flicker have impacts on people living close to wind turbines. Vibration arises from wind-turbine operation and from noise. Shadow flicker arises from the rotation of turbine wings as a repetitive shadow effect. Their effects on health are not clear and well-understood. However, their existence causes annoyance from wind turbines which can lead to the problems related to annoyance. Therefore, the effects of both should be considered and need to be more studied (National Academies Press, 2007).

The impacts on people are also associated with the visual and aesthetic impact of wind farms on particular landscapes. To some, wind turbines appear visually pleasing, while others view them as industrial machines intrudes on landscape. As wind farms often constructed in areas such as rural or natural areas which are never before considered for industrial land uses, their visibility on pure stationary landscapes as giant structures becomes disturbing and create annoyance on people (National Academies Press, 2007). Therefore, the impact on people mainly related to subjective factors and visual concerns about wind turbines. Other impacts as well, are associated with subjective factors and visual impact which is very much related to landscape context and site specific characteristics. Especially in rural and

natural areas where wind turbines are seen as contrasting and unsuitable, annoyance is greater (Knopper & Ollson, 2011).

All these negative impacts have bad influence on people's well-being. Either visual or any other impact of wind energy facilities creates annoyance on people which cannot be ignored or neglected. In order to avoid or reduce these potential negative impacts including noise and visual impact on people living in close distances, setback distances (see; Table 2) have been established at various countries and also at various studies (Aydın, 2009).

Table 2: Site selection criteria for wind energy developments for living environments (Aydın, 2009)

Living Environment Context	**Criteria**
Acceptable in terms of safety and aesthetics for large city centers	- 2000 m away from large settlements - 2000 m away from cities, urban centers
Acceptable in terms of safety and aesthetics for town centers	- Minimum 1000 m away from towns
Acceptable in terms of noise	- Minimum 400 m away from nearest settlement

2.2.3. Impact on Local Community

Other than environmental and health impacts, there are also some adverse effects of wind energy developments on communities. As wind energy developments bring changes, they have some impacts on local environments by bringing some negative consequences. These impacts are mainly socio-economic impacts including private property problems and damage to local economic activities such as agriculture and tourism.

As wind energy developments are large-scale in nature, they cover large areas and turbines can be sited close to or on private properties. Private properties remaining in wind energy fields are purchased or rented by the developer or by the state. This situation has direct impact on landowner and can lead to some economic problems because land rental or purchase paid is mainly limited (Loring, 2007). Besides this, wind turbines can bring negative impact on properties even though the land is not used for wind turbine siting. The effects of big wind farm projects and closeness of wind turbines can increase the negative impact on property values. Other impacts of wind energy developments such as visual, health and environmental impacts can influence the property values and may lead to property devaluation (National Academies Press, 2007).

Additionally, if private land is used for an economic activity (e.g. agricultural land) land purchase for wind energy can cause an economic damage. The economic contribution is also limited because the jobs created by wind farm project in locality is limited. Tourism can also be negatively influenced by wind turbines especially in areas of high scenic and natural beauty (National Academies Press, 2007). Consequently, wind energy developments do not contribute to local economy and it can also bring economic problems to the locality.

It is difficult to generalize about the effects of wind-energy projects on local economies (National Academies Press, 2007). However, all the impacts of wind energy developments including physical, social and economic impacts should be considered while developing a wind energy project in a particular environment.

CHAPTER III

THEORETICAL FRAMEWORK FOR WIND FARM CONFLICTS

Renewable energy is widely recognized as an important part of transition to sustainable energy economy (Toke et al., 2008) hence it is accepted as a fundamental component of sustainable development (Dinçer, 2000). At the same time, renewables are seen as an alternative to the problem of fossil fuels and they are recognized as an effective response to climate change (Aydın et al., 2013). Therefore, the expansion of renewable energies is seen as a necessity and this strategy is supported at many international and national agendas. Wind power, in this sense, has considerable involvement in the process (Toke et al., 2008). However, against the expansion of wind energy developments, many countries face problems, and in a very general sense, this problem appears to be social barrier caused by local oppositions against new developments. While general public expresses positive opinion towards wind power, specific projects face opposition from local residents (Ek, 2005) and this conflicting situation is referred to as wind farm conflict in the literature.

Wind farm conflict is a current subject and there are many studies focusing on wind farm conflict in different cases. Furthermore, finding a solution to this current problem has great importance which firstly requires an understanding on the issue. Therefore, this chapter introduces a theoretical framework for understanding the reasons of wind farm conflicts, while handling different explanations for local oppositions in the literature. Then, it includes theoretical insights on conflict resolution and minimization for wind farm conflict processes.

3.1. Understanding Wind-Farm Conflicts

Accelerating renewable energy policies and practices in the context of global concern confronts with local opposition in the context of local concern, which makes a conflictive situation for wind farm developments. Especially in renewable energy practices, it is very important to understand why local people oppose to specific projects although wind energy constitutes general support from the public.

In general, the conflict is recognised as 'Social Gap' which explains the problem as the gap between high public support and low success rate achieved in implementation of wind power. There are different reasons for the emergence of this gap including democratic deficit, qualified support and individual gap and in order to achieve national targets on renewables, the social gap should be eliminated which can only be done by understanding the nature of the problem (Bell et al., 2005).

Mainly, local opposition to particular developments is explained by NIMBY (Not In My Back Yard) syndrome (Burningham, 2000), which describes the reasons of oppositions towards beneficial developments as selfish behaviour seeking only personal benefits. Bell et al. (2005) also accept that individual gap, which exists when an individual holds positive attitude towards wind power but actively opposes to particular development, can be one possible explanation for wind farm oppositions. However, many scholars agree that, there are many other determinants which should be understood in order to explain the situation and offer solutions addressing the issue correctly.

According to Gipe (1995), while public acceptance is high before implementation, acceptance falls when developments start to take place on a specific location because of individual concerns. He argues that, when the development is completed, acceptance starts to increase again. At first, people can have negative perceptions as an unfamiliar development started to take place in their local environment. However, these negative perceptions can decline after the installation of wind turbines. This is because people start to realise that their concerns are unfounded and they become more favourable to wind turbines in their local environment.

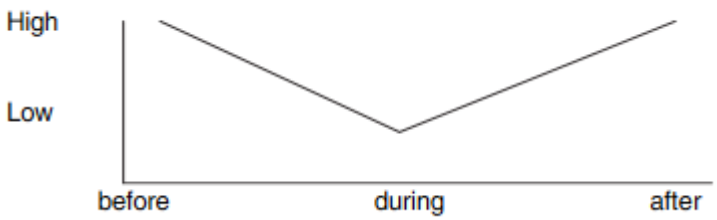


Figure 8: Level of acceptance before, during and after implementation of wind power projects (Gipe, 1995)

There is also proximity hypothesis which reveals the idea of a relationship between distance and opposition against wind power; negative perceptions increase when the distance to wind farm decreases. People living closer are supposed to have more negative attitudes towards wind power than the people living further (Devine-Wright, 2005) as the risk perception is high in close distance (Van der Horst, 2007).

However, these generalizations are not always true and different development processes may give different results. Both before-after evaluations and perceptions at different distances has emerged as the opposite in different cases (Devine-Wright, 2005; Van der Horst, 2007). Additionally, Van der Horst (2007) expresses that existing and proposed wind farms can collect different reactions; proposed windfarms can collect more opposition. Therefore, reactions can change according to the particularity of the projects.

The generalization can be misleading in different cases (Walker, 1995), as each case will have its own dynamics. Attitudes towards wind energy can be highly variable and may be formed by many different reasons. There are many other studies emphasising other determinants and these studies emphasize negative externalities (Wolsink, 2007), harm on local identity (Devine-Wright, 2009), different perspectives on nature (Woods, 2003) and institutional problems (Toke et al., 2008) as reasons of local oppositions.

3.1.1. NIMBY Explanation

Negative attitudes arising during the implementation phases of new facilities mainly labelled as NIMBY syndrome, which is used to describe as selfish stance towards necessary developments. These facilities can be locally, regionally or nationally needed and the sorts of facilities can differ but they all have the same reaction in local; resistance at local level. Therefore, NIMBY is not a situation that only arises in wind power developments, but wind power produces greater NIMBY response because of its nature (Gipe, 1995). The important thing here is that, wind power has general support on public level but has powerful resistance at local level and this is explained by NIMBY reaction at a very general manner.

In NIMBY syndrome, oppositions can be characterised by three possible perspectives. Firstly, oppositions can be based on ignorant and irrational response resulted by lack of knowledge. Secondly, they can be based on rational but selfish response which seeks individual utility; developments can be socially beneficial and necessary but the person doesn't want any development which can harm their personal utility. Lastly, it can be based on rational and prudent response which is shaped by well-grounded concerns about the impacts of new developments (Burningham, 2000). However, the term is mainly used to describe ignorant or selfish behaviour seeking self-interest. NIMBY attitude has been commonly used to explain a situation where an individual or a group holds positive attitude towards a development until actually confronted it and then opposes it for individualistic reasons (Wolsink, 2007).

Taken from a very general angle, NIMBY syndrome fits to what is experienced in wind farm problem. Renewable energy in general and wind power in particular collect positive reaction from the public however, acceptance of wind energy seems to vanish when actual projects take place in local environments (Krohn & Damborg, 1998). Especially in implementation processes, oppositions increase in the locality. Here, local objections and resistances are defined as behaviours motivated by selfishness and ignorance (Peker, 2013).

NIMBY attitude fuelled by ignorance is explained by Burningham (2000) as an irrational response towards the facility resulted by lack of knowledge. As new developments bring impacts and risks to locality, public assessment of these risks can sometimes be wrong because of having little or incorrect knowledge. The 'irrational fears' (Burningham, 2000) resulted in opposition to especially proposed ones as risk perception of unfamiliar is higher (Van der Horst, 2007). This reaction fuelled by ignorance can result in blocking the implementation of socially beneficial development. Here, knowledge becomes an important determinant of reaction.

NIMBY attitude fuelled by selfish attitude is explained by Bell et al. (2005) as an individual gap which is resulted by the gap between collective rationality and individual rationality. Supporting wind energy can be collectively rational but choosing 'free-ride' is individually rational. So, individual rationality motivates behaviours and individuals act in favour of their own utility rather than public utility. Personal concerns become more important than wider social and environmental concerns. Therefore, this behaviour motivated by selfishness results in the public good not to be provided and selfish attitude becomes the determinant of opposition.

Oppositions to wind farm developments can be explained by NIMBY generalizations. However, the reasons of oppositions cannot be solely confined to NIMBY syndrome as one single factor. Besides, some scholars found this explanation insufficient to explain local opposition (Wolsink, 2000; Bell et al., 2005; Van der Horst, 2007). They argue that, inevitably, there are many other factors influencing wind farm conflicts and local oppositions and Bell et al. (2005) emphasise that NIMBY can only be one possible explanation for local oppositions among other reasons. The concerns about the consequences of new developments should also be considered in wind farm conflicts rather than reducing it to one single cause. Therefore, understanding other determinants of the attitudes is crucial.

3.1.2. Negative Externalities

As Burningham (2000) states, attitudes towards new development doesn't have to be only selfish or ignorant behaviours. Oppositions can also be grounded on

the concerns about the impacts of new developments on local environments. Any development make changes on land uses and these changes usually have impacts on local people, so they can be considered as objectionable even though they may be nationally needed (Atay Kaya, 2014). Wind energy developments also create changes on the land and the impact of a different technology upon local environment can collect oppositions. Possible change caused by existing or proposed wind farms can be considered as objectionable as they can cause negative externalities on local environment and local people.

According to Wolsink (2000), the externalities of wind farms such as noise pollution, visual disturbance, hazard to natural areas and species (particularly to birds) have impact on public attitudes towards wind energy developments. In addition to these, sometimes damage to economic activities comes into existence as a result of the developments. Intentions towards wind power have been shaped by these externalities, local and site specific characteristics of the area also become important in this sense. In a qualified environment, consequences of wind farms and their externalities might have detrimental effects. Especially on a valued landscape visual intrusion and damage to natural features create concerns about the environment. When economic losses are also added, annoyance and so resistance against wind power can increase.

Among the negative externalities, visual intrusion into landscape and perceived impact of intrusion are the most decisive factor that shape oppositional attitudes towards wind power. Wolsink (2007) states that, visual disturbance and aesthetical concerns about perceived impact on landscape is more dominant than the other externalities in attitudes towards wind power. The main reason is that, turbines are evaluated as foreign structures and their intrusion into the landscape creates an important change which makes people concern more about their environment. Therefore, physical characteristics including turbine size, colour and location are substantial in the evaluation of their suitability (Devine-Wright, 2005). Additionally, another important factor affecting visual perception is the landscape context that the wind farm is sited upon (Wolsink, 2000; Devine-Wright, 2005). If the location has a beautiful and qualified landscape, the intrusion of turbines becomes more disturbing.

Even more, if the landscape is valued by the people, perceived effect is recognized more. Negative evaluation of the impact of turbines in a valued landscape is mostly high and in a qualified landscape negative evaluation increases. Subsequently, the visual intrusion of turbines into the landscape become much more disturbing and the opposition becomes that much greater.

Environmental damage that wind farms create is another determinant in public attitudes towards wind energy. The hazard of rotating blades of turbines to birds, the hazard of roads opened for construction and the hazard of scraped ground for turbine siting creates environmental damage. The most important thing here is that, larger projects create larger impacts on environment and damage to natural landscapes in the construction phase of many turbines is high. Hence, environmental damage creates concerns among people and it becomes an important determinant in attitudes towards wind power. However, according to Wolsink (2000), it has smaller impact on the attitudes than the visual disturbance. Environmental consequences of turbine siting are again related to perceived impact of turbines on the landscape. Hence, landscape characteristics have determining role in these concerns. In a qualified landscape environmental harm becomes much more disturbing and triggers opposition. Therefore, landscape conservation becomes crucial and balance between sustainable energy forms and protection of natural landscapes should be overseen.

Noise pollution is also an important externality which must be taken into account. Noise created by wind turbines is disturbing especially if turbines are located very close to living environments. The location of turbines and their distance to residential units is critical thing to consider in noise pollution as the noise of turbines can cause some health effects on local people which were mentioned in detail previously (see Chapter II). Therefore, it is an important factor to consider in explaining oppositions. However, according to Wolsink (2007), noise annoyance is again related to visual impact perception therefore, it is expected to be secondary factor after visual impact in explaining public attitudes. It is an important determinant especially in close distances to turbines however, the judgement on the perceived impact of turbines also determines the judgement about the noise impact and it becomes secondary factor in oppositions.

Even if there are no externalities of a development, the change on the place resulted by new developments might be evaluated as unfavourable. Rather than the externalities, the impact of change on the landscape might collect oppositions. According to Devine-Wright (2009), the impact of change caused by a specific development can be evaluated as disruption to place attachment or threat to place identity. Here, place attachment refers to positive emotional connections to a place that people established and place identity refers to individual sense of self established by physical and symbolic attributes of a place. Therefore, any change on the place that people live in can cause a spoilage on environment, disruption to emotional feelings on the place and may lead to an opposition. People who have more positive sense of identity from a particular landscape (e.g. rural landscape) are more likely to oppose such developments (Van der Horst, 2007). Here again, characteristics of a place including environmental, social and economic has great importance (Devine-Wright, 2009). Even if one of them is in danger of disruption, oppositions start to rise as a result of the intention to protect local environment.

Sitting of wind farms on specific locations (mainly on rural and on empty areas having high landscape value), especially if they consist many turbines, results in a big change in the area. The impact of an unfamiliar technology is evaluated by local people and as any negative impact of change is perceived as harm on the identity (Wolsink, 2007), the change caused by turbines collect oppositions. Oppositions to wind energy developments are proposed as place-protective actions and attempts to cope with a change which resulted by the specific development and its externalities on the place that people feel belong to (Devine-Wright, 2009). The reason of the dominance of visual intrusion in attitudes can also be explained by the place disruption. Disruptive change on the valued landscape creates visual annoyance. However, sometimes this does not necessitate physical change on the place but a sense of threat of possible future changes also creates disruption (Devine-Wright, 2009), especially if there is experience of existing ones. That's why, proposed developments also collect reaction.

It is obviously seen that, in oppositions against wind power, landscape/place characteristic factor has an important role. Common reason of the opposition is

mainly the reduction in the value of landscape (Kempton et al., 2005) resulted by a change caused by new and unfamiliar developments. Negative externalities are much more irritating if the landscape is valuable for the people living in the area. Therefore, assessment of the acceptability of turbines in terms of landscape quality and the consequences for the chosen location (Wolsink, 2007) has an important role in attitudes towards wind power. The perceived visual quality has more weight in developing attitudes rather than perceived environmental benefits of wind power (Wolsink, 2000). Furthermore, if the generation of wind energy is massively concentrated in the area, the change on the landscape caused by many turbines is greater and disruption is higher. The size of the wind farm and siting of turbines become very important in this sense.

3.1.3. Conflicting Perspectives

The reasons of conflicts over wind energy developments can be highly variable but another important reason can be grounded on the main argument of conflict between preservation and development. As wind farm developments mainly take place in natural and rural environments, the argument between preservation and development began to rise. As the nature and rural (as a part of nature) are evaluated as pure and treasured spaces (Woods, 2003), development pressures have increased concerns about their quality (Frouws, 1998). The key issue in wind farm conflict is that, regardless of being environmentally friendly, wind energy developments -which can be considered as infrastructural developments-, have been rapidly spreading in natural and rural spaces. As further installations have taken place, there are greater concerns about the effects of wind farms on the landscapes (Woods, 2003). Accordingly, development and preservation debate have come to the fore in this conflicting situation.

Different people interpret the interaction of development and environment differently because perspectives of people are different. Woods (2003) divides these perspectives into two as natura-ruralist (or preservationist) and utilitarian perspectives. Natura-ruralist perspective accepts nature as pure, idyllic and

vulnerable to human intervention. Similarly, rural is also a natural form as it is the basic interaction between people and nature (Frouws, 1998). Therefore, nature and rural should remain as it is and require protection from big developments as they become a threat to this valued entity. Likewise, utilitarian perspective perceives nature as wild and to be tamed through human activity. Here, nature and rural offers an opportunity for human services and investment. Even more, rural is seen undeveloped therefore, the use of it is required for its development (Frouws, 1998).

Another explanation of Woods (2003) suggests that, there are also conflicting perspectives on the development of rural areas. On the one side, there is the perspective of rural as a space of production. The perspective argues that, rural is an underdeveloped area and provides a potential for new development types. Therefore, it can turn into a productive space by providing new investments on the area. On the other side, there is another perspective of rural as a space of consumption. This perspective argues that, rural development should be provided by the commodification of rural and natural potentials through tourism. By this way, natural features and spiritual characteristics of rural can be preserved.

The utilitarian perspective which considers renewable energy developments (or any development) necessary, perceives rural as a space of production which offers a potential for new investments including renewable energies. In contrast, people with more preservationist perspective perceives rural as a space of consumption with attractive features of nature and rural and evaluate these renewable energy developments (or any development) as a threat to their valued environment and its attractiveness (Woods, 2003). Local people can be accepted as preservationists (natura-ruralists) and wind farm initiators as utilitarian within this context. When investors choose place from rural areas for new investments, people who value in these fields have shown reactions. Therefore, these two perspectives and two groups came across with each other and the situation triggers opposition against wind energy developments.

When a development takes place, the development is interpreted by different actors such as institutions, developers and local residents. Therefore, people's perspectives on nature and rural have determine their reaction towards

developments (Woods, 2003). The interpretation of people about the interaction of a development and environment becomes an important issue in this sense. As renewable energy technologies are accepted as more environmentally friendly, their interaction with natural spaces can be evaluated positively. Even more, the expansion of these technologies can be seen as a necessity by both governments and developers, and with a utilitarian perspective rural areas are seen as a potential waiting to be used for renewable energy technologies. However, no matter how environmentally friendly the renewable energy investments may seem, the interaction of wind energy developments and nature/rural is sometimes interpreted as objectionable from preservationist perspective. The reason behind this can be explained by the visual and environmental effects on natural and rural environments. The intrusion of turbines into landscape becomes disturbing because preservationist people classify nature as pure and idyllic and they evaluate turbines as unfamiliar and industrial structures which represents utilitarian perspective on nature. The turbines are evaluated as unnatural and being out of harmony with their landscape (Woods, 2003) therefore, oppositions started to raise against wind power developments in local environments.

Rather than conflicting perspectives on nature and development, there is another reason for the emergence of conflicts which is grounded on a different debate related to different rationalities on green investments. The green investments are evaluated differently from different perspectives. The transition to green technologies has been criticised by some segments because of ignoring the real causes of ecological problems. This rationality argues that the problems are a result of existing capitalist order based on economic growth, technology and market-based approaches (Hoedeman, 2012) and renewable technologies also become a new way of market creation for existing order by providing new sites of accumulation (Matthews & Paterson, 2005). So, these green technologies are seen as a new way of commodifying and privatising nature which are much related to neoliberal rationalities of governments and supranational structures (Hoedeman, 2012). Relatedly, the concept is defined as ‘greenwashing’ which emphasises that the renewable energy developments are a continuation of existing capitalist order

disrupting nature with the legitimacy by global concerns about environmental problems (Hoedeman, 2012). According to this rationale, in order to respond to environmental problems, consumption patterns should be changed and more environmentally friendly living styles should be adopted rather than fully investing in renewable and green technologies. So, the conflict is also grounded on capitalist and anti-capitalist rationalities of different people which is also much related to conflict between preservation and development.

People with different cultures may interpret the interaction between development and environment differently (Toke et al., 2008) and so react differently in development processes. Some of the public may support new renewable energy technologies but some others may oppose by grounding their reasons on certain basis. The reasons of oppositions may be grounded in deep-seated cultural backgrounds (Walker, 1995) or in different rationalities of people and change according to people's approach to these kinds of developments. There are many different actors involve in development processes and all of these agents have their own positions in approaching to a development issue and they all have their own rationale. Therefore, understanding people's interpretations are important while analysing the reasons of conflicts in particular projects.

3.1.4. Procedural Problems

Not only physical characteristics of particular developments have influence on public attitudes towards wind power but also process of planning and decision making have (Devine-Wright, 2005). National policies intend to support wind energy but their reflection to reality is through planning. The implementation of renewable energy policies is closely related to planning and any blockage in planning process will result in policies not to realize. To be able to achieve national policies on wind energy, planning which favours wind energy developments is needed (Toke et al., 2008). However, planning which only seeks national priorities and ignores local priorities will collect responses from locality.

As wind energy implementation is a governmental policy, decisions about site selection are mainly taken at national level. At governmental level, decisions are taken with top-down and hierarchical way of planning which mostly fails to seek local level needs and demands. Planning schemes in which central institutions have more power don't allow local people to be politically, economically or socially involved in development processes. However, both local institutions and local people wants to be involved in decision making processes especially in site selection processes of new developments which will cause a change in their local environment. In this sense, decisions taken by whom and how become an important determinant (Wüstanhagen et al., 2007). Decisions taken by central institutions and planning with top-down decision making tend to be insufficient to consider the issues having importance for locality and trigger opposition against wind farm developments (Wolsink, 2007).

Planning schemes vary across countries; in some countries (e.g. Germany, Denmark) local bodies have more effect in planning of local developments however, in some countries (e.g. Spain, UK) centralized understanding is more dominant in planning of wind energy projects (Toke et al., 2008). In Turkey also, there is centralized planning tradition and local bodies (especially municipalities) have weak legal power in planning especially about the developments related to national strategies (e.g. energy investments). However, it is known that countries giving more power to local authorities and involving local structures into planning processes have more success in wind energy implementation, likewise countries applying top-down planning and decision making on siting fail to have good performance (Toke et al., 2008). The reason is that these countries with top-down and hierarchical way of planning cannot provide local level connection. These countries mainly face the problem of local opposition in the process of implementation. Therefore, planning traditions gain importance in wind farm conflicts.

In addition to this, top-down planning understanding which only seeks national priorities and works with decide-announce approach about new developments creates public mistrust (Walker, 1995). Because, the decisions taken without considering local opinions impair locality's sense of trust. In such a planning

system, local people's trust on decision makers has been abused; they may feel ignored and left out in decision making about their own local environment, even more they may feel 'forced' to accept the decisions made by the others. Besides, investments on wind energy is made by big private companies (outsiders) supported by national governments. The exclusive and top-down decision making approach of foreign investors (which seeks only profit maximization) and governmental bodies (which supports private investors) creates perception of mistrust and unfairness (Peker, 2013).

Another aspect of the situation is that, big private energy companies supported by national governments (in the face of liberalisation) invest in large fields by only seeking their profit maximization. Through the agency of centralized policy-making tradition, the investments have been approved by national institutions. Agents who have concerns about the effects of massively concentrated energy fields on their environments began to react against these investments as they feel excluded in the process economically, socially and politically. However, their oppositions sometimes tried to be ignored and supressed by more powerful institutions (private companies and sometimes government bodies itself) in order to protect the realization of investments and national policies (Özen & Özen, 2010) which increases the sense of being excluded, breaks the sense of trust and justice and causes oppositions to grow.

Wüstenhagen et al. (2007) also emphasises justice and trust issues in public acceptance of wind energy schemes in locality. Investments do not represent social acceptance since there is lack of community acceptance which is influenced by distributional justice (cost-benefit distribution), procedural justice (fair decision making process) and community trust (trust on the investors and the information) experienced in development processes. Although global and national benefits of renewable energy are obvious, benefits at local level are not specific enough (Peker, 2013). Therefore, distributional justice, procedural justice and community trust becomes questionable by local people and their perceptions shape their oppositional behaviour.

As a consequence, planning processes and social characteristics of wind energy development can be an important factor in public acceptability. The sense of equity and fairness are also emerging as other important factors in shaping public attitudes and oppositions. Decision-making procedure has great importance in this sense. Socio-political and market acceptance can be high for wind energy developments as it constitutes general support from the public and positive motivation from the investors but the decision needs approval by different stakeholders; it should be acceptable not only by government institutions and investors but also by local institutions and local people to be able to provide equity and fairness and to be successful in implementation (Wüstenhagen et al., 2007).

3.2. Resolving Wind-Farm Conflicts

Resolving conflicts over renewable energy has great importance because the renewables are seen as an important part of efforts in meeting global concerns about the world's future. The use of renewable energies especially wind energy in energy production become vital and is supported by many national and international agendas. Any blockage in the process of implementation (both technical and social) is seen as a problem which must be solved to be able to reach national and global targets. So, understanding and overcoming conflicting situations in the process of renewable energy and wind energy developments are crucial and related methods about conflict minimisation and resolution can contribute to the solution of the problem that is faced in the process of development.

As it is already mentioned in the first part of this chapter, there are many reasons for the emergence of the conflicts in wind farm development processes. In a very general manner, conflicts emerge when people influence negatively by a particular wind energy investment in their local area and the extent of the influence is not only physical but also economic and social. Therefore, to consider all dimensions of developments (Devine-Wright, 2005) and to minimize negative impacts on local people becomes key issue in resolving and minimising wind farm conflicts.

There are several practices for wind farm conflict resolution including mitigating negative externalities by sensitive designs and proper sitting practices (Wolsink, 2000) supported by legal instrument which are considered as conflict minimisation methods to prevent conflicts before emergence of it (Atay Kaya, 2014). Once recognized the presence of the conflict, conflict resolution methods such as negotiation and collaboration between agents in development processes become important (Atay Kaya, 2014). In the case of wind farm conflicts, public participation in planning processes (Toke et al., 2008) and involvement of local people (both economic and social) become prominent as a way of negotiation and collaboration.

In conflict minimisation, mitigation of externalities of wind farm developments by proper siting practice and design come into prominence. In conflict resolution, community involvement in gains importance. For both conflict minimisation and conflict resolution participatory processes are essential. Wind energy literature give suggestions to consider more participatory planning processes before and after the emergence of conflict in order to avoid such problems (Bell et al., 2005). From the beginning of the processes to the end, participatory processes are important to minimize conflicts and community involvement is considered to be a factor that will facilitate local acceptance.

This part includes both conflict minimisation and resolution practices for wind farm conflicts. Mitigating externalities and participatory approaches will be introduced as main solutions.

3.2.1. Mitigating Externalities

It is obvious that the benefits of renewables and wind energy is global and national however, the benefits are not that much obvious at local level (Peker, 2013). Even more it has some costs on local level resulted by the apparent impacts of wind energy developments (Kempton et al., 2005). These impacts include visual disturbance, environmental hazard, noise pollution and sometimes damage to economic activities. Therefore, it is of central importance to minimize these costs on the surrounding of developments in terms of conflict minimisation and avoidance.

In this sense, mitigation of externalities by sensitive designs and proper site selection comes into prominence and most importantly, both of them require determination of certain criteria on the development (Bell et al., 2005; Stevenson, 2006) which can be achieved by strong legal instruments.

3.2.1.1. Sensitive Design

In order to avoid negative impacts of developments, more sensitive designs should be adopted in design phases of the project (Stevenson, 2009). This sensitive design requires consideration of physical parameters such as turbine features (Gipe, 1995), distance to living environments (Knopper and Ollson, 2011) and the size of the facility (Devine-Wright, 2005) as they all influence the extent of impact of wind energy developments on environment, on people and on living environments.

The turbine features influence the degree of environmental impacts even more, they influence the level of annoyance from wind energy facilities caused by visual, aesthetic and environmental concerns (Gipe, 1995). Therefore, design becomes prominent. Design parameters for wind farms such as turbine density, height, colour and etc. become important to mitigate environmental and visual impacts resulted by wind turbines (Gipe, 1995; National Academies Press, 2007). These design parameters established in design phases can mitigate negative environmental impacts especially on birds and habitats additionally, visual and aesthetical impacts on people (Stevenson, 2009).

Another important parameter in design phase is the distance to settlements and living environments. The impact of wind turbines siting close to living environments and environmentally sensitive areas (including bird migration routes and habitats of endangered species) can be greater than the ones farther (National Academies Press, 2007). Therefore, moving turbines away from sensitive areas is required to prevent adverse impact on those areas (Stevenson, 2009). Setback distances should be established in implementation of wind farms to reduce the negative impacts and to avoid oppositions related to annoyance caused by close turbines (Knopper and Ollson, 2011). Setback distances are used especially for

avoiding noise pollution but distance can also be a solution to environmental disturbance and visual disturbance as the distant wind turbines will be less disturbing for both species and people.

The last thing to consider in design process is the size of the wind farms. As it is considered to be more productive, wind energy policy tends to encourage larger-scale developments (Devine-Wright, 2005) however, impact on environment and on people increases when the size of wind farm grows. As the size grows, cumulative effect of many turbines is increasing; when more wind-energy facilities are constructed, risks are expected to increase (National Academies Press, 2007). Additionally, the perception about wind farms also change in relation with the size of developments. In the study of Devine-Wright (2005) it is presented that, smaller wind farms are found to be more favourable than larger wind farms and small clusters of wind turbines are more positively perceived on local environment. Therefore, size becomes an important parameter in design processes.

3.2.1.2. Proper Site Selection

Proper site selection is a crucial issue in wind farm conflict minimization because selecting suitable and acceptable locations plays an important role in public acceptability (Wolsink, 2000). Mainly, site selection is made by considering only sufficient wind capacity but other determinants such as environmental, social and economic factors are neglected. However, they all should be considered together in site selection processes to be able to mitigate local impacts.

In site selection processes, site specific characteristics of the area become substantial issue to consider (Wolsink, 2000; Devine-Wright, 2005) as it is the main subject in visual and environmental concerns of the people. The landscape characteristics determine visual disturbance and natural factors determine environmental disturbance. All these features of the area; land type (forest area, agricultural area, grassland, etc.) and ecological condition (endemic or endangered species, bird routes, etc.) show the importance and sensitivity of the area. In this sense, more sensitive site selection which consider landscape context can mitigate

visual and environmental disturbance (Stevenson, 2009). Additionally, developments should be more sensitive towards valued landscapes and qualified environments such as ecologically sensitive areas, conservation areas and forests; these areas should be excluded from development areas as the construction phase of developments can cause environmental damage in those areas (see Chapter II).

In site selection processes, locations that will not affect local people's living environments and economic activities should be selected for development. Planning, in this sense, has great importance. Proper site selection can be achieved by proper planning which should be supported by legal frameworks.

3.2.1.3. Strong Legal Instruments

In order to provide more sensitive designs and proper site selection for wind farm developments, strong legal instruments such as laws, EIA reports, planning zones which include development parameters should be established (Stevenson, 2009). These instruments should involve measures for mitigating negative impacts and establish criteria and qualifications on site selection for wind farms in order to support productivity while reducing environmental and local costs on local environment (Sediqi, 2015).

Significant effects on nature, people and communities can be mitigated by planning systems which introduce development and buffer zones for wind farm developments (Stevenson, 2009). The potential impact areas should be determined and excluded from development areas (Sediqi, 2015) and planning guidelines that suggest where and how wind energy development can choose place should be established (National Academies Press, 2007). In this sense, Breukers & Wolsink (2007) emphasize the importance of local zoning schemes for wind energy developments established by local institutions. The absence of local zoning schemes in planning procedures can lead to approval of wind energy installations with potential adverse impacts on environment and communities. Therefore, planning systems which address development zones for new developments are required in

order to mitigate negative externalities of wind energy developments and the empowerment of local institutions becomes important in this sense.

Another important legal instrument in terms of mitigation of negative impacts of developments is environmental impact assessment (EIA) processes. The effects of wind farms can be effectively mitigated before the conflicts emerge through the adoption of more sensitive construction techniques supported by strong environmental impact assessments. These impact assessment studies are required to be done more carefully to be able to determine positive and negative impacts of projects on environment and on communities. In this manner, EIA must consider the landscape, with emphasis on anything -including species of flora and fauna and birds protected under international agreements- that may be affected during the construction or operation phases of the project. Besides, there should be careful consideration for adverse impacts on human environment including noise and visual impacts and possible adverse effects on property values, tourism and other economic activities (National Academies Press, 2007). Even more, cumulative impact assessment should also be established (Masden et al., 2010) in order to overcome the problems of project-specific review. Therefore, wider EIA processes including visual impact assessments (Stevenson, 2009; Devine-Wright, 2005) and cumulative impact assessments (Masden et al., 2010) are needed in order to provide more sensitive impact assessments and mitigate potential adverse impacts of wind energy developments.

Both planning zones and EIA processes will remain insufficient unless they are supported by legal frameworks on renewable energy developments. A legal framework can constitute a base for both planning and EIA by providing measures, criteria and qualifications for wind farm developments (National Academies Press, 2007). Properly operated legal processes supported by such legal frameworks for renewables and wind energy virtually eliminates false applications and therefore minimize oppositions related to procedural problems.

3.2.2. Participatory Processes and Community Involvement

The process of wind energy development is recognised as an important factor affecting public acceptability and it is considered as important as physical features of developments. Oppositions are motivated not only by negative evaluations of physical features but also by the dissatisfaction from planning processes (Devine-Wright, 2005) and people mainly object to the lack of meaningful participation in the development processes rather than to renewable energies itself (Peker, 2013). Hence, public participation becomes an important issue to consider. Participatory decision-making in planning processes and participatory consensus building after the realisation of projects are seen as a requirement for wind farm conflict minimization and resolution (Peker, 2013; Breukers & Wolsink, 2007; Toke et al., 2008; Wolsink, 2000).

Participation is accepted as an essential part of democracy, as a process that reduces conflicts, creates trust and results in delivery of better decisions (Loring, 2007). Participation provides ground for different agents to improve their information by learn from each other and exchange their ideas in valued ways; so produce mutual-gain outcomes (Atay Kaya, 2014). Accordingly, it is expected that interactive communication provided by effective participatory processes will minimize oppositions and increase acceptability and success of developments.

As Devine-Wright (2005) indicates that, there is a willingness in public to participate to wind farm development processes both politically (in decision making processes) and economically (in profit sharing). Additionally, public participation in both economic and political aspects has positive effect on wind farm acceptability. Concordantly, wind farm developments call for a planning system which allows for collaboration (Wolsink, 2007) and citizen involvement (Toke et al., 2008) in development processes.

3.2.2.1. Participatory Planning Processes

Attitudes towards wind energy are highly influenced by planning and decision-making processes. Planning which ignores local demands and concerns collects responses from locality and the status of being excluded from planning and decision-making increases level of oppositions against wind power (Peker, 2013). Therefore, local participation becomes an important issue to consider in order to release level of conflicts over wind energy developments before the emergence of it.

In planning processes of wind energy developments, local public involvement is mainly limited (Loring, 2007) and although there is willingness to participate by local public, there is little opportunity for local public to influence the project outcome before the decisions are made (Devine-Wright, 2005). The reason for this is the top-down planning understanding about energy developments which excludes local people from decision-making processes. Based on the assumption that people are ignorant and uninformed, the decisions are mainly taken at governmental level and participation is only realized for informational purposes (Peker, 2013; Özen & Özen, 2010). In such a planning system, local people are left out of decision-making processes and informed about developments after the planning procedure is completed. As a result, local people are unable to influence decisions and local public develops a sense of lack of local control over local development which increases negative perceptions (Devine- Wright, 2005).

As the impacts of wind energy developments are local, the ones who will be affected by the changes resulted by developments will be local people. Besides, the attitudes towards wind energy are motivated by mainly subjective opinions about the environment and the impact of developments. Therefore, local people who are excluded from decision-making processes are inclined to oppose in order to convey their opinions and concerns about the change brought by new developments (Peker, 2013). Since the project will be a part of their own environment, locality wants to have an influence on the planning processes and on the planning outcome. However, top-down planning understanding and decide-announce approach provides only one-

way flow of information (Peker, 2013) and it remains insufficient to gather subjective opinions and concerns of local people (Devine-Wright, 2005).

Furthermore, such planning system is perceived as a closed process by local public (Peker, 2013) and this decide-announce approach which excludes locality from decision making increases public mistrust (Walker, 1995). Because this course of action creates the perception that local people are ignorant and are not to be trusted in such development processes. Additionally, when the investor is an outsider and decisions are taken by higher stages of government without involving local people, the process can easily be perceived as unfair (Toke et al., 2008). Local people feel that their oppositions are ignored and supressed by more powerful institutions (Özen & Özen, 2010) and their sense of trust in governmental bodies and planning processes is abused.

In order to avoid all these problems, collaborative and participatory approaches in decision making processes are recommended (Peker, 2013; Breukers & Wolsink, 2007; Toke et al., 2008; Wolsink, 2000). Before the planning of renewables schemes are completed, opinions, concerns and demands of people should be obtained and developments should be organized in response to people's demands which can only be achieved by participatory processes. Participation enables acquiring different knowledge resources in different levels such as procedural, technical, environmental, local, experiential and tacit knowledge (Breukers & Wolsink, 2007). Obtaining all this knowledge and providing mutual interaction between these levels in decision making processes will result in more constructive and publicly acceptable solutions (Loring, 2007). Therefore, rather than decide-announce approach that maintains top-down character of planning, consult-change-progress approach which provides early participation and full disclosure supported with two-sided information flow should be implemented (Peker, 2013).

With participatory and collaborative procedures, project can be modified accordingly which will release concerns and oppositions of local people towards wind energy developments. Allowing participation of locality will provide them a ground to influence the planning outcome according to their own needs and demands. This will develop a sense of ownership since local people will have a

chance to decide the nature of the project. Even more, the process of participatory decision making can lead to mutual understanding between locality and developers by learning from one another and enables mutual trust.

In addition to all these, in top-down planning system, governmental bodies with hierarchical organisations fail to provide local level connection and cannot acquire local demands. Whereas in planning processes, local concerns and opinions should be acquired and decisions regarding developments should be taken together with local public. This can only be achieved by non-hierarchical and bottom up planning processes. In order to provide local level connection, local bodies should be empowered and local planning system that allows local people's participation should be supported in planning of renewable energy developments (Toke et al., 2008).

Consequently, with higher levels of participation in decision-making processes, oppositions caused by procedural problems will be reduced and the success of the application of renewable energies will increase with the same level (Peker, 2013). With more collaborative, interactive and bottom-up strategies, which vary involvement of different actors, disagreements can be reduced and rate of implementation can increase (Breukers & Wolsink, 2007). Therefore, collaborative approaches in planning and participation in decision-making processes are seen as important ways of conflict minimization since they are efficient ways of addressing concerns and demands of local people, providing mutual understanding, ensuring fairness and enabling trust between the sides.

3.2.2.2. Community Involvement

As previously mentioned, benefits of wind energy are obvious at global and national level but, benefits are not clear at local level. Even more, developments may also lead to some environmental and social costs on local. Hence, after the implementation of renewables, benefit-cost distribution becomes an important determinant of public attitudes towards wind power (Peker, 2013). Distributional dimension becomes significant in terms of equity and fairness; perception of unequal distribution of costs and benefits creates public mistrust and triggers oppositions. In

response to this situation, negotiation and consensus building by community involvement come into prominence as a way of wind farm conflict resolution.

In renewable energy developments, policies mainly focused on installation for large-scale energy provision (Breukers & Wolsink, 2007). So, investments are mostly made by large private companies supported by national governments with special incentive systems. These companies seeking profit maximization often ignore public preferences. By using local assets such as land and wind, companies make profit without sharing it with local people. These large investments do not have any economic contribution to local, they also cause some negative consequences to local public. Hence, exclusionary activities of these private companies create perception of unfairness, increase public mistrust and triggers oppositions (Peker, 2013).

From the point of equal distribution of benefits, local people's financial participation comes to the fore in wind farm conflict resolution. Local people have willingness to be involved not only to development processes but also to the project itself in economic terms and economic involvement increases positive attitudes towards wind energy developments (Devine-Wright, 2005). Therefore, community involvement by local ownership patterns becomes important for wind power acceptance (Toke, 2005). Based on the idea that locally produced energy should be used locally and profits should be shared with local people (Devine-Wright, 2005), local people support community ownership in local wind energy developments.

As the land rental paid is a very limited form of financial benefit (Loring, 2007), different financial systems for benefit distribution should be adopted such as local shareholding systems allowing people to participate or have a share in the project economically. These financial systems can be conducted as locally owned co-operatives (co-operatives with ownership by farmers, local investors or local initiatives) or locally-shared developments (community shares) (Toke, 2005). Financial ownership via these systems results in growing interest in wind energy developments (Loring, 2007). The best examples for this are Denmark and Germany where mainly local co-operatives and farmer ownership patterns have taken place in wind energy developments and these locally-owned wind farms have led to higher success rates in these countries in wind power implementation (Toke, 2005).

As a consequence, community involvement in the project is an important issue in wind farm conflict resolution since wind farms conducted in partnership with local people will have positive effect on attitudes towards wind power (Devine-Wright, 2005). Increased level of participation and community involvement in the project by provision of community-based wind farms will positively affect the perception of fairness, strengthen trust, increase sense of ownership and decrease the outsider effect of the project. Even more, these community-based wind power schemes with local ownership patterns provide local development. Consequently, community involvement and local ownership schemes in wind farms will improve the acceptability of wind farm developments and release wind farm conflicts.

CHAPTER IV

THE CASE:
WIND FARM CONFLICT IN KARABURUN

In recent years, Turkey has been trying to increase the share of renewables in energy production and wind energy emerges as one of the favourable domestic resources which gives the opportunity to Turkey to provide clean energy for its developing economy and urbanizing population. Therefore, investments supported by national government have risen over the past few years and wind energy installations have spread around certain cities with high wind capacity mainly choosing location from rural areas.

In Turkey, Izmir emerges as the city where the highest number of wind energy investments have been made. These energy investments have chosen location intensively from rural areas of the province. As being one of the peripheral district of Izmir, Karaburun has also been exposed to pressures of large-scale wind energy investments. In addition to its high wind potential, the peripheral location and relatively less-developed character of Karaburun offer a potential for wind energy developments. However, the accumulation of these large-scale investments collects responses and local public shows strong oppositions to these developments with the concern of preserving their local living environments.

This chapter provides a brief information about Karaburun and its characteristics in order to understand the dynamics of the district. Later, it presents current situation of wind farm developments in Karaburun and provides a general information on wind farm conflict experienced in the area.

4.1. Karaburun and Its Characteristics

Karaburun is a part of the Peninsula of the same name which is located at the westernmost part of Izmir and it stands out as relatively isolated and sparsely populated area with distinctive natural features. The district shares its only boundary with Urla district and is surrounded by the sea on the other three sides. The only connection that Karaburun has is its bendy road connecting over Urla district to Izmir city centre and Karaburun has always had distance to city centre and other locations. The topographical conditions also reduced the accessibility of the town. Due to this, Karaburun has remained isolated and become relatively, economically less developed (Arkon, 1995). Relatedly, because of being distanced from urbanization pressures, the district has maintained its rural characteristics. However, this is the reason that Karaburun could preserve its natural characteristics and natural values until today (Arkon, 1995; Nurlu, et al. 2008). Consequently, Karaburun becomes prominent with its qualified landscape and environmental characteristics in recent years.

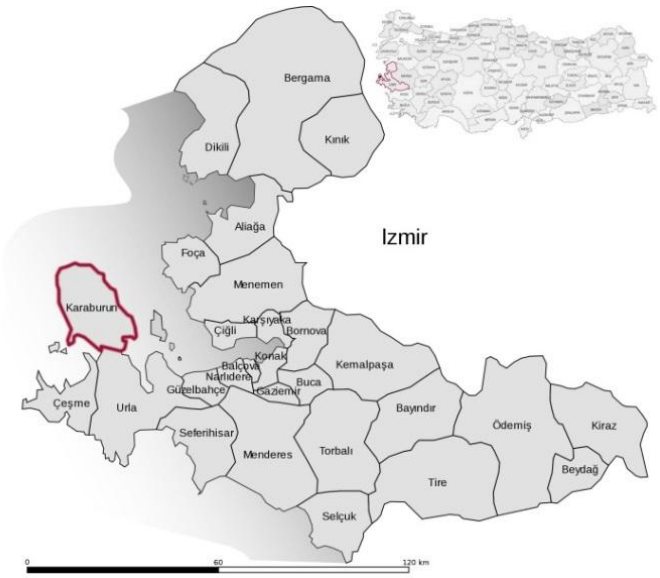


Figure 9: The location of Karaburun district in the city of Izmir

4.1.1. Natural Features

The most prominent feature of Karaburun is its highly qualified environment thanks to its unspoiled nature. Karaburun Peninsula is classified as one of the undisturbed natural sites of Aegean Region of Turkey which could remain until today (Nurlu et al., 2008). This natural environment has also been combined with agricultural usages and due to this, Karaburun has been hosting a very special landscape. Up to the present, being isolated and distanced from urbanization pressure have been the most important factor in protecting this landscape.

The peninsula has typical Mediterranean climate therefore, the dominant plant cover of the area is small patches and maquis; %50 of the area is covered by forests comprised of small patches (IDA, 2014). This type of plant cover has affected agricultural activity and geography has been home to important agricultural products such as olive, grape and mastic. Rugged terrain has also led to the formation of many different natural features. Although this ruggedness makes life difficult, it adds a great natural wealth to Karaburun. Besides, the geography hosts rich Mediterranean flora and fauna having many species including endemic and endangered ones which are declared to be protected by international regulations (Erdem et al., 2002; Nurlu et al., 2008). Therefore, Karaburun emerges as an area with high natural quality and ecological value which increase its natural quality.

Because of having special natural environment with high ecological value, Karaburun was requested to be declared as Special Environmental Protection Area by Izmir Provincial Directorate of Environment and Urbanisation and Karaburun City Council in 2013 (MEU, 2013). Examination report which emphasises the necessity of protection of this landscape (MEU, 2013) has been prepared and presented to the Ministries and currently the proposal is awaiting approval.

4.1.2. Demographic Features

At present time, Karaburun is the smallest district of Izmir province in terms of population. Because of the rural economic challenges, Karaburun has a declining

trend in young population and the villages are shrinking. Today, the district is sparsely populated with small villages. There are two central neighbourhoods named as Merkez (Karaburun Centre) and Mordoğan and thirteen villages within the administrative boundaries of Karaburun. These villages are; Anbarseki, Saip, Bozköy, Tepeboz, Haseki, Sarpıncık, Parlak, Salman, Yaylaköy, Küçükbahçe, Kösedere, İnecik and Eğlenhoca. These villages become neighbourhoods with the municipal law numbered 6360 enacted in 2015. As a result, they have lost their village legal entities but they preserve their village characteristics.

After the 1980s, the population of Karaburun has increased. The reason of this increase is the secondary housing trend started in the 1980s (Işık, 2002) and Karaburun has been one of these coastal settlements that can serve as a place for secondary housing and tourism. However, due to its limited accessibility, Karaburun has not been affected as much as other coastal areas. The secondary housing trend was seen especially in Mordoğan so; its population has risen rapidly in the next two decades. In the same period, Karaburun centre has also had an increase in population but with a smaller rate. As a result, the total population of Karaburun has been affected by an increase and has reached to 13446 until 2000. This population was not permanent rather it was seasonal hence, with Address-Based Population Registered System recorded population decreased to 1990 levels (Figure 2).

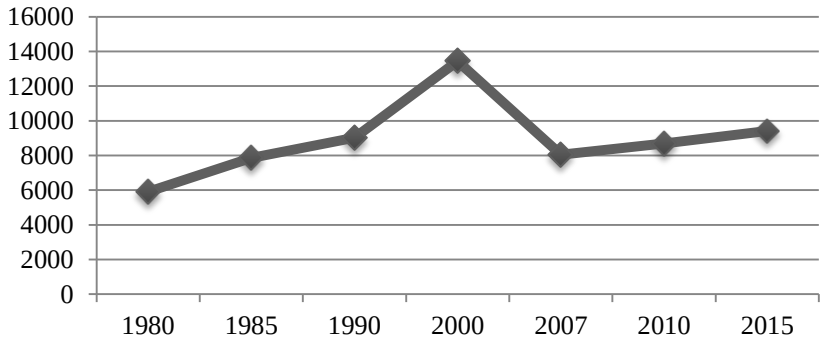


Figure 10: The population change of Karaburun between 1980 and 2015 (Source; TurkStat, 2016b)

The current trend in population after 2010 has growing trend with a slight increase; the population which was 8689 in 2010 increased to 9403 in 2015. According to Address-Based Population Registered System, Karaburun has a population of 9403 in total today (TurkStat, 2016b). Few of those living in the villages and most of the population resides in central neighbourhoods. The age group; 50-75 year-old forms the majority (TurkStat, 2016b).

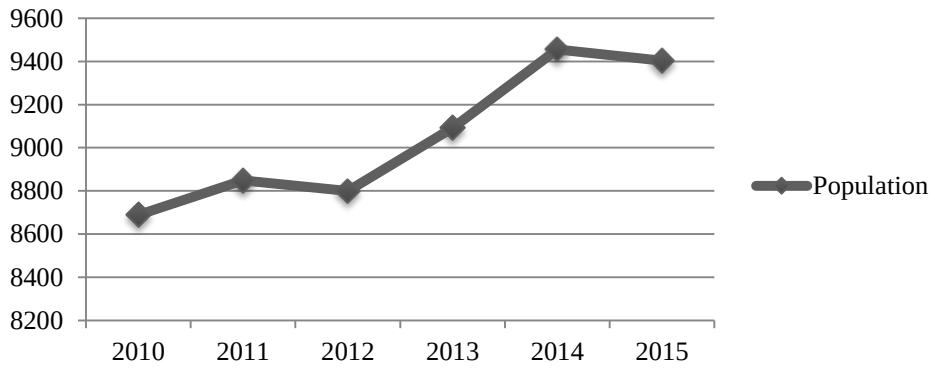


Figure 11: The population change of Karaburun between 2010 and 2015
(Source: TurkStat, 2016b)

The most important demographic problem of Karaburun is the migration of young population and ageing population (IDA, 2014). The ratio of elderly population is high when compared to Izmir province and other districts in the peninsula (TurkStat, 2013). Most of the young population migrates from the villages as villages are inadequate in terms of economic activity and social environment. There is only elderly people left in the villages with the average age over 70 (Interview no. 11). However, in recent years, Karaburun is also a place for a reverse movement; the district and the villages have been mostly preferred to settle by people who are well-educated and in search for more natural living style. Although incoming population maintains ageing population trend in the district because of being old and retired, this situation affects the demographic structure of Karaburun in a different way.

Table 3: The populations of neighbourhoods by the years between 1970 and 2015 (TurkStat, 2016b)

Years / Villages	1970	1975	1980	1985	1990	2000	2007	2010	2015
Anbarseki	287	258	249	263	224	253	192	215	186
Bozköy	208	206	202	170	152	177	101	120	168
Eğlenhoca	715	628	666	638	578	702	431	428	406
Hasseki	203	145	154	149	167	91	91	85	123
İnecik	152	198	268	276	324	559	143	142	155
Kösedere	805	774	777	689	558	673	340	363	376
Küçükbahçe	590	469	371	398	457	776	426	471	464
Merkez	1120	1235	1456	2020	3405	2932	2489	2685	2769
Mordoğan	455	415	576	2018	2018	5986	2933	3271	3825
Parlak	203	181	193	176	184	183	109	129	132
Saip	338	288	285	229	223	219	153	151	197
Salman	110	110	92	151	121	163	124	119	99
Sarpıncık	247	249	234	224	201	244	138	131	102
Tepeboz	263	253	195	288	278	357	258	269	298
Yaylaköy	209	173	176	173	130	131	112	110	103
Total	**5905**	**5582**	**5894**	**7862**	**9020**	**13446**	**8040**	**8689**	**9403**

4.1.3. Economic Features

Karaburun is facing a declining trend in its population and also facing development challenges in its economy in recent years. It has been losing its young population and experiencing difficulties to catch the development dynamics. Referring to the current situation in Karaburun, agriculture and husbandry still maintain their importance for local economy but they have declining trends. Besides, although there are tourism activities, tourism or other sectors also remained very limited in the region and haven't developed enough to reconstruct local economy.

As having rural characteristics, the prominent sector in Karaburun is agriculture and husbandry but, these activities have a declining trend in recent years. Some people living in villages have engaged with rural economic activities and existing agricultural activity is dominated by olive groves and goat raising (IDA, 2014). Other important fields have been vegetable or fruit cultivation and floriculture (IDA, 2014). Because of the topographical conditions, Karaburun has very limited productive agricultural land (IDA, 2014) and due to this, agricultural activity has remained very limited in the region. The migration of young population and ageing population have also caused agricultural activities to slow down. The migration trend has caused agricultural fields to be left empty and unproductive (Karaburun Municipality, 2014). Related to this, Bozköy village headman Mr. Baba stated that; "there are mainly old people living of which 80% are retired and others live on agriculture. The average age is over 70 and the ones who are engaged in agriculture are mainly at age of 55 and over because, young population has migrated to Izmir for work. They are not dealing with agriculture anymore" (Interview No.13).

Especially until 2000, the dominant sector was agriculture (Table 2) and the dominant agricultural activity was olive cultivation. However, declining trend in agriculture caused agricultural activities to slow down. A native from Yaylaköy Mrs. Çakmak explains this issue as such; "We (the villagers) used to cultivate once. We used to have our fields. Now, no one left. Young ones are always in Izmir. They will study, they will educate their children. All the retired ones left here now. Nobody does agriculture" (Interview No.16).

Table 4: Sectoral Distribution of Employment in Karaburun in 1990 and 2000 (TurkStat, 2016c)

	Agric. & Husb.	**Trade (Hotels & restaurants)**	**Industry & Mining**	**Construction Warehousing & Transport**	**Public Services**	**Total Emp.**
1990						**Pop.:9020**
District Center	401	179	113	326	446	1465
Villages	2516	223	151	366	303	3559
Total	2917	402	264	692	749	5024
2000						**Pop.:13446**
District Center	19	192	56	189	572	1028
Villages	5126	440	330	481	928	7305
Total	5145	632	386	670	1500	8333

As the olive is prominent in this region, olive cultivation has flourished partly thanks to agricultural supports in Karaburun. In recent years, some people have grown olive by renting public property (Karaburun Municipality, 2014) and benefited from agricultural supports given by the state. Together with this practice, many fields including meadows have been converted into olive groves. Some villagers have stated that this practice has also remained far from providing local contribution because, only a few villagers have benefited from this practice. Even more olive groves started to spread into villages and to some extent obstruct other agricultural activities (Interviews No.16&19).

Karaburun is also affected by the tourism wave in the 1980s however, tourism has developed mainly on secondary house usage. Trade activities have increased accordingly especially in the coastal villages. The village headman of Tepeboz Mr. Biçer evaluated this situation as; “The young ones in the villages

mainly prefer to stay in the coastal part. It is economically more active especially in summer. But still, job opportunities are limited" (Interview no.10). Therefore, the contribution of tourism to local economic activities seems very limited since tourism developed mainly by secondary houses (IDA, 2014).

In the last decade, unspoiled environment of Karaburun is seen as its greatest potential to new alternative development trends. Izmir Metropolitan Municipality (IMM) and Izmir Development Agency (IDA) prepared a Strategic Plan for the Peninsula which proposes an asset based development strategy by maintaining unspoiled environmental characteristics of Karaburun. Fundamental development strategy here was to develop economically by preserving and enhancing existing local features (IDA, 2014). Therefore, sustainable rural development in harmony with agriculture and tourism was determined as a new development strategy by municipal institutions for Karaburun. The main aim is to regain young people by creating new job opportunities with alternative tourism activities. And today, studies related to these development strategies have been continuing.

4.2. Wind Energy Developments in Karaburun

Referring to the current situation, Karaburun comes to the forefront as a rural territory having low population density and facing population decline. It is also a territory in which economic activities are very limited. Correspondingly, rural development studies are supported by municipal institutions in order to overcome this situation. However, it seems that, this rural environment has also been chosen as an energy field for large-scale investments by central institutions recently.

As a result of global concerns, the importance of renewable energy has increased and under the influence of international agreements, the states started to support electricity production from renewables (Loring, 2007). Additionally, as being favourable economic sector, renewables started to be supported in the context of neoliberal moves of governments (Hoedeman, 2012; Atlı, 2012). Similarly, Turkish state has given weight to wind energy and with the government policies and special incentive systems, investments have accelerated in the country. Therefore,

wind energy projects have appeared especially in Izmir and in the Peninsula. Karaburun also appears as one of the important targets, while renewable energy investments which are in need of large and vacant land have chosen their sites from rural and natural areas. Today, in the end, there are many large-scale investments in the area accomplished by major energy companies operating in energy and building sectors in Turkey.

Wind energy process in Karaburun started when Izmir Provincial Directorate of Environment and Forestry gave document of 'EIA is not required'[i] to Lodos Company for 249 MW with 166 turbines in 252 km^2 area in 2005. About the mentioned project, Energy Market Regulatory Authority (EMRA) has given approval for 120 MW with 50 turbines at first. Later, EMRA has given approval for additional 103 MW with 47 turbines for the same project. After that, 5 other companies also took 'EIA is not required' document and took electricity generation licence for around 100 turbines generating approx. 214 MW from EMRA in 29.05.2008 (EMRA, 2016). Several projects (including capacity increases) follow these investments. Today, in Karaburun district, there are six wind farm investments approved by EMRA; one of them is partially in operation, four of them is in operation, one of them is under construction. These investments collectively consist of 146 turbines capable of generating 344 MW in total (Table 3). Besides these investments, there is other investment which is under evaluation in pre-licence stage in EMRA. In the case of approval, there will be 156 turbines generating 374 MW in the whole Karaburun totally.

[i] The decision given in the scope of the EIA Directive numbered 177 entered into force in 2003.

Table 5: Wind Energy Investments in Karaburun (EMRA, 2016)

Condition	**Starting Date**	**Expiry Date**	**Name**	**Capacity (MWm)**	**# of Turbine**
Cancelled[i]	29.05.2008	29.05.2057	KARABURUN RES (Company: Lodos)	120	50
In operation	25.05.2016	18.10.2057	KARABURUN RES (Company: Lodos)	120	50
Under Cons.	25.05.2016	18.10.2057	KARABURUN RES (Company: Lodos)	103	47
In operation[ii]	29.05.2008	29.05.2057	MORDOĞAN RES (Company: Ayen Enerji)	31.5	15
In operation	29.05.2008	29.05.2057	YAYLAKÖY RES (Company: Yaylaköy Res)	15	5
Under Cons.	29.05.2008	29.05.2057	SARPINCIK RES (Company: Çalık Enerji)	32	14
In operation	29.05.2008	29.05.2057	MORDOĞAN RES (Company: Egenda Ege)	15	5
In operation[ii]	06.10.2011	06.10.2060	SALMAN RES (Company: Öres)	27.5	10
SUBTOTAL				344	146
Under Eval.	-	-	KAYA RES (Company: Ezse)	30	10
TOTAL				374	156

[i] This license was renewed several times due to cancellation decisions given by the court. Lately, the licence was included in the licence for capacity increase for 223 MW with 97 turbine in 25.05.2016.

[ii] These projects have requested capacity increase (e.g. their EIA report for capacity increase has been prepared). However, their licence for capacity increase couldn't be found on EMRA website and so capacity increases are not included in the table.

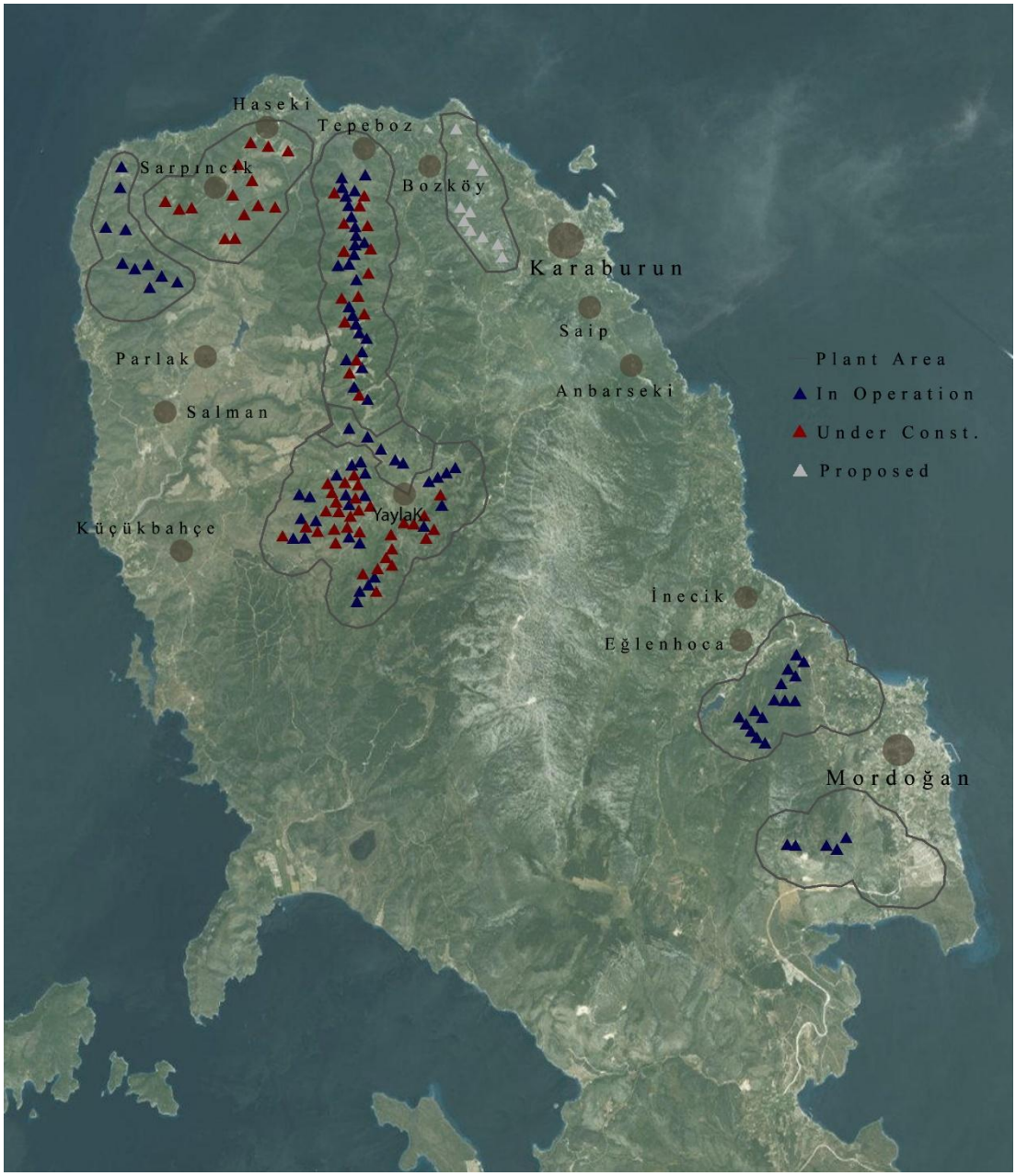


Figure 12: Existing situation of the turbines in Karaburun district

(Source: Produced by author with the data from EMRA, 2016)

Referring to the current situation, wind energy investments have densely concentrated in the area especially in the northern and middle part of the peninsula where some of the villages are located (see; Figure 12). The biggest development belongs to Lodos Company with 97 turbines located around Yaylaköy and on the area extending towards Tepeboz. Yaylaköy is surrounded by wind turbines which are approx. 125 metres in height. Other effected settlements from wind farm developments are Mordoğan (village), Tepeboz, Bozköy, Haseki and Sarpıncık. Some of the developments are so close to these rural settlements; some others located within 500 meters and many of them environ villages with their plant areas. Additionally, some of the turbines are located on environmentally important areas in Karaburun; they are located on meadows, forest lands and farmlands.

The most affected village from wind farm developments is Yaylaköy as the village remains in the plant area of Karaburun RES project. As it is seen from the figures below, the village is surrounded by many wind turbines all around. The turbines belong to Karaburun RES and Yaylaköy RES projects. Some of the turbines are located on the areas where economic activities take place (e.g. meadows and olive grows) and some of the turbines are very close to the village (see; Figure 13). The closest turbine is located within approx. 580 metres[i] to the village.

Figure 13: Wind turbines visible through Yaylaköy village
(Source: Personal archieve, 20 March 2016)

[i] The distances are measured by GoogleEarth Pro, 2016.

Other affected villages from Karaburun RES project are Bozköy and Tepeboz villages. Tepeboz village is affected more because it is much closer to existing turbines and the plant area of the mentioned project. The closest turbine to Tepeboz village is located within approx. 600 metres[i] and the closest point of the plant area is within 260 metres[ii]. The turbines are not so close to Bozköy village but they are visible from the settlement because of the topography (see; Figure 14).

Figure 14: Wind turbines visible through Tepeboz (right) and Bozköy (left) villages (Source: Personal archieve, 20 July 2016)

Mordoğan village is another affected settlement from the developments. It is affected from existing Mordoğan RES (Ayen Company) project and capacity increase of the same project. Existing turbines are not so close but they are visible from the village (see; Figure 15). New turbines are planned to be located close to the settlement; to be located within 350[i] metres to the village. Additionally, one of the turbines is located within 150[iii] metres to nearest dwelling in Mordoğan neighbourhood.

[i] The distances are measured by GoogleEarth Pro, 2016.

[ii] Karaburun RES EIA Report, 2015.

[iii] Mordoğan RES EIA Report, 2014.

Figure 15: Wind turbines visible through Mordoğan village
(Source: Personal archieve, 27 July 2016)

The affected villages from proposed wind farm development are Haseki and Sarpıncık villages. They are affected from Sarpıncık RES project which is currently in construction on a very close area to both of the villages. The closest turbines of the proposed project are located within 540 metres to Sarpıncık village and within 260 metres to Haseki village[i]. Additionally, both Haseki and Sarpıncık villages (settlements) remain in the plant area of Sarpıncık RES project.

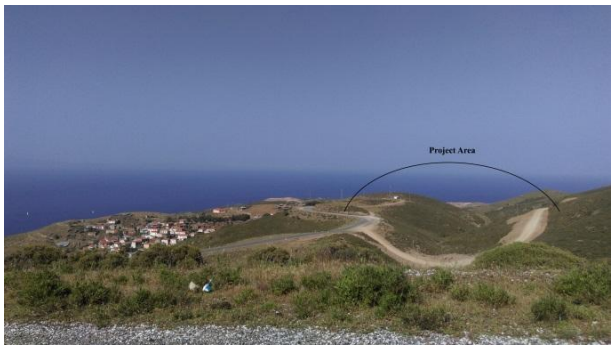


Figure 16: Sarpıncık village and Sarpıncık RES construction area
(Source: Personal archieve, 20 March 2016)

[i] Sarpıncık RES EIA Report, 2014.

Wind energy developments in Karaburun have been implemented according to the old procedures based on the related legislation (Law No. 5346 entered into force in 2005) and regulations (e.g. EIA Directive No. 177 entered into force in 2003) applicable in the period which have less stringent procedures about renewable energy developments. According to that version, in a very general order, companies have received positive opinion for the selected site from relevant institutions[i] and have completed EIA procedures for the facility[ii] in order to take electricity generation licence from EMRA. As there were no criteria for site selection and no requirement for EIA process, wind energy projects quickly passed these processes and took generation licence easily. Following the generation licence, development plans (1/1.000 and 1/5.000) have been prepared. As there was no requirement for an upper-scale plan decision and no zoning for renewable energy developments (See; Figure 17) the projects have received approval regardless of their site selection[iii]. Once the plans have been approved and the legal compliance have been ensured, company could have entered in the construction phase for the facility.

In that time period, wind energy investments which were passing through such a simple procedure began to spread rapidly in specific areas having high wind energy potential. Karaburun, in this sense, was one of those areas exposed to many wind energy developments. A number of investments have chosen sites from Karaburun by completing entire procedure rapidly. Following this, many turbines have started to rise on Karaburun landscape. In a small period of time, turbines have been installed on very close areas to rural settlements or on agricultural lands and meadows. Consequently, Karaburun and its villages began to be affected negatively from these major developments.

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[i] In order to take generation licence from EMRA, investors should receive positive opinion from 47 authorities.

[ii] According to the EIA Directive No. 177 entred into force in 2003, renewable energy developments was not subject to EIA procedure regarless of their size and capacity.

[iii] Smaller scale development plans for renewable energy investments can be prepared without a change in the environmental master plan (1/100.000) by only receiving approval from the relevant institutions and Ministry of Environment and Urbanisation.

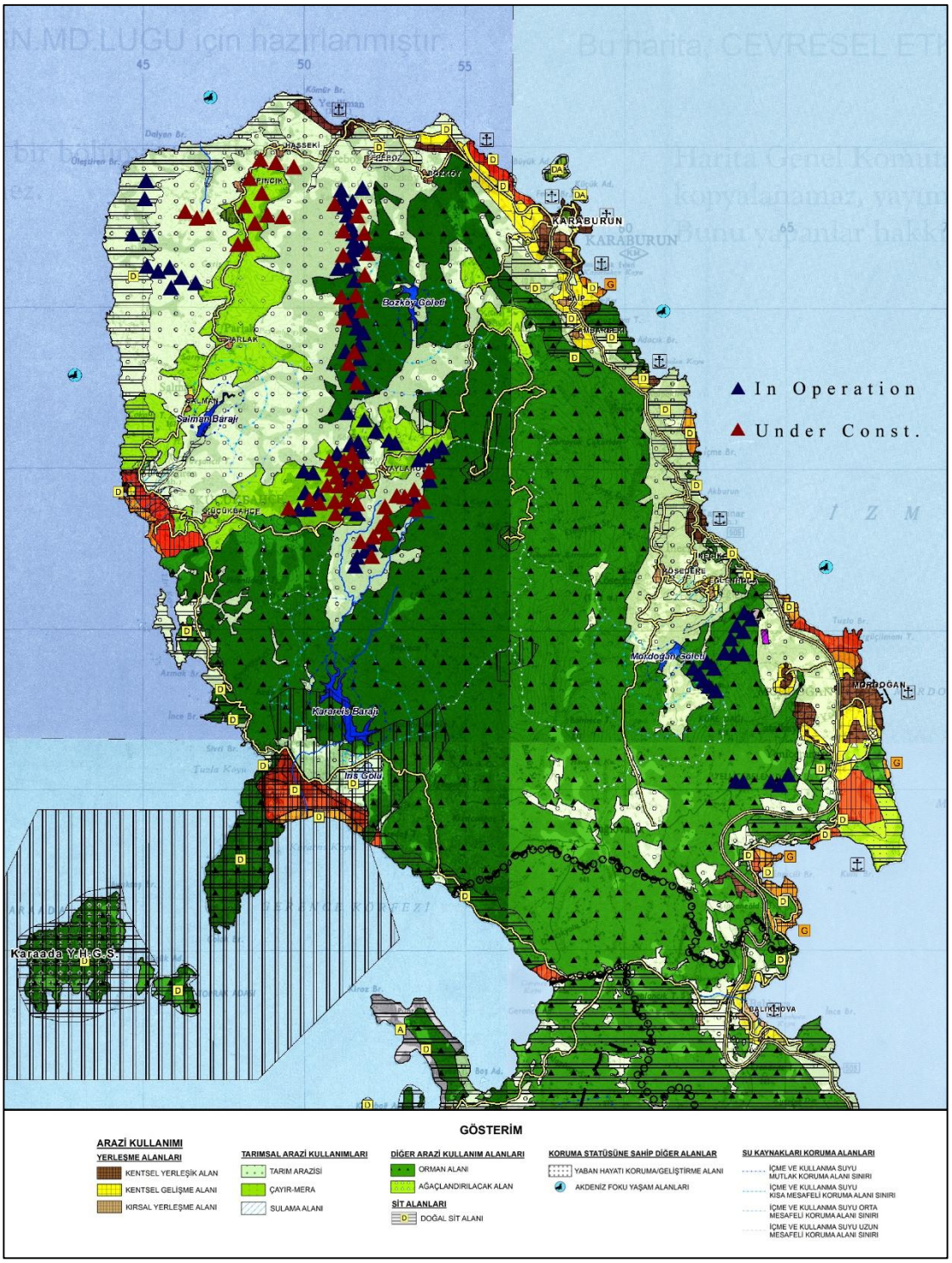

Figure 17: Location of the turbines on 1/100.000 Environmental Master Plan (Source: Produced by author based on the data from EMRA and MEU)

4.3. Resistance in Karaburun

When wind turbines have risen on Karaburun landscape, these intense investments started to face local opposition. Until today, many protests have been performed against these developments and protests have grown when new constructions have taken place consecutively. Oppositions have arisen in the villages, grown and gained power with the involvement of opposing local initiatives. Afterwards, the protests have continued through legal system; lawsuits have been filed against the developments and they still continue. Today, the resistance against wind energy developments have grown in Karaburun and turned into a struggle in the field of energy.

4.3.1. Oppositions against Wind Farms

The oppositions have started when local people started to be affected negatively form rapidly increasing developments. Problems began to occur when private properties were expropriated and together with meadows, they were assigned to investor for wind farm development (Interview No.9). In the first instance, olive groves of a villager in Yaylaköy was expropriated (by urgent expropriation[i]) in the context of Karaburun RES development plans and the area have been enclosed for turbine siting (Interview No.25). Particularly, some of the peasants began to suffer from these processes as the meadows and farmlands have been divided and have turned into energy fields (Interview No.16; No.17). Consequently, their economic activities have been interrupted. Besides, construction of turbines started to damage natural and rural environment by site clearing for roads and turbine basement (Interview No.2, No.9). After the construction phase, noise started to affect daily life of the people living close to turbines. These negative externalities have been experienced in almost all villages but become prominent especially in Yaylaköy

[i] Urgent expropriation procedure has been implemented in expropriation process for wind energy developments because EMRA allows small period of time for the developments to complete the legal procedure.

village. These phases have drawn the attention of local population who were environmentally concerned and the process have been moved towards protests by this population.

The protests come primarily from local non-governmental organisations such as Karaburun City Council and Karaburun Common Life Platform which are carried out by newcomers who became a part of local community in recent years. These newcomers came and settled to Karaburun for living a natural life in their retirement. The strength of the protests come from those newcomers who consider themselves environmentalists. The first protest was held in 2013; nearly 300 environmentalists under the leadership of Karaburun Common Life Platform protested against wind power plants in the region and representatives of other non-governmental organizations on the peninsula such as Peninsula Common Life Platform gave their support to the action[i]. Following this, many other protests were held under the leadership of these local platforms and organisations and some of the villagers also took part in the protests. Addition to these protests, resistance in public consultation meetings[ii] were also seen as a kind of protesting wind energy projects.

Figure 18: Photos from protests against wind energy investments held in Karaburun (Source: Karaburun City Council Website, 14 July 2015)

[i] Hurriyet Newspaper, 16 August 2013.

[ii] Karaburun City Council Website, 19 February 2013; 10 November 2014.

Following the protests, the environmentalist groups together with villagers have launched legal struggle against developments with the help of an outsider organisation of environmentalist lawyers (ÇEHAV). This organization was involved in the process by carrying out the lawsuit proceedings. Since 2014, the number of cases filed against wind energy developments in Karaburun have reached to 11. These cases have been filed against five developments in the region and the highest number of cases belongs to Sarpıncık RES and Karaburun RES (See; Table 4). The files have been opened as citizen lawsuits against licence for capacity increases, EIA processes and developments plans. Izmir Metropolitan Municipality, together with Karaburun Municipality, have also filed lawsuits against the Ministry of Environment and Urbanization in the context of development plans of projects (Yaylaköy RES and Sarpıncık RES) and the planning processes with the reasons of being a contrary decision to the plan decisions of IMM and the lack of consultation to municipal institutions in the planning processes.

Table 6: Number of cases opened against developments in Karaburun

# of CASE	EIA Cancellation	Licence Cancellation	Dev. Plan Cancellation	Total
Karaburun RES (Lodos En.)	2 cases	2 cases	_	4 cases
Sarpıncık RES (Çalık En.)	2 cases	_	1 case	3 cases
Yaylaköy RES (Yaylaköy El.)	1 case	_	1 case	2 cases
Mordoğan RES (Egenda En.)	_	_	1 case	1 case
Mordoğan RES (Ayen En.)	1 case	_	_	1 case

Legal struggle started with the lawsuits filed for the cancelation of the decision of 'EIA is not required' and the electricity generation licence given to Lodos Company Karaburun RES project which is the biggest wind energy project in the area. The court cancelled the licence of the company and turbines were stopped[i]. However, after a period of time, EMRA has renewed the licence; a new EIA process was initiated (for the new 47 turbine) and approved by the Ministry of Environment and Urbanisation with 'EIA positive' decision[ii]. Now the turbines are operating and the construction of new turbines planned in capacity increase continues. The legal process started by the opponents also continues along with these processes.

Opponents also filed a citizen lawsuit for the EIA process of Sarpıncık RES project of Çalık Enerji Company. The company has prepared EIA report although the project does not subject to EIA criteria. The Ministry of Environment and Urbanisation approved the EIA report of the project and gave 'EIA positive' decision. Villagers and environmentalist groups have protested the decision by not attending public consultation meeting held under EIA process[iii]. Opponents have also filed a lawsuit against the 'EIA positive' decision and the court cancelled EIA process of the development. After that, opponents also filed a lawsuit against the development plans of Sarpıncık RES approved by the Ministry of Environment and Urbanisation[iv]. Izmir Metropolitan Municipality also filed a lawsuit against the same development plans. These development plans of Sapıncık RES have been cancelled. However, as in Karaburun RES project, new EIA and planning process for Sarpıncık RES was initiated, approved by the Ministry of Environment and Urbanisation and the construction of turbines have started[v]. Currently, legal process for Sarpıncık RES project also continues.

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[i] Karaburun City Council Website, 21 April 2014; Hurriyet Newspaper, 14 July 2015.

[ii] Karaburun City Council Website, 11 November 2015.

[iii] Karaburun City Council Website, 10 November 2014.

[iv] Hurriyet Newspaper, 5 October 2015; Karaburun City Council Website 4 November 2015.

[v] Karaburun City Council Website 29 January 2016; Hurriyet Newspaper 24 March 2016.

Today, legal struggle against developments still continues and the ongoing lawsuit processes are repeatedly progressing. Main reason for that is the process which progresses as follows; an operation (e.g. EIA decision) has been submitted to the court by opponents. Later the operation has been cancelled. However, instead of the cancelled operation, the Ministry (MEU) allocates a new process (e.g. new EIA decision) regardless of the court decision. Thereupon, a new citizen lawsuit has been opened against new operation and the legal process has been repeatedly progressing (Interview No. 3).

Main arguments in the protests and in the lawsuits are formed on the arguments that wind energy is good as it is producing clean and renewable energy but, its massive generation on the area started to effect the region negatively. Too many large-scale developments concentrated in the area started to disrupt the nature of Karaburun as the number and size of the developments have exceeded the potential that Karaburun can handle. Many developments have spread all over the district and due to their locations, they started to damage natural environment, limit local people's living spaces and disturb local economic activities which are already limited in the region[i]. Even more, the developments are established without considering economic needs, vital necessities, socio-cultural and natural values and endemic species under protection of local environment. This place has unique environmental and cultural characteristic which is needed to be protected. In such an environment, there is a requirement of more comprehensive impact assessments which also take into account cumulative impact of many developments. However, investments are planned without such an assessment and by disregarding local priorities, local life and human health[ii]. As a result, local people are protesting wind energy implementations which disturb existing local life in the region by threaten economic and social presence of local people.

[i] Karaburun City Council Website, 19 March 2013.

[ii] Karaburun City Council Website, 20 December 2015.

4.3.2. The Conflict Process

An important feature of wind energy projects in Karaburun is that they are one of the first wind energy projects in Turkey which are subject to less strict licensing procedures**.** The main reason is that, in that time period, increasing energy production from renewable energies, especially from wind energy, have become a new state policy in Turkey and in order to pave the way for investments, wind energy was subject to an easier procedure. First of all, wind energy was not subject to strict EIA and site selection procedures. Consequently, whole licencing procedures of wind energy developments have been completed without much deliberation, the project based development plans have been approved regardless of the location (site selection), size and capacity of investments and they have passed quickly to their construction phases. The absence of integrated planning and lack of criteria in site selection have allowed the establishment of turbines on a very close area to the settlements or on many high quality natural lands (forests, farmlands, conservation areas, etc.). Investments which are not going through proper site selection by planning and impact assessments filters have caused problems in local environments and have collected responses from local public. Poor operation of the process with lack of mitigation have led to the emergence of unpredictable problems and have caused to the emergence of wind farm conflict in the area (See; Figure 19).

It can be deducted from the whole process and the discourses, there are three main problems most prominent in planning processes which are related to mitigating externalities of wind energy;

- Site Selection; site selection is not subject to detailed assessments, criteria and planning decision. The location of turbines is determined by related regulation which is grounded on purely engineering and technical criteria (esp. wind capacity).

- EIA Process; wind energy developments have taken their licences without being subjected to detailed EIA processes. Existing EIA process is not sufficient; there is no socio-economic, visual and cumulative impact assessments required in the licencing procedures of developments.

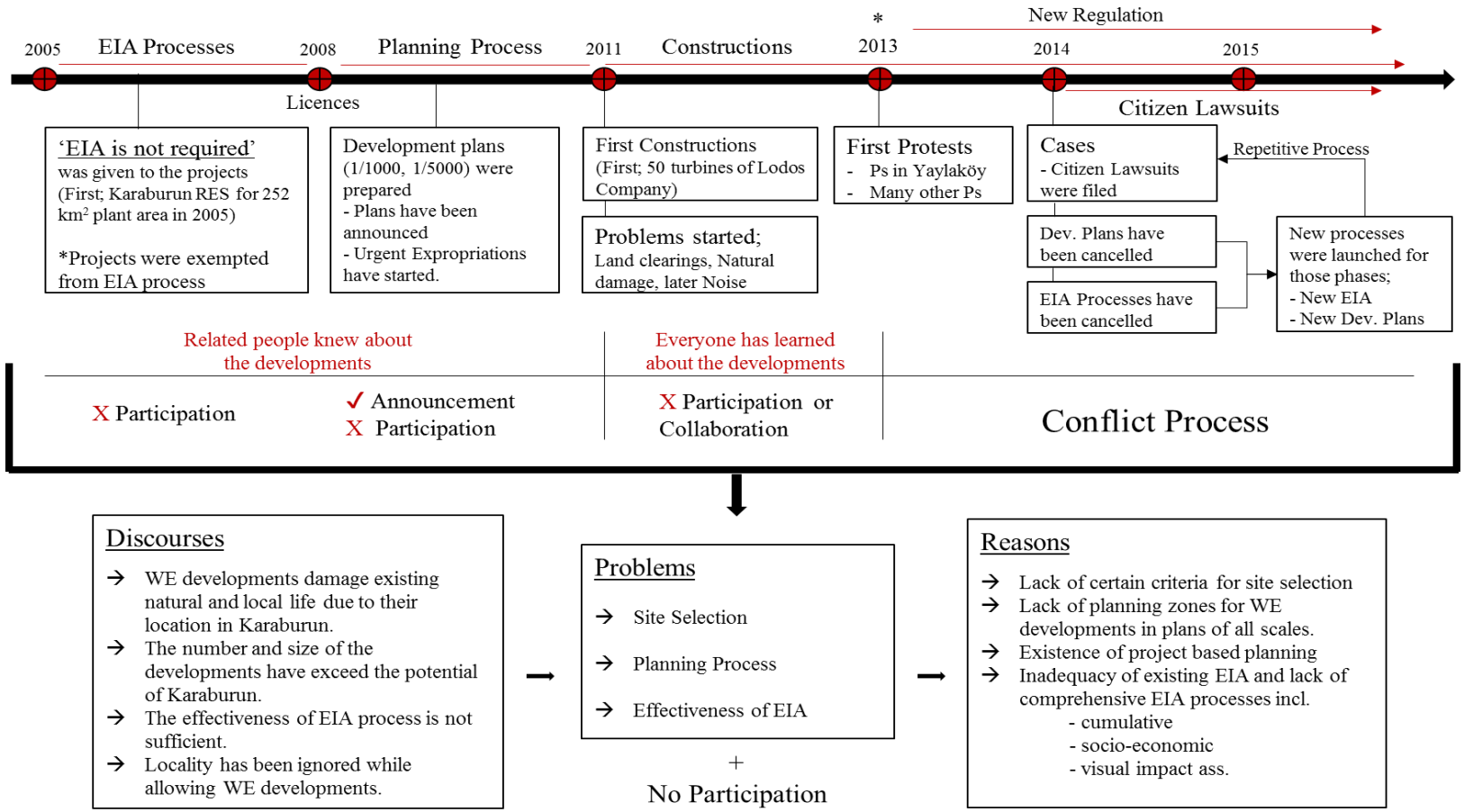

Figure 19: Timeline of wind farm conflict process in Karaburun

- Planning Process; there is lack of integrated planning approach which spatialize policies in accordance with the existing local features in the region as a whole. Existing planning procedure has remained project-based since there isn't any zoning or plan decision to restrict developments in site selection in upper scale plans.

Besides all these, top-down decision making on wind energy in Turkey, also triggered oppositions towards wind energy. There is central planning understanding especially on developments related to national policies in Turkey and since wind energy is a governmental policy, decisions about wind energy developments have been taken at national level. Even, local municipal institutions are not included in both decision-making and planning processes. Whole process is proceeding with decide-announce approach which only provides one-way flow of information (Peker, 2013). Likewise in Karaburun, the announcement for each project was made after the development plans have been approved. It is observed that no public participation has been provided in any stages. The only participatory phase in the whole process; public consultation meeting in the scope of EIA couldn't also be realised as the developments were exempted from EIA processes[i]. Other meetings performed afterwards were also realized for informational purposes. Consequently, only after the whole process has been completed, locality introduced with the situation that many wind energy developments were about to take place in their local living environments. In top-down planning understanding, local people were unable to have an opportunity to influence project outcomes. This has reduced the sense of local control on developments, has increased perception of unfairness and has resulted in negative perceptions to increase easily. In order to convey their opinions about the developments, local community inclined to oppose and organise protests against wind power in Karaburun.

Consequently, there is another important problem in the process of wind energy which is much related to planning process;

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[i] Some of the investors (e.g. Lodos Company) have made public information meeting in the scope of Social and Environmental Impact Assesment which should be fulfilled to receive Gold Certificate. But this is not a necessity of Turkish wind energy procedure.

- Lack of Participation; no participatory schemes enabling acquirement of different knowledge resources (including technical, environmental, local, experimental, etc.) has been adopted in decision-making and planning process for developments. Not only local public but also local institutions have been excluded from the process of planning therefore, process remains insufficient to gather subjective opinions and to response local concerns and demands related to the issue.

As a consequence, Karaburun is an important area with its natural and rural features. Initially, more sensitive planning processes are needed in such environments for any development models, even though the developments may seem environmentally friendly. However, before the installation of wind energy developments, no application related to mitigation of externalities on local environment has been provided. Additionally, completion of entire process without public participation has led to the loss of local level connection. Two of these processes, which are very much related to procedural deficiencies, have resulted in some problems related to the issue. First of all, lack of proper site selection and lack of participation have led to the establishment of projects on local priority areas of Karaburun. As EIA process is not sufficient, negative impacts of developments have been disregarded. Therefore, concerns about negative externalities started to increase and triggered oppositions. Secondly, the exclusive and top-down decision making processes started to impair locality's sense of trust because they started to feel 'excluded' and 'forced' to accept the decisions given on their own living environment. Additionally, allowing many investments without considering local opinions started to create perception of unfairness and injustice. The inconclusive proceedings in legal struggle also triggered this perception. Consequently, poor operation has reduced the acceptability of the projects and increase oppositions against wind energy developments in Karaburun. This shows the importance of good management of whole process including decision-making, impact assessments and planning on wind energy in order to minimize conflicts related to issue.

4.3.3. Actors Involved in the Conflict Process

As it can be understood from the previous part, there are many actors involved in the process. Local community became one of the main actors in the process as they are directly affected from wind energy developments. Wind farm developers also become one of the main actors as they are the practitioners of wind energy developments. Lastly, governmental institutions are important actors in the process as they are the legal authorities responsible from the process of development. Therefore, main actors are defined as local people (both villagers and newcomers) resided in Karaburun and affected villages, wind farm developers (investors) operating in the area and governmental institutions responsible for the development processes. Other important actors in the conflict are local initiatives carried out by newcomers, outsider environmentalist organisations, municipal institutions and intermediary institutions such as universities or professional chambers.

Newcomers and local initiatives they formed become prominent as important actors in the process as well. Newcomers are a population who choose to live in Karaburun for more calm and natural life. This group with higher level of education and awareness has an environmentalist position and strongly opposes the developments. Although wind energy developments are seen as an environmentally friendly investment, densely constructed developments attracted the attention of this group. They have shown their reactions through local initiatives such as Karaburun City Council and Karaburun Common Life Platform. Oppositions against wind power developments gain power with the involvement of these environmentalists and the local initiatives they lead. Other environmentalist groups such as EGEÇEP (Aegean Environment and Culture Platform) and ÇEHAV (Environment and Ecology Movement Lawyers) involved in the process from outside. EGEÇEP supports the protests and ÇEHAV supports the process by carrying out the legal proceedings. The protests and struggle have grown and many other environmentalist platforms involved in the process. Later, all these platforms formed another platform

together; Rüzgar Yaşamdan Yana Essin Initiative[i] which is directly against wind energy developments. The platform includes many environmentalist organisations from the Peninsula (e.g. Urla, Çeşme, Güzelbahçe), from Izmir (e.g. Kemalpaşa, Bayındır, Turgutlu) and from Aegean region (e.g. Bodrum, Ayvalık). So, these environmentalist groups are important actors in the process of wind farm conflict.

Municipal institutions; Karaburun Municipality and Izmir Metropolitan Municipality are important local actors in the process too. These municipal institutions are mainly excluded from the process of development as the developments plans are approved by the Ministry of Environment and Urbanisation with a top-down planning process. Especially Izmir Metropolitan Municipality, opposed their exclusion from the planning process and have filed lawsuits against the development plans approved in its area of responsibility. Therefore, the municipal institutions have also been involved in the conflict and have been one of the important actors in the process.

Lastly, intermediary institutions such as universities, research centres and professional chambers are taken as other actors in this wind farm conflict process experiencing in Karaburun. These actors are not directly involved in the process but accepted as important actors as they have expert positions.

Different actors have different reasons to oppose or support wind energy developments in Karaburun and different reasons to be involved as they all have different positions in the process. In order to understand the main rationale behind wind farm conflict in Karaburun, it is important to understand the positions and intentions of each actor involved in the process which will be discussed in the next chapter (Chapter V) more deeply.

[i] Rüzgar Yaşamdan Yana Essin Iniative (wind should blow in favour of life) has been established in March 2016 with the involvement of 17 different environmentalist organisations.

CHAPTER V

THE CASE:
ACTOR POSITIONS IN THE CONFLICT

Rapidly expanding wind energy developments have launched a major controversy on wind energy and its implementation in Turkey. Even though the developments provide clean energy, they started to intrude into unspoiled natural and rural areas. Therefore, a debate started to grow between people who think differently about the issue; wind energy as a solution to energy and environmental problems or as a danger to living species and natural areas; as an opportunity for local jobs or as a threat to local economic activities; as a beautiful scenery of clean energy or as ugly intrusion on the landscape; as a government policy and national necessity or as greedy developers spoiling rural territories.

Likewise in Karaburun, different actors started to oppose or support wind energy developments for different reasons. In order to understand the debate with all determinants so far, 35 semi-structured interviews were conducted with local people, local initiatives, public institutions, developers and other actors involved in the process. Meanwhile, necessary documents were collected from the people interviewed. Also participant observations have been done in the protests and group meetings organised by leading initiatives. This chapter discusses findings from interviews, observations and collected information. By this, it lays out the issues that people and key actors emphasise about their beliefs and logic behind the debate. The purpose of this is to understand the reasons of support and opposition more deeply, therefore to understand main reasons behind the conflict experienced in the area. Another aspect of this effort is to find the points that can change the perspective of the actors and minimize or resolve the conflict realised in the area.

5.1. Local Community

Local community is one of the important actors of wind farm conflict in Karaburun since the oppositions come mainly from this group. The community has been composed of two main groups; villagers and newcomers. These two groups are distinguished as different actors having different interest on the conflict experienced in the area.

Even though these groups are distinguished in terms of their interest, they also have common problems related to the issue. The most important problem they have in common is negative externalities on their living environments related to the site selection of wind energy developments. This problem has brought these two groups together and led to strong oppositions towards wind energy in Karaburun.

5.1.1. Villagers

One of the main actors involved in the process is native people living in Karaburun villages because they are the ones who are directly influenced from wind farm developments. This influence can be either positive or negative so the positions of villagers have been divided into two according to their kind of influence. While some of them oppose, some others support the developments. So there are two different views among the villagers.

Opposing views constitute the majority amongst villagers. Opponent villagers are mainly opposing to the developments in the context of local concern. Against the developments, the most widely used argument was the site selection of turbines. Negative externalities of close turbines such as noise and disruption of local economic activities were the most important problems they emphasised.

Tepeboz village headman explained the general opinion about the problem;

> "We need energy and it is important that this energy to be clean. Only the location (of the turbines) is troubled. (They are) so close to the settlements, making noise and bothering citizens. … I think the location is important. If you choose well, no problem. It won't be a problem as long as it does not damage existing life here…" (Interview No.11)

Likewise the headman, villagers accept the need for energy investments but their opposition is mostly towards the way of implementation (Interview No.17, 19 & 20). Most of the villagers emphasise the location and problems that the proximity of turbines brings. The mostly stated problem is the noise of turbines especially when there is strong wind (Interview No.2, 16, 18, 19 & 21). Particularly in Yaylaköy village, where the problems mostly emerged, villagers mentioned that turbines have surrounded the village all around and started to create many problems. The noise created by close turbines started to affect daily life and close turbines started to limit their living environments. A villager from Yaylaköy explained the issue as such;

> "We know that these investments should be made, but they must be made without harming people. They (turbines) surrounded entire village and located almost over our village. My complaint is only about the proximity to our village and the noise. I don't have any other problem. .... I am not opposed as long as they are located away. They should be made but they should be made properly." (Interview No. 17)

Other peasants also stress similar problems related to the issue (Interview No.16, 19 & 27). They mention that fields for economic activities, especially meadows and olive yards, were taken for energy usage. Agricultural activities have suffered since some parts of the fields have been used for roads and turbine siting. Additionally, husbandry started to be disturbed as they have no place left to graze their animals because of the turbines located on meadows. They stress that this situation particularly affects goat raising very negatively. Another villager again from Yaylaköy explains the issue as;

> "They (developers) cut through the fields for roads. They only open roads but it takes even half of the field. They (turbines) are established on the fields, on the lands grazed by goats." (Interview No. 17)

From the discourses of villagers, it is observed that the oppositions are grounded on the concerns related to the location and negative externalities it brings. Opponent villagers underline the importance of the location and site selection of turbines. They want turbines to be located away from their living environments; including their settlements, their farmlands and meadows. When the distance is maintained and negative externalities are reduced, their positions can easily change

towards more positive attitude. Site selection, in this sense, becomes an important determinant of attitudes towards wind power and wind farm conflict experiencing in the area.

Even though opponents constitute the majority, there are also other villagers who support wind energy developments. These villagers support the developments with the reason that they create local job opportunities (Interview No.2, 12 & 18). Again in Yaylaköy village, some villagers support wind power as their family members are working for the developments as security guards. This group, who stresses the decline of agricultural activity, argues that wind energy can be a local opportunity (Interview No.2&12). Besides, community compensation activities such as free electricity, rehabilitation of roads and pavements provided by the developers increased support for the developments. This condition made some villagers support wind energy investments in the area (Interview No.2, 12 & 18). For example, a villager whose son is working as security guard said;

> "We have no complaints. It makes noise in strong wind but inside, no harm to us. Neither to our sleep, nor to our living. If there isn't strong wind, it makes no noise at all. Our electricity is free, they made our pavements, they made financial support to our mosque and village. We do not have any complaints about them (the developments)" (Interview No. 18)

However, disagreement between two sides with different positions result in villages to split into two. The conflict experiencing in the area has also damaged social ties exist between people living in the villages.

Consequently, people with economic benefit mainly support wind energy developments and community compensation also increases support. This shows the importance of economic benefit on the perceptions of wind energy developments. However, in other villages, villagers emphasised that under no circumstances, they accept turbines to be located close to their settlements because of negative externalities on their living environments and their social interactions;

> "They (turbines) constitute no harm to us, they are already far away. But, we do not want them near us. They should not help us and should not come closer." (Interview No. 20, 21 & 22)

From here, it can be interfered that economic benefit could reduce the conflict but location and proximity emerge as more important criterion.

In summary, most of the villagers have emphasised mainly two problems; noise and disruption of economic activities. Almost all of the villagers (either opponent or supporter) have mentioned about the proximity of turbines to their living environments and problems that the proximity brings. Therefore, site selection becomes an important issue in order to decrease level of oppositions coming from villagers. When the proximity of turbines to living environments increase, level of negative influence and perceptions of villagers would decrease easily.

5.1.2. Newcomers

Second group from local community is newcomers who came Karaburun to settle for tranquillity and nature exist in the area. This group is composed of environmentalist people who have high level of education and high level of awareness. The quiet nature of Karaburun has provided them the place for more natural living style so they chose to live here and become a part of local community.

Nearly all of the newcomers interviewed answered the question "How would you describe Karaburun?" with the same answers; "Karaburun is a very natural area and it is a very special environment with its preserved and undisturbed natural characteristics" (Interview No.1, 9, 25 & 28). They all emphasise that they have settled Karaburun for this reason. Therefore, site-specific characteristics of the area becomes an important determinant for newcomers in their positions.

Relevantly, the discourses of newcomers are formed in the context of nature as their attitude is preservationist towards nature. First thing they emphasise about the negative impacts of developments is the hazard to natural areas and species especially endemic ones (Interview No.1, 9, 25 & 28). Second thing is the hazard to rural features thus to rural development potential. So, against the developments, the most motivating argument of this group is that the developments intrude into a very special landscape and started to damage unique characteristics of this environment.

In an environment they choose to live, the damage brought by the implementation of this large-scale developments began to disturb this group. They all mentioned about their annoyance resulted by the environmental hazard from turbine construction (roads, site clearing) and operation (hazard on birds, bees, bats and other species). One newcomer explains her annoyance about the construction by mentioning the area was riddled with holes for turbine basements (Interview No.28). Another explains the damage resulted by the whole process as follows;

> "For one single turbine, huge spaces and roads have been opened by site clearing, a valuable land cover have been hampered. Also operating turbines constitutes risks for birds. Turbines are being implemented by destroying the habitat of many endemic species of Karaburun." (Interview No.1).

In addition to natural damage, newcomers also emphasise the damage on rural features in the second place. For them, Karaburun is a rural area which is needed to be protected with its natural and rural features. They all believe that Karaburun should develop with its ecologic and natural values and by rural development models aiming at protecting local values it has (Interview No.1, 9 & 28). They stress that wind energy developments with these sizes obstruct rural development potential of Karaburun by giving harm on local rural features;

> "Investments of these sizes are destroying rural development potential (of Karaburun). Olive grows, meadows thus goat raising and nature tourism have suffered. They can trigger existing immigration problem. After 25 years, they are going to leave by leaving us a heap of junk as well as damaging all local economic activities." (Interview No.1)

As it can be deducted from these, this interest group evaluates nature as idyllic and pure which is vulnerable to human intervention. Any development is harmful for the nature and wind energy started to be one of those developments. Even though wind energy is known as environmentally friendly energy form, rapid change resulted by these large-scale facilities started to attract these preservationist (or natura-ruralist) people's attention. Developments started to be seen as constructions reaching to industrial dimension rather than being environmentally friendly because of their sizes (in total) and their detrimental effects on environment. One of them indicated the issue as follows;

> "It (wind energy) is not comparable to other forms of energy. I would advocate some years ago. I wouldn't believe I will come to this point. We did not know that they were so massive. They are officially industrial factories." (Interview No. 9).

As it can be understood from this discourse, in the face of large scale investments, this group started to question the reliability of renewable energy developments. They argue that wind energy turns into a massive development and even though wind energy is an environmentally friendly form of energy, it started to be a kind of spoliation of nature. One of them said that her decision changed after her experiences;

> "It (wind energy) was a kind of energy form we prefer among the other energy forms. But after our experiences, we have changed our minds. Because it turns into a spoliation. It is progressing by disregarding and demolishing existing life here. Process are progressing very quickly; they are planned without being asked. Suddenly, construction begins and it give irreversible harms. Thus, it started to be distasteful." (Interview No.25)

Relatedly, most of them put emphasis on the political side of energy decisions and energy investments. They emphasise the procedures and planning systems which are in favour of large-scale developments. Therefore, they asses the process as a way of rent provision for big companies supported by governmental policies;

> "Wind energy is a new governmental policy and the developers supported by government are making the investments. So the question of "energy for who?" comes to our minds" (Interview No.9)

The fact that all the planning process is ignorant and exclusive has further increased their negative perceptions on wind power and increased their opposition levels. Because exclusion from whole decision-making process and later troubles they faced in resistance process (both protests and legal process) have resulted in another problem; mistrust. The exclusive and disregarding attitude in planning phases has broken their trust on the development processes, on the institutions and on renewable energies. Disregarding attitude towards their discourses in oppositions and towards their legal achievements in cases have increased their mistrust on decision

makers and triggered oppositions against wind power even more. Another one said about the disregarding attitude as follows;

> "… there are already very few people in Karaburun and villages, so they ignore. They come too close. Existing life is being damaged. So, you open a file against them, but they continue with a new application whether you won the case or not. For the sake of big capitals, individual rights are being ignored" (Interview No.28).

In summary, a key source of the opposition of newcomers is based on the natural destruction by massive renewable energy developments and the sacrifice of nature to large-scale energy developments by political preferences. Rather than aesthetical concerns, main emphasis of newcomers is on the negative impacts of wind energy developments on nature. It is clearly seen that they have natura-ruralist perspective on nature (Woods, 2003). They see wind energy developments in great sizes are out of nature and harmony. Negative perception of an unnatural development in a valued environment triggered their opposition. The change resulted by large-scale wind energy developments was negatively perceived by this group because an unfamiliar usage is perceived as harm on the place that this people feel belong to (Devine-Wright, 2009). Therefore, oppositions are mainly towards the conversion of this area into an energy field by allowing many wind energy developments to intrude into this landscape. This violate the expectations and values of this interest group who expected this landscape would remain forever undisturbed.

Therefore, main reason behind the opposition of newcomers is ideological. As they have preservationist towards nature, they argue that existing situation has already exceed the balance between preservation and development and started to damage natural structure of the region. Besides, exclusive attitude violates their belief that the developments are done for clean energy and public interest. According to them wind energy development has deviated from its real purpose. That' why, the acceptance of wind energy has declined and they show strong resistance to implementation of wind power. Their strong position can only be softened and modified by collaborative practices.

5.2. Non-governmental Organisations

Non-governmental organisations have great importance in wind farm conflict processes not only in Karaburun but also in other regions of Turkey. Local organisations in the regions where many wind energy installations take place, were struggling alone against the developments. In Karaburun too, there are local initiatives struggling against wind energy developments in the area. After a period of time, these local organisations began to support each other in their protests against wind energy. Besides, external environmentalist organisations (See; Chapter IV) started to give their support to the protests and to legal struggles prosecuted by these local organisations. Finally, these environmentalist organisations formed an initiative by bringing all these organisations together; Rüzgar Yaşamdan Yana Essin Initiative which is directly against wind energy developments in the whole Aegean region.

The initiative has three main arguments in their oppositions[i]. Firstly, they oppose wind energy developments by strongly emphasising negative impacts of developments on natural and rural features. They stress that, cumulative effect of many developments consist of too many turbines in total will have detrimental effects on natural environment of the regions. Secondly, they argue that socio-economic life exist in those areas is under threat because, the areas necessary for social and economic life are allocated to wind energy developments without considering existing life. Lastly they claim that, because of all these reasons, their right to live in a healthy environment have been taken away. They also refer to the deficiencies of planning processes, inadequacy of EIA processes, exclusive and top-down decision-making and disregarding attitude of central institutions while mentioning about the problems related to wind power. Consequently, the Initiative and the member organisations are against wind energy developments with the reason that wind energy investments started to be harmful and no longer sustainable because of the costs on local environments resulted by their size, their location and their way of implementation.

[i] The press release of the Initiative, 14 June 2016.

5.2.1. Local Initiatives

Local initiatives in Karaburun and in the Peninsula are leading groups of the conflict in the region. There are several initiatives leading the process in Karaburun and the most dominating one is Karaburun City Council. Karaburun Common Life Platform also gives their support to the action. Additionally, Peninsula Common Life Platform is another active initiative in the region. These institutions are mainly led by newcomers living in Karaburun and in the Peninsula (e.g. Çeşme) so their positions do not very distinguish from the positions of newcomers which has been described previously in detail.

When the positions of local initiatives have been analysed, it is observed that there is no supporter initiative in the region. All the organisations involved in the process oppose wind energy developments in the whole peninsula strongly. These initiatives provide organisation of the protests against developments and they bring power to the process of oppositions. In this sense, they give great importance to their initiatives and platforms in order to organize against the developments and the development processes (Interview No.9&10).

As these local initiatives are led by newcomers, their discourses are also formed in the context of nature. They also have same discourses with the Initiative founded to stand against the natural destruction caused by wind energy developments. The most important thing to emphasise about the oppositions of these local initiatives is their ideological positions. It is seen that; these local initiatives have undertaken a mission to protect natural structure of the area. The reason for that, the initiatives have been founded and led by newcomers who value natural and rural features of Karaburun and have more preservationist perspective towards this features. Therefore, they mobilize their interests through these local initiatives and they evaluate any development as harmful to this valuable environment;

> "There are very important values which makes here Karaburun, there is a culture developed over many years, there is unspoiled nature which combined with agriculture. All of them are very valuable. We are against any development that harm these values. All of these practices are inacceptable." (Interview No.10).

In their discourses, they strongly emphasise the environmental damage resulted by the developments by mentioning the environmental and social costs resulted by wrong and offensive way of implementation of wind energy. One of them states the issue as follows;

> "We are aware of the climate change problem, we are aware of the energy need, too. The important thing is where, how and what cost they are established." (Interview No.1)

In addition to all environmental and social damage resulted by the developments (Interview No.1, 9 &10), they also emphasise their oppositions against the development models. Renewable energy developments are seen as opportunist models of capitalist order and seemingly innocent way of brutal destruction of nature (Interview No.10). These initiatives stress that these developments are a way of exploitation of nature which are covered by renewable energy mask;

> "…Ecologically important areas which are rich in biological diversity, agricultural fields, natural-cultural-historical assets have been ruined by many wind energy investments under the mask of 'reduction of foreign-dependency on energy' and 'renewable-clean energy'…" (Press release of the Initiative)

It can be deducted from these arguments, the oppositions of local initiatives is grounded on an anti-capitalist rationality. They express their positions against the commodification and privatisation of nature with renewable energy developments which are an important part of neoliberal moves of government (Interview No.10). This interest group has an attitude based on the refusal of existing capitalist mode of production and consumption which sees nature as a capital instrument for private companies and disrupts nature by large-scale development models.

Relatedly, another important thing they highlight is the procedural problems and the exclusive and top-down planning understanding of governmental institutions in wind energy developments. They stress the political side of all these exclusionary attitudes (as also expressed by newcomers previously) which increase unreliability about the projects are being made for public benefit. Prevention of their participation into the whole development process, ignorant and disregarding attitude towards their protests and discourses and non-execution of judicial decisions have ruined their trust

on the development processes and on the institutions (Interview No.1, 9&10). Therefore, political factors and exclusionary attitude of governmental institutions have strongly influenced their negative attitudes towards wind power.

As a result; they show strong resistance towards wind energy developments which are seen as a threat to their valuable environment. They emphasize sea, nature and agriculture constitutes their capital (Interview No.9) and strongly believe that there is need for an alternative vision based on humans living in harmony with nature (alternative to capitalist mode of living). In Karaburun, development can also be achieved with more environmentally friendly development models which preserve existing values of the region. All of them underlined the suitability of the strategic model commissioned by Izmir Metropolitan Municipality (Interview No.1, 9&10).

Therefore, oppositions are a result of an anti-capitalist rationality of newcomers leading local initiatives. They also have preservationist positions towards nature. The important thing to emphasise, this group brings their own political views into action by grounding their discourses on nature and natural destruction. But mainly, the oppositions are a kind of political struggle and there is actually a clash of political interests in this situation. As the positions are ideological, local initiatives shows strong resistance and they have very sharp conditions for the investments. Their primary demand is suspension of certain developments which give natural and rural damage on Karaburun and secondary demand is not to bring any new development to the region. Because, Karaburun (and the Peninsula as well) has already filled its capacity. However, their strong and uncooperative attitudes reduce their rightness about the issue. Their tolerance is very low in this circumstances.

5.2.2. External Organisations

In this thesis, external organisations are primarily taken as outsider environmentalist institutions. The outsider environmentalist organisations are EGEÇEP (Agean Environment and Culture Platform) and ÇEHAV (Environment and Ecology Movement Lawyers) which give their support to the struggles experienced in Karaburun from outside. These organisations are also included in the

Initiative founded against wind energy developments. Addtionally, Chamber of City Planners and external scientific organisations related to wind energy in Turkey are taken as external organisations because of having expert positions on the issue.

As EGEÇEP and ÇEHAV are a part of the Initiative, their positions and perspectives against wind power are not very different. Like the other organisations in the Initiative, these organisations also have environmentalist positions. Especially ÇEHAV is founded in order to protect natural and cultural features against the exploitation of anthropogenic activities (ÇEHAV, 2016). Therefore, their rationality is anti-capitalist and their positions are preservationist towards nature. Their discourses against wind energy developments are also formed in the context of nature and natural damage resulted by large-scale wind energy developments in ecologically important areas[i]. They adopted three main arguments of the Initiative in their oppositions but they also strongly emphasise the procedural problems emanating from governmental policies.

Their primary argument is that, all these investments (whether environmentally friendly or not) are a result of a perspective which is grounded on economic development by exploiting nature (Interview No. 13). As a result of this perspective, large-scale energy investments supported by central governments are spreading on natural and rural areas by only considering high wind potential. A representative from EGEÇEP explains the issue as;

> "Both the state and the company see nature as a capital instrument. The state has faded from the scene by privatizing energy investments. Private companies are working with profit-oriented understanding. They are approaching villages in order to reduce their costs and spoiling everywhere with roads, power lines and etc." (Interview No.13)

Additionally, they refer to the problems related to political preferences and policies on development. Wind energy developments started to go beyond its purpose and become a sector that serves for the market growth. Large-scale wind energy developments started to go beyond measures and result in natural and rural

[i] Citizens v. MEU, Report on the request for suspension of EIA decision for Sarpıncık RES, 10 December 2015.

damage but they are strongly supported by the state policies. They emphasise that, there is a dominant mentality which supports development by large investments at national level rather than development at local level (Interview No.3). Another important thing they emphasise is the energy produced at local level is going to cities and urban uses (the basis of capitalist mode of consumption). Even, these developments do not provide any benefit to local and cause local damage on local living environments while providing national development (Interview No.3&13). A representative from ÇEHAV strongly emphasise that the problems related to wind energy are results of dominant policies and procedural and regulative deficiencies while implementing these policies;

> "The reason for going beyond measure is the policies (on energy) and the reason for being nonadjustable to a measure is the regulation. Lack of criteria is the biggest problem related to the issue. There are no criteria on development, there is no assessment on a regional basis. Thus, problems occur in implementation." (Interview No.3)

Consequently, both of these outsider environmentalist organisations underline the need for strong legal instruments for site selection and EIA processes. They also emphasise the need for a planning understanding which takes into account real needs of local areas. In this regard, they claim the necessity of decision-making which enables participation of all local institutions and organisations. As well as in Karaburun, establishment of certain criteria on wind energy developments and reorganising existing developments according to those criteria is a vital necessity for the future of both wind energy and Karaburun (Interview No.3&13).

Chamber of City Planners also emphasises that the problems mostly emerged because of the same reasons; the dominant rationality in line with the perspectives on development and lack of comprehensive and integrated planning approach in planning. Representative from the Chamber mentions about the importance of renewable energies but emphasises that there are many problems related to the planning processes which is based on constantly changing state policies for development in Turkey. Representative argues that, the situation is firstly relevant to the perspectives on development of planning authorities;

> "Karaburun peninsula is a special area that having many potentials in itself. However, there is a pressure on the area as there is on all other rural areas. An understanding is prominent which sees rural as underdeveloped and requires an industrial function for its development." (Interview No.30).

According to Chamber, planning system is constructed to reflect this understanding. There isn't an integrated planning approach works with upper plan decisions which reflects policies at upper scales and guide investments according to those decisions. There is project-based planning system which can be modified according to the dominant policies. Renewable energy policies and investments are also a part of this decision-making and planning concept which fails to manage the process properly. Besides, problems are experienced in site selection of wind energy investments because of the lack of legislation with scientific basis. Consequently, all of these deficiencies have resulted in mismanagement of the process and problems to be occurred in local level (Interview No.30).

In summary, outsider organisations oppose wind energy developments in the context of conflicting perspectives. Their primary demand is an integrated planning system which considers all dimensions of these large-scale investments at all scales. They also emphasise the importance of legal instruments which restricts companies in their site selections. Other scientific institutions also emphasise the importance of site selection for the turbines in order to minimize negative externalities on local features thus minimize conflict (Interview No.5&6). All of them underlines the need for local level involvement in development processes.

5.3. Wind Farm Developers

Wind energy is a governmental policy but the practitioners of this policy are the developers so wind farm developers are important actors of wind farm conflict process in Karaburun. There are six wind farm developments in the area all of which belong to different companies. Five of these developments have been engaged in lawsuits and specifically two of them have been highly included in the process of conflict emerged in the area.

The discourses of wind farm developers are formed in the context of energy demand of Turkey and the importance of clean energy. As they are profit-oriented enterprises, their first priority is profit maximization and their perspective on nature is more utilitarian (Woods, 2003). Additionally, most of them have emphasized the importance of sustainable energy forms and wind energy among the other energy forms. Another developer stated about this issue as follows;

> "Everyone needs energy in their lives. Renewable energies are very important in this regard. The most useful form to both environment and humans among these energy forms is the wind energy. So we (Turkey) should turn onto wind energy investments seriously." (Interview No.35)

Taking into account the energy need of Turkey, they are trying to increase their investments within the limitations brought by the Turkish legislation on wind energy. One of them explained the issue as such;

> "One the one hand, there is our energy need or even our dependency on energy. On the other hand, there is environment. I think there should be balance between these two. In a place where there is wind potential, I think wind energy investments should be done in order to use this potential but in the extent permitted by the state." (Interview No.31)

Therefore, their motivating argument is more wind energy development as this is the most sustainable and environmentally friendly way of energy production in order to supply clean energy for the energy demand of Turkey.

Relevantly, almost all of the developers advocate that renewable energies, especially wind energy, have minimal environmental impact when compared to other energy forms and even other development types (Interview No.31, 32 & 35). The developments do not have any disposal as well as they are occupying very small areas in terms of turbine basement. Moreover, one of the developer stated that there are also positive side of the developments;

> "Another environmental opportunity of wind power is that; it is an investment ensuring the area remain untouched. Because, the plant area for wind energy prevents another investment to come in that field. Even more, the turbines are covering very small part of it. So, most of the field remains the same." (Interview No.31)

They believe that the opposing people with the arguments of natural damage have wrong assessment about wind energy developments (Interview No.35). The oppositions mainly arise from the fact that it's a new technology that people are not familiar with (Interview No.32).

All of the developers stressed that they attach great importance to environmental damage. They get all sorts of scientific studies done on environmental damage that wind turbines can have and academic reports on the topics related to flora and fauna prepared by universities and academic institutions (Interview No.31, 32&35). Another important thing that they underline, they fulfil all necessary procedures in legal framework hence, they do not make an incomplete application. They have received necessary permits from relevant institutions and done these investments in the extent permitted by the state (Interview No.31, 32&35).

About this issue, the importance of strong legal instruments come into prominence. There should be regulatory mechanisms and planning systems in order to organize market mechanism and establish balance between investments and environment. Planning is carried out by the governmental institutions in Turkey therefore, these institutions are supposed to conduct and supervise these processes. However, deficiency of this organisation for wind energy developments in Turkey lead to troubles for everyone including investors. An investor stated as following;

> "…Technical analysis should be made and planning zones should be established according to this analysis. But there is no such study in the planning institutions currently. Some criteria should also be determined in the regulation. If there is clarity in legislation, it would absolutely be more facilitative for everyone. It must be better organized and I think the government agencies are the ones to organize this process." (Interview No.31).

Another investor who said that they are acting within the legal framework but the uncertainty in the process have led them trouble too, refers to the following;

> "We act according to existing legal procedures and decisions given by the court. This process (conflict) harms us as well but we cannot withdraw from the process by saying 'okay'. We have investment inside (in EMRA), so we need to run the process. For us, state institutions should be buffer. And there should be criteria which can direct us, too." (Interview No.32)

From these arguments, the importance of clarity in legal frameworks and in planning schemes becomes prominent. As making surveys outside of necessary procedures will return as additional time and cost to investor, investors choose to act in the extent of the limitations brought by legal procedures. In this context, these investors have completed all legal requirements and procedures but didn't provide additional surveys on social, economic and environmental requirements of the region. Even more, as there are no criteria exist in the regulations about wind energy developments, investors only take wind potential into account in the phase of site selection. Consequently, they follow all legal procedures but could not gather local level priorities and sensitive matters which has vital importance for local community. So, ensuring strong legal instruments which regulates planning and site selection of wind energy developments seems to be the primary demand of the investors.

5.4. Governmental Institutions

Since all the other actors emphasise the importance of planning and legal frameworks in their discourses, governmental institutions become prominent as they are the regulatory institutions of wind energy development processes. However, the institutions are divided into two as municipal institutions and central institutions. Although both of them are public institutions, their positions differ in wind farm conflict processes in Turkey. It is mainly observed that, this is because of the conflict in the context of scope of authorization between central governmental institutions and local municipal institutions. Central planning understanding in Turkey has also triggered this conflict. Additionally, conflicting perspectives on development is prominent as an important matter of fact between these institutions. Their interest and positions differentiated so they become different actors in the conflict related to wind power. Accordingly, in order to have a deeper understanding on the positions of these public institutions, they have been investigated separately.

5.4.1. Municipal Institutions

As it is emphasised before, wind energy is a governmental policy in Turkey and due to this, planning and decision-making on wind energy are realised at central level. Level of involvement of municipal institutions in the whole process is very limited. In the process of decision-making and planning, opinions of municipalities are not taken and municipal institutions are informed about the process only after the whole process is completed. For these reasons, especially Izmir Metropolitan Municipality have filed lawsuits against some of the developments in the context of plan approval processes and different plan decisions given on the same area. Their discourses are mainly grounded on the top-down planning understanding in Turkey which ignores local organisations and their plan decisions. Therefore, because of being important local institutions and being opponent to the developments, municipal institutions become one of the major actors in the conflict.

Municipal organisations, both Izmir Metropolitan Municipality and Karaburun Municipality oppose some of the developments. Their positions are mainly in between because, these institutions are mainly in favour of renewable energies but their oppositions are towards the existing planning procedures. Especially, Izmir Metropolitan Municipality supports sustainable development types as they are making significant efforts in order to change Izmir to a more sustainable city. They believe that rural development with ecologic and natural values is a part of sustainable development so there should be a balance between renewable energy investments in rural areas and rural characteristics exist in peripheral locations. Accordingly, sustainable rural development strategy in harmony with agriculture and tourism was determined as a new development strategy for Karaburun and the Peninsula as a whole by municipal institutions (IDA, Strategic Plan for Peninsula, 2014). However, central planning approach that allows intense energy investment on the same area contradicts with local planning and development approaches. Therefore, the most motivating argument of municipal institutions against wind power is; although wind energy is an important type of energy for a sustainable city, developments are planned by top-down planning understanding which excludes local

level organisations and local development strategies. Accordingly, representatives of municipal institutions emphasise the development policy differences with central institutions. A representative from Izmir Metropolitan Municipality explains the contrasting positions and the major concern of theirs as follows;

> "The ministry (MEU) is prone to development by construction. But the municipality (IMM) have more preservationist approach. Agriculture and rural development is on the foreground. However, MEU proposes more development on rural areas by using their authorisation and they are not doing cooperation with municipal organisations in planning phases and even, we are being excluded." (Interview No.4).

Municipal councillor of Karaburun Municipality also emphasises in the meetings[i] that the government mainly supports industrial investment types but does not support rural development attempts. He claims that, these rural development attempts are a requirement for the benefit of the country too and all of these investment types should be done in a balance without harming each other's potential.

Therefore, main emphasis of municipal institutions is on the problems related to planning processes. They highlight the problems about lack of integrated planning approach which should provide priority zones for wind energy developments in plans of all scales (Interview No.8). According to them, project-based planning understanding damages local structures and impairs the potential for rural development (Interview No.26&29). Additionally, top-down planning approach is problematic as because it fails to gather local level requirements and priorities. Related to the issue, the Mayor of Karaburun Municipality emphasises that; because of not taking into account the opinions of local authorities, wind energy developments negatively affect the priority areas of Karaburun;

> "This energy is clean energy so we support. But we are informed only after the whole planning process is completed. We want to be included in site selection and planning process because we can be the guide for not to select priority areas which has local development potentials. We have to be. These investments should be planned certainly together with local governments and local community." (Interview No.26)

[i] Karaburun City Council Meeting, 16 March 2016.

Other important issues that municipal organisations emphasise are the problems related with the size of developments and the site selection of turbines. Lack of site selection criteria allows the establishment of turbines close to settlements, living environments and naturally valuable areas. The problem of site selection is also indicated in the case reports[i]; due to the location of turbines, rural and natural structure will be destroyed, ecological structure will be disrupted and socio-economic life will be adversely affected. Even though wind energy is a sustainable energy form, because of the way of planning, developments cause local damage and they become no longer sustainable. Karaburun municipal councillor stresses that wind energy investments are very useful but there are also negative consequences on local level because of their sizes and locations and he adds the following;

> "They (developments) can be done to a certain extent without harming the people and the nature. They can be placed on the areas where they can add value. But they were placed in such places where nature has been damaged. Of course they should be done but, not in this way." (Interview No.29)

From all these arguments, it can be inferred that the municipal organisations are not totally disagree with wind energy policy but they emphasise the importance of integrated planning for wind energy developments. As their perception on rural as space of consumption, their demand is the balance between development and preservation which will not harm alternative development potentials. Additionally, their primary concern is about the exclusive way of planning and they stress that developments should be planned in collaboration with local institutions and local community. Therefore, participation and collaboration in decision-making becomes an important feature of planning in order to minimize conflict between institutions.

[i] IMM v. MEU, The request for suspension of Development Plans of Sarpıncık RES, 28 May 2015; IMM v. MEU, The request for suspension of Development Plans of Yaylaköy RES, 25 August 2015

5.4.2. Central Institutions

Central institutions are important actors of wind farm conflict since they are the regulatory authorities of wind energy developments in Turkey. Related central institutions about energy developments are Ministry of Environment and Urbanisation, Energy Management Regulatory Authority and Ministry of Energy and Natural Resources. Because of being the planning authority in Turkey, MEU has been taken as the dominating authority responsible for the planning processes of wind energy developments and taken as the related actor about wind energy conflict in this thesis.

Unfortunately, the department of development plans in MEU has refused the interview request in the context of this thesis. As wind energy conflict is a problematic issue recently, both a planner working in the department and the secretary of the head of the department have refused the interview request. Especially, the secretary claims that there isn't any problem related with energy development plans and if there is a problem then it is a subject of law, it is not an issue that concerns them. This also gives an idea about their position which is not open to cooperation. Therefore, only the views of the deputy manager in Izmir Provincial Directorate of Environment and Urbanization will be reflected in this part. Also, opinions drawn from the case reports will be transmitted.

When a general evaluation has been done, it is observed that central institutions have supporting position in the context of national concern and national priorities. As wind energy dominates energy policy in Turkey in recent years, central institutions are defending the necessity of more wind energy development and their position is very rigid in this sense. Their motivating argument is the necessity of these investments for the benefit of the country. First thing they emphasise is the energy need of Turkey and the need for wind energy developments in this manner. Especially in the case reports[i], MEU emphasises the developments are established for

[i] Citizens v. MEU, Summary of Defense, 5. Administrative Court Decision, 22 October 2015; IMM v. MEU, Defense report, 27 October 2015

'public benefit' and they are implementing by considering the balance between protection of environment and country's energy needs.

The deputy manager also emphasises energy requirement in Turkey by pointing out energy related current account deficit of the country. He underlines the importance of domestic energy production and the necessity of the use of wind resource which is relatively high in Turkey. According to their point of view; while allowing investments, there should be equilibrium between ecology and economy and MEU always try to provide this balance. This resource is supposed to be used in where it is available and these investments do not have any negative externality. Therefore, there should be no hesitation about the implementation of these investments especially if they have established in accordance with the regulations;

> "Izmir and Karaburun are very convenient in terms of wind. I do not see any loss resulted by these investments to choose their sites herein. We (MEU) require EIA report for the facility and approve the plans accordingly. We do not approve if there is any damage." (Interview No.7)

MEU also emphasises in the case reports[i] presented to the court that wind energy developments are realized in accordance with the principles and procedures specified in the legislation. They always stress legal compliance of the projects on all occasions and argue that there isn't any problem related with the developments.

Not about the regulation but about the planning, the deputy mentions about the deficiencies of the process by stating the existence of project-based planning and by stressing the requirement of integrated planning for the developments;

> "There is project-based plans for wind energy developments. There may be a cumulative effect of a combination of many individual projects. Plans should be prepared for the whole area. Their cumulative effect should be considered." (Interview No.7)

Central authority claims that these developments should be done as long as they maintain their legal compliance. Since dominating energy policy is wind energy in recent years, more investments are expected to take part in where possible.

[i] Citizens v. MEU, Summary of Defense, 5. Administrative Court Decision, 22 October 2015; IMM v. MEU, Defense report, 27 October 2015

Karaburun (also Peninsula) in this sense, is an important area which has considerable wind capacity so wind energy developments are supposed to choose their sites from this region. It can be said that, Karaburun is seen as an area with potential for wind energy with its high wind capacity so the region is selected as an important target for wind energy investments.

It should also be emphasised here is that; perception of rural by central authorities also emerges as an important matter of fact. As Frouws (1998) suggested, rural is perceived as being underdeveloped and in the context of utilitarian point of view this situation is perceived as a potential for new investments with large capitals. Also Woods (2003) explains the issue as 'rural as a space of production'. Özen & Özen (2010) also suggested that in Turkey, such perception of rural is dominant. Therefore, Karaburun (and other rural areas) is perceived as underdeveloped (with unproductive agricultural fields) and they can turn into a space of production by turning into an energy investment field. Even more, wind energy is already environmentally friendly development type so they are compatible with natural and rural fields.

Consequently, the reason of strong position of central authorities is also ideological. Their utilitarian perspective on rural dominates their investment decisions. As central authorities are in favour of wind energy, they support wind energy investments in potential investment areas. Decision-making and planning on wind power are progressing to support this position. They allow more developments to choose their sites from rural areas. Together with the central planning understanding, their positions become stronger. However, centralized planning understanding and the exclusive way of planning triggers opposition even more and resulted in the conflict grew day by day. So, there is need to consider more participatory and collaborative approaches in planning of energy developments in order to reduce or minimize conflicts related to the issue. Additionally, as the central institutions gives considerable importance to compliance to regulations, establishing certain criteria on developments in regulative frameworks would reduce conflict to some level.

Table 7: Actor Positions and Factors Influencing Their Positions

Main Actors		**Position**	**Reason**	**Tolerance for Change of Position**	**Factors Influencing Actor's Position**	
					Actor's Suggestion	**Suggested Resolution Methods**
Local Community	Villagers & Natives (incl. all peasants, farmers, shepherds, elderly ones and headmen)	Opponent	- Negative externalities; esp. noise problem	Middle	- Proper site selection for new developments (choosing sites away from settlements, outside of meadows and farmlands) - Changing the location of problematic turbines	- Economic benefit (incl. job opportunities and community compensation) *Economic involvement to the project would also increase support.
		Supporter	- Economic Benefit (working for WE plants) - Clean energy and national necessity	Middle		
	Newcomers	Opponent	- Negative Externalities; esp. damage on natural assets - Procedural Problems; EIA and planning processes - Conflicting Perspective on Nature	Very Low	- Establishment of certain criteria on WE developments - Suspension of certain (problematic) developments - No new development	- Community involvement* and collaboration with local public & local initiatives in planning of WE *Both social and economic involvement
Non-Governmental Organisations	Local Initiatives	Opponent	- Negative Externalities; esp. damage on natural assets - Procedural Problems; EIA and planning processes - Conflicting Perspective on Nature	Very Low	- Establishment of certain criteria on WE developments - Suspension of certain (problematic) developments - No new development	- Community involvement* and collaboration with local public & local initiatives in planning of WE *Both social and economic involvement
	Outsider Platforms	Opponent	- Negative Externalities; esp. damage on natural assets - Procedural Problems; EIA and planning processes	Low	- Establishment of certain criteria on WE developments (and reorganising existing developments according to those criteria) - Proper site selection for new developments - Participatory decision making & planning procedures	- Community involvement* and collaboration with local public & local initiatives in planning of WE *Both social and economic involvement
Public Institutions	Municipal Institutions	In-Between	- Procedural Problems; Exclusive & top-down planning understanding - Conflicting Perspective on Nature	Middle	- Participatory decision making & planning procedures - Proper site selection for new developments - More comprehensive and bottom-up planning in planning of WE	- Collaboration with municipal institutions in planning of WE
	Central Institutions	Supporter	- Energy demand of Turkey - National Interest - Conflicting Perspective on Nature	Very Low	- More WE development - Following the legal procedures on WE developments (esp. EIA)	- Establishment of certain criteria on WE developments
Wind Farm Companies	Developers	Supporter	- Company Interest - Profit Maximization	Low	- More WE development - Following the legal procedures on WE developments	- Establishment of certain criteria on WE developments

CHAPTER VI

AN OVERVIEW OF WIND FARM CONFLICT IN KARABURUN

The proposals and the constructions of wind energy plants have brought about strong oppositions from local public in Karaburun. It is important to understand why oppositions have emerged especially in the Peninsula and in Karaburun and why Karaburun become prominent in the oppositions against wind farm developments. As each case has its own dynamics (Walker, 1995), oppositions can change according to particularity of the cases. Therefore, in order to understand the debate in wind farm conflict in Karaburun, there is need to make an evaluation on the whole process experienced in the area by giving emphasis on the particular features of the case.

In order to understand the debate related to renewable energies, there is need to understand the reasons for support and opposition of both sides. First of all, increasing demand and support (economically, politically and socially) for renewable energies in recent years should be emphasized here. In Turkey too, renewables and specifically wind power started to be the dominant policy of the country. Accordingly, wind energy investments have increased and they will continue to increase in the following years in order to reach the objectives related to the issue. Therefore, large-scale energy investments are in search of available sites to be located and wind energy installations, which are in need of large fields, have put pressure on rural and natural areas. In this sense, the investment pressure on Karaburun and on the Peninsula can be observed clearly. Primary reason for this pressure is the dominant policy and particularly Karaburun constitutes a potential for investments with unproductive rural fields and proper wind capacity. However, being

far from development pressures until today has preserved natural structure of Karaburun and this has provided a different ground for the conflict. The unspoiled environment of Karaburun started to be the most prominent factor in opposing views on wind power. The existence of such an environment have led to the formation of environmentally concerned actor groups in the area, have affected the positions of these agents and have affected the debate on wind power. The environmentalist actor groups began to show strong resistance to wind farm developments and have moved the oppositions to a higher level by organising oppositions against the developments in the area and by supporting other protests in other regions. That's why, Karaburun become prominent in the oppositions against wind power, especially in İzmir.

Therefore, wind farm conflict in Karaburun is a process involving many different actors with many different rationalities and perspectives and the conflict is a result of conflicting perspectives of these agents. There are many interest groups in Karaburun beginning from governmental actors to private companies, from public institutions to non-governmental organisations and local activists and all of them have their own rationale. Therefore, a debate has grown between those actors who think differently about the issue.

On the one side; renewable energy technologies, especially wind energy has been highly supported by government institutions and by private companies. From the government institutions' point of view, the renewables are seen as a requirement for the country because of being favourable domestic resource for energy provision and being an important tool for decreasing foreign dependency of the country in terms of energy. Besides this, under the neoliberal economy, wind energy has been highly supported because of creating new industries and new markets for developing economies (Matthews & Paterson; 2005; Hoedeman, 2012). Turkish government also supports wind energy developments because it is a kind of new market provision which also keeps their political legitimacy (Atlı, 2012). Relatedly, generation of wind energy have been supported by incentive mechanisms and private energy companies have begun to show increasing interest for wind energy market in Turkey. So, investments started to be a significant part of an economic movement by private sector in line with neoliberal moves of government (Atlı, 2012). As a result, large-

scale wind energy investments done by private companies started to increase rapidly (See; Chapter II) and Karaburun become an important target for those large-scale wind energy investments.

But on the other side; the large-scale wind energy developments in Karaburun have been highly opposed by most of the local community, especially by newcomers who have positive connections with the natural environment of the area. The existence of a qualified environment with high ecological value started to be the source of oppositions against wind power in Karaburun. As it is mentioned in theoretical framework, oppositions can be grounded on the concerns about the impact of developments (Burningham, 2000) and the concerns are much related with the landscape characteristics (Wolsink, 2007). Relatedly, the arguments of opposing groups are formed on the discourses of negative environmental impacts and natural damage on the qualified landscape of the area. Therefore, concerns about negative impacts of developments become determinative in attitudes towards wind power in Karaburun. However, the perception of negative change on living environment resulted by wind energy developments become much more significant in oppositions towards wind energy. In a valued landscape, the impact of change brought by wind energy can be greater and negative evaluation of the impact is mostly high (Wolsink, 2000). The impact of change on the landscape caused by unfamiliar developments can be perceived as harm on local identity so the oppositions can be described as place-protective actions to cope with the change resulted by those developments on a place that people have positive connections (Devine-Wright, 2009). There are some actor groups in the region who have positive connections with the natural characteristics of the area. They believe that developments which are out of harmony with the landscape of Karaburun have brought negative change on the environment and started to damage local characteristics. Therefore, the impact of change on the landscape has perceived negatively and caused strong oppositions from local public especially from newcomers who wish to maintain existing features of this local environment.

This situation has provided a ground for a conflictive situation; the conflict between preservation and development. As Woods (2003) suggested, people's

interpretation on nature and development determines their reaction towards developments so, another reason for wind farm conflict can be grounded on the conflict between different perspectives. Likewise in Karaburun, the existence of a rural landscape has led to a similar conflict in the area by resulting in the formation of actor groups with different perspectives and positions (See; Chapter V). On the one hand, there are some actor groups (wind farm developers, central institutions) trying to take advantage of these rural fields with energy investments. Because rural and nature are seen as unproductive areas and they constitute a potential for development. These areas should turn into a productive space by providing new investments on the area (spaces of production). This is also a result of a neoliberal rationale which sees nature as a capital instrument for development. However, on the other hand, there are significant actor groups (newcomers, environmentalist initiatives, municipal institutions) who want to preserve existing features of the region. Because nature and rural areas are valued entities and they require protection from big developments which spoil nature for economic development. Additionally, environmental characteristics of Karaburun should be preserved by enabling its development with alternative tourism usages (space of consumption). This conflict can be observed from the discourses of each agent (See; Chapter V) and it can also be observed from the different plan decisions given on the same area by different institutions at different levels. While municipal institutions have been developing strategies related to nature tourism which can protect natural structure of the region (e.g. Peninsula Sustainable Development Strategy), central institutions have been allowing new developments with more industrial usages on the same area (e.g. wind energy projects). Additionally, while environmentalist people and initiatives have been supporting the Development Strategy because of being the most appropriate development model for such an environment, wind farm initiators have been supporting the idea that the area should turn into an energy field because of having high wind potential.

Relatedly, the wind farm conflict in Karaburun is also grounded on the debate between capitalist and anti-capitalist rationalities of the agents. Wind energy investments are evaluated by opponent actor groups (newcomers) living in the region

as a new way of privatising nature for existing capitalist order which is much related to neoliberal rationalities of governments. As they have preservationist position, they started to show strong resistance to the developments which are seen as a part of capitalist order spoiling nature with the legitimacy by global concerns about environmental problems. That's why they show strong resistance against existing and new wind energy developments in the area.

Another problem related to wind energy implementation is the top-down and exclusive way of planning of wind power (Toke et al., 2008, Breukers & Wolsink, 2007). As Wolsink (2000) emphasised; planning with top-down decision-making schemes tends to be insufficient to gather local priorities so negative externalities increases and the acceptability from local public decreases. Application of decide-announce approach which cannot provide local level connection mostly fails to have good performance in wind energy developments (Toke et al., 2008). Additionally, this planning approach increases the perception of exclusion (socially, politically and economically) from decision making processes and mostly creates public mistrust (Walker, 1995). These factors increase negative evaluation of projects and cause oppositions to grow. The same situation has been experiencing in Karaburun case. When a general evaluation on the whole process has been done, it is seen that the problem is also very much related with the procedural deficiencies which does not have any mitigation practices and any participatory procedures to gather local level priorities in development processes (See; Chapter IV). All of these practices have increased the feeling of social, economic and political exclusion and have reduce the reliability of projects. But it should be emphasized here is that, the top-down decision making is also very much related to ideological rationalities of government institutions; it is a part of authoritarian neoliberalism in which the investment decisions related to national necessities are taken by central institutions together with private companies (elite groups). In this planning approach, there is dominancy of central institutions in planning of nationally needed developments and exclusion of other political groups in decision making. The exclusion of both municipal institutions and local non-governmental institutions from energy investment decisions can be explained by this dominant rationale of government.

Consequently, conflicting approaches; preservationist/utilitarian and capitalist/anti-capitalist, become prominent in the debate related to wind power and reveals the major conflict on the issue of wind energy in Karaburun. It can be said that, people's interpretation on nature have determine their reaction towards wind energy. Even though wind energy is an environmentally friendly type of development, the interaction between nature and wind energy developments can be interpreted as objectionable by local people. Especially newcomers and environmentalist initiatives in the region have evaluated these developments as foreign structures which demolish existing structure of the area. Besides, they evaluate the developments as industrial structures which represents capitalist and utilitarian use of nature by private companies. Therefore, conflictive perspectives and ideologies between agents; between newcomers and developers, also between local initiatives and central institutions reveals the most effective reason of wind farm conflict in the area. While local environmentalist activists (mainly newcomers and local initiatives) are trying to impose their own rationale under the discourse of nature and natural damage, the government and its institutions are trying to legitimize renewable energy investments, which is the most effective economic instruments in recent years, under the discourses of national necessity and sustainability. Therefore, it become entirely an ideological conflict and there is clash of interests of both sides. The landscape context of Karaburun, in this sense, also become prominent in wind farm conflict since it determines the compatibility of developments on nature and the level of opposition.

The most important aspect of the conflict in Karaburun is the existence of many different interest groups with different positions. In order to resolve these kind of multi-actor conflicts, a deeper understanding on the positions and intentions of the agents and their negotiation possibilities is needed. As the conflict involving a range of actors has already emerged in Karaburun, conflict resolution by collaborative approaches have immense importance. As the situation has become an ideological conflict and has become more political in Karaburun, the conflict can only be resolved by aligning the interests of the interest groups involved in the process. In order to find the balance between these groups, there should be collaborative

practices which enables mutual understanding and mutual decision-making by learning from each other and to find the equilibrium between their perspectives. With more collaborative, interactive and bottom-up strategies which enables involvement of different actors with different positions, disagreement can be reduced or minimised. Mutual interaction provided by participatory consensus building can result in publicly acceptable solutions for the future of developments and can decrease the level of conflict.

Recommendations for conflict resolution by collaborative practices;

For conflict resolution by collaborative practices, the possibility of the agents, who are more moderate in their positions, to cooperate with each other has gained importance. As the municipal institutions, expert institutions (e.g. universities, professional chambers, etc.) and outsider organizations are more moderate in their positions, they should take action to negotiate on future wind energy developments. There are some possibilities for agents with more tolerant positions to negotiate on some specific issues related to wind farm developments such as preparing road maps for future developments, wind farm cooperatives and necessary measures and criteria for developments (See; Table 8).

First possibility is the negotiation between municipal institutions and expert institutions such as universities and professional chambers, as their positions are more moderate in wind farm conflicts. Local bodies together with universities and professional chambers can provide a platform for bottom-up and participatory planning for wind energy in the Peninsula and Karaburun. The involvement of universities may reduce the political side of wind energy problem and other agents such as outsider organisations and local initiatives can participate. With the involvement of the institutions with expert knowledge on the issue, information pollution may be overcome and more accurate outcomes may be achieved for future wind farm developments. These institutions can negotiate on and prepare a road map for wind energy developments in the Peninsula. This road map can also be a legal base for municipal institutions to object or accept top-down wind energy decisions.

Table 8: Negotiation Possibilities of Agents in Karaburun

	Agents to Negotiate		Other Agents to Cooperate
Agents	Municipal Ins.	Expert Ins.	- Outsider Org. - Local Initiatives - Newcomers
Positions	Middle	Middle	
Negotiate on	Road Map for Wind Farms in Peninsula		
Agents	Municipal Ins.	Developers	- Expert Ins. (Chambers) - Villagers - Newcomers
Positions	Middle	Low	
Negotiate on	Wind Farm Cooperatives		
Agents	Government Ins.	Outsider Org.	- Developers - Expert Ins.
Positions	Very Low	Low	
Negotiate on	Legal Measure and Criteria for Wind Farm Developments		

Second possibility is the negotiation between municipal institutions and developers on wind farm cooperatives in the region which can provide local ownership patterns. Villagers and newcomers may also give their support to such compromise. The cooperatives may be organized by the cooperation of chambers of different professions and union of chambers together with developers and municipalities may provide a platform for this interdisciplinary cooperation. This kind of financial participation to an investment will increase the sense of ownership so increases level of acceptance. Avoiding unequal distribution of costs and benefits increases perception of fairness and decreases level of oppositions. Besides, economic contribution of wind energy can be a local opportunity for local development especially for rural areas where local economic development is limited (e.g. Karaburun).

Third possibility is the negotiation between government institutions and outsider organisations on legal measures and certain criteria for wind farm developments. As each agent emphasised the problems caused by lack of certain criteria on developments, the establishment of site selection criteria may decrease level of conflicts. The establishment of certain criteria on developments requires negotiation of government institutions and environmentalist organisations as they are the ones who emphasise the necessity of these legal arrangements for wind energy developments.

Other recommendations for conflict minimization and resolution;

Both for wind energy developments in general and for Karaburun in particular;

- In order to minimize possible conflicts before emergence, mitigating externalities by sensitive designs and proper site selection which consider local level environmental and socio-economic priorities should be provided. The most important physical feature about wind power is the location therefore, site selection criteria should be established and proximity to living environments and sensitive environmental areas (forests, natural sites, special protection areas, etc.) should be provided. Other physical features such as density, height and size influence the extent of the impact of wind energy developments so, design of smaller-sized wind farms are more favourable. Additionally, these design factors should be directed by mitigation criteria or setback distances which should be included in legal regulations.

- Balance between sustainable energy forms and protection of local landscapes should be overseen. This requires more comprehensive and long-term analysis before the construction of wind energy facilities in order to mitigate their adverse impact on environment. Not only environmental impacts but also socio-economic impacts of wind energy has vital importance for local living environments. Cumulative Impact Assessments for many wind power plants including all dimensions (visual, social, economic, etc.) should be included in EIA regulation. These assessment filters should also be the guide for site selection of developments.

- As Karaburun has a very special environment and valued landscape, there should be more comprehensive analysis on the impacts of existing wind energy developments on the area. Additionally, cumulative impact of many developments should be considered seriously. According to those analysis, all existing and proposed investments on the area has to be reconsidered.

- Balance between preservation and development is essential in planning in order to sustain healthy living environments. There should be an integrated planning system which defines areas for different development models while protecting priority areas for sustainable living environments (forests, farmlands, naturally protected areas, etc.). Therefore, project-based planning approach should be abandoned and integrated planning approach should be adopted which considers the relationships of projects with their environments. Zones for wind energy developments should be identified by technical analysis and these zones must be processed at upper scale plans (e.g. Environmental Master Plan at 1/100.000 scale). Wind energy projects should be given licence only if they are located in these zones. Lower scale plans for these developments (e.g. Development Plans at 1/5.000 and 1/1.000 scales) should be prepared accordingly.

- Participatory planning and decision making processes considering local community perspectives should be enabled for wind energy developments in Karaburun and in other regions. There is need for more alternative planning processes with more public participation in which local community is consulted and their priorities are acquired. To be able to provide equity and fairness and increase trust, opportunity for local public to influence project outcome should be provided. Effective participation will minimize conflicts and increase acceptability of projects. In this sense, bottom-up techniques rather than top-down decision making for developments should be preferred and these processes should be strengthened by participation of local level institutions (both municipal and non-governmental organisations). Especially, local bodies should be empowered in wind energy planning as they can provide local level connection more easily.

CHAPTER VII

CONCLUSION

As a result of global concerns about energy related environmental problems, the use of renewable energies has gained great importance. In order to limit energy related emissions and fight against global warming, the expansion of renewable energy resources becomes prominent and renewables become significant component of sustainable development. Among these renewables, wind energy started to be the most effective option as it is technologically viable and cost-effective. Due to this, national policies started to support wind energy, installations have increase in the world and they are expected to increase more in the next few decades. However, the expansion of wind energy facilities has launched a major controversy on wind energy and its implementation. Even though the developments are environmentally friendly, they started to intrude into unspoiled natural and rural areas so they started to collect reactions from local communities. The oppositions against developments started to be a significant barrier to further on-shore wind energy developments in the world.

Likewise in Turkey, wind farm conflict becomes a major issue. Energy strategies started to focus on wind energy since wind emerges as a favourable domestic resource. As being favourable investment type, wind energy becomes an important investment model and recently, wind energy has been the dominant development strategy for Turkey. With the legal arrangements which paves the way for new energy investments, wind energy applications have gained speed. Consequently, over the last ten years, many wind power stations started to spread around particular cities with high wind capacity, mainly choosing location from rural areas. However, the expansion of wind energy requires construction of many power

stations which started to have significant effects on local environments. The effects of rapidly expanding wind energy developments have attracted some segments of the communities and lead to oppositions against developments. The most recognizable case in Turkey becomes Karaburun because of the strong and organized oppositions against wind energy developments in the area and so, wind farm conflict in Karaburun has been an important case for wind energy in Turkey.

This thesis aimed at answering why conflicts are emerged in wind farm development processes in Karaburun and how these conflicts be minimized or resolved. After reviewing the literature, case study of Karaburun have been examined in its own context with the help of document analysis, media search and in-depth interviews with various interest groups involved in the process of conflict. The reasons of the conflicts are tried to be understood by examining all aspects of the case. Relatedly, there are multiple reasons for the emergence of conflicts in the area including procedural and planning problems but, the most prominent reason is the conflicting perspectives and rationalities of different interest groups involved in wind farm development processes.

To summarise what has been learned from Karaburun experience;

- The actors and their conflicting positions; preservationist/utilitarian and capitalist/anti-capitalist, are the most significant reason of wind farm conflict experienced in the area. There are different positions and rationalities of the agents and there is clash of interests of the sides. This situation has resulted in a major debate to occur between people with different rationalities. Some strongly believe in the importance of national development by wind energy on rural landscapes which are already in decline economically, some other supports the importance of preservation of rural and natural landscapes from large-scale energy developments. Therefore, conflicting perspectives on nature and development becomes one of the core reasons of the conflict experienced in wind farm development processes. Landscape context, in this sense, become an important determinant in wind farm conflicts because it constitutes the basis for the determination of compatibility of wind energy facilities with local landscapes.

- Procedural problems become important fact in wind farm conflicts, too. Planning of turbines which fails to mitigate negative externalities on landscape started to collect reactions from local public and wrong management of planning process causes oppositions to increase. Insufficient EIA processes, improper site selection, lack of integrated planning approach and the existence of top-down planning with lack of public participation are the most prominent problems related to planning. All of these processes have failed to grasp local level priorities and resulted in loss of local level connection. Such planning deficiencies easily create public mistrust, increase sense of unfairness and collect responses from local public.

- In order to resolve multi-actor conflicts, a deeper understanding on the positions and intentions of the agents and their negotiation possibilities has immense importance. As the conflict involving a range of actors has already emerged in Karaburun, conflict resolution by collaborative approaches becomes prominent.

Resolving conflicts over wind energy developments has great importance since wind energy is an important part of meeting global concerns about world's future. As the implementation of renewable energy policies is closely related to planning, the evaluation of the problem in terms of planning discipline is essential. Understanding the nature of conflicts by assessing the problem in terms of both technical and social aspects can contribute to the solution of the problem by enabling selection of most effective methods for conflict resolution. According to the problems experienced in the area, conflict minimization and resolution methods are recommended. Mainly, in conflict minimization, mitigation practices such as proper site selection and design come into prominence. In conflict resolution, participatory consensus building gains importance. For both, participatory processes are essential which can be achieved by non-hierarchical and bottom-up planning processes. With more collaborative, interactive and bottom-up processes which vary involvement of different actors with different knowledge resources will result in more constructive and publicly acceptable solutions. As a consequence, increased level of participation and involvement positively affect the perception of fairness, increase sense of ownership, strengthen trust and it becomes fundamental planning approach which can decrease level of conflicts in wind farm development processes.

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APPENDICES

APPENDIX A

ADDITIONAL PHOTOS

Figure 20: First protest by Karaburun Common Life Platform held in Konak square

(Source: Hurriyet Newspaper, 16 August 2013)

Figure 21: Protests led by Karaburun City Council in Yaylaköy, Karaburun

(Source: Karaburun City Coucil Website, 14 July 2015)

Figure 22: Yaylaköy villagers protests against Lodos Company in their villages
(Source: Hurriyet Newpaper, 18 July 2015)

Figure 23: Opposers protests against Sarpıncık RES project in Sapıncık
(Source: Karaburun City Council Website, 29 January 2016 & 19 April 2016)

Figure 24: Opposers protesting against wind power in Mordoğan
(Source: Karaburun City Council, 9 August 2016)

Figure 25: Wind turbines visible through Yaylaköy
(Source: Personal Archieve, 20 March 2016)

Figure 26: Wind turbines on meadows around Yaylaköy
(Source: Personal Archieve, 20 July 2016)

Figure 27: Wind turbines visible through Bozköy Village
(Source: Personal Archieve, 20 July 2016)

Figure 28: Wind turbies visible through Tepeboz Village

(Source: Personal Archieve, 20 July 2016)

Figure 29: Wind turbies visible through Haseki Village

(Source: Personal Archieve, 20 July 2016)

Figure 30: Wind turnines (Salman RES) near Sazak village

(Source: Personal Archieve, 13 June 2015)

Figure 31: Wind turbines (Karaburun RES) and Karaburun landsape
(Source: Personal Arshive, 20 March 2016)

Figure 32: Wind turbines (Karaburun RES) through the hills
(Source: Personal Arshive, 20 March 2016)

Figure 33: Wind turbines (Karaburun RES) and agricultural landscape
(Source: Personal Arshive, 20 July 2016)

Figure 35: Panaromic view of wind turbines (Karaburun RES on Karaburun hills

(Source: Personal Archieve, 20 March 2016)

Figure 34: Another panaromic view of wind turbines (Karaburun RES) on Karaburun hills

(Source: Personal Archieve, 20 March 2016)

APPENDIX B

QUESTION SHEET OF INTERVIEWS

Görüşülen kişinin adı: **Görüşme No:**

Görüşülen kişinin kurumu: **Tarih:**

Araştırma Soruları:

Yerel halk; muhtarlar, köylüler, yeni gelenler ve yerel platform/dernek temsilcileri için (tüm sorular)
Dışarıdan platform/dernek temsilcileri, üniversiteler ve uzmanlar için (3. soru ve devamı)

1. Nerelisiniz? (Dışarıdan ise) Ne zaman ve neden Karaburun'a yerleştiniz?
2. Ne işle uğraşıyorsunuz? (Tarım, hayvancılık, turizm, emekli, memur, vs)
3. Karaburun'u nasıl bir yer olarak tanımlarsınız?
4. Karaburun'un nasıl bir yer olmasını, nasıl gelişip kalkınması gerektiğini düşünüyorsunuz?
5. Yenilenebilir enerjiler ve rüzgar enerjisi hakkında ne düşünüyorsunuz?
6. Karaburundaki rüzgar enerjisi santralleriyle ilgili ne düşünüyorsunuz?
    a. Olumlu/Olumsuz yönleri nelerdir?
    b. Size ne gibi zararları/artıları vardır?
    c. Karaburun'a ne gibi zararı/artısı vardır?
    d. Zararları var ise, nasıl önlenebilir?
7. Karaburunda rüzgar enerjisi santralleriyle ilgili yaşanan anlaşmazlıkların temel sebepleri nelerdir?
    a. Kimler neden karşı çıkıyor? (süreç, doğa, yerel ekonomi, vs)
    b. Kimler neden destekliyor? (temiz enerji, iş/para verilmesi, vs)
8. Siz hangi pozisyondasınız? (Karşı/Destekliyor) Neden?
9. Bu anlaşmazlık sürecini anlatabilir misiniz?
    a. Nasıl ve neden başladı?
    b. Tepkiler nasıl gösterildi?
    c. En çok hangi konular üzerinde duruldu?
    d. Taraflar çözmek için ne yaptılar?

10. Sizce anlaşmazlıkların azalması için ne yapılabilir/yapılmalı?
11. Rüzgar enerjisi Karaburun'un ve kalkınmasının parçası olabilir mi?
    a. Evet ise; Nasıl olabilir? Alternatifiniz nedir?
    b. Hayır ise; neden? Alternatifiniz nedir?

Araştırma Soruları:

Kamu kurumları; bakanlıklar ve belediyeler ve rüzgar enerjisi firmaları için

1. Karaburun'u nasıl bir yer olarak tanımlarsınız?
2. Karaburun'un nasıl bir yer olmasını, nasıl gelişip kalkınması gerektiğini düşünüyorsunuz?
3. Yenilenebilir enerjiler ve rüzgar enerjisi hakkında ne düşünüyorsunuz?
4. Karaburundaki rüzgar enerjisi santralleriyle ilgili ne düşünüyorsunuz?
    a. Olumlu/Olumsuz yönleri nelerdir?
    b. Karaburun'a ne gibi zararı/artısı vardır?
    c. Varsa nasıl önlenebilir?
5. Karaburunda rüzgar enerjisi santralleriyle ilgili yaşanan anlaşmazlıkların temel sebepleri nelerdir?
    a. Kimler neden karşı çıkıyor? (süreç, doğa, yerel ekonomi, vs)
    b. Kimler neden destekliyor? (temiz enerji, iş/para verilmesi, vs)
    c. Siz bu konuda ne düşünüyorsunuz? Haklılık payları var mıdır?
6. Bu anlaşmazlık sürecini anlatabilir misiniz?
    a. Nasıl ve neden başladı?
    b. Tepkiler nasıl gösterildi?
    c. En çok hangi konular üzerinde duruldu?
7. Sizce bu konuda ne yapılabilir/yapılmalı?
    a. Anlaşmazlıklar nasıl çözülebilir?
    b. Siz anlaşmazlıkları çözmek için ne yapıyorsunuz?
    c. Üzerinde durulan konular hakkında sizin önlemleriniz nelerdir?
8. Sizce rüzgar enerjisi santralleri Karaburun'un ve kalkınmasının bir parçası olabilir mi?
    a. Evet ise; Nasıl olabilir? Sizin alternatifiniz nedir?
    b. Hayır ise; Neden? Sizin alternatifiniz nedir?
    c. (Yatırımcıya) Gelecek yatırım kurgunuz nedir?

English Translations of Question Sheets

Name of Interviewiee: **Interview No:**

Institution of Interviewiee: **Date:**

Research Questions:

For local people; headmen, villagers, newcomers & for local platform/organisation representatives (all questions)
For external platform/organisation representatives & for experts (quest. 3 and following)

1. Where are you from? (If foreigner) When and why have
2. you settled to Karaburun?
3. What do you do for living? (Agriculture, husbandry, tourism, retired, etc.)
4. How would you describe Karaburun?
5. How do you think Karaburun should be like and should be developed in near future?
6. What do you think about renewable energies and wind energy in general?
7. What do you think about wind energy facilities in Karaburun in particular?
    a. What are the positive/negative aspects of developments?
    b. What kind of benefits/costs do developments have on you?
    c. What kind of benefits/costs do developments have on Karaburun?
    d. If there are cost, how can they be prevented?
8. What are the fundamental reasons for the conflicts related to wind energy developments experienced in Karaburun?
    a. Who opposes and why? (the process, nature, local economy, etc.)
    b. Who supports and why? (clean energy, job opportunity, etc)
9. What is your position in the conflict? (Opposed/Supporter) Why?
10. Could you explain this conflict process?
    a. How and why the conflict started?
    b. How were the reactions shown?
    c. What topics were most emphasized?
    d. What did the agents do to solve the conflicts?
11. According to you, what can/should be done in order to release conflicts?
12. Can wind energy plants be a part of Karaburun and its development?
    a. If yes; How? What is your alternative?
    b. If no; Why? What is your alternative?

Research Questions:

For public institutions; ministries and municipalities and for wind energy companies

1. How would you describe Karaburun?
2. How do you think Karaburun should be like and should be developed in near future?
3. What do you think about renewable energies and wind energy in general?
4. What do you think about wind energy facilities in Karaburun in particular?
    a. What are the positive/negative aspects of developments?
    b. What kind of benefits/costs do developments have on Karaburun?
    c. If there are negative aspects, how can they be prevented?
5. What are the fundamental reasons for the conflicts related to wind energy developments experienced in Karaburun?
    a. Who opposes and why? (the process, nature, local economy, etc.)
    b. Who supports and why? (clean energy, job opportunity, etc)
    c. What do you think about this issue? Do they have rightness about the subject?
6. Could you explain this conflict process?
    a. How and why the conflict started?
    b. How were the reactions shown?
    c. What topics were most emphasized?
7. According to you, what can/should be done in order to release conflicts?
    a. How can the conflicts be resolved?
    b. What have you done for resolving conflicts?
    c. What are your precautions about the topics that are being addressed?
8. Can wind energy plants be a part of Karaburun and its development?
    a. If yes; How? What is your alternative?
    b. If no; Why? What is your alternative?
    c. (For investor) What is your future investment plans?

APPENDIX C

LIST OF INTERVIEWS

No	Name	Age	Education	Institution	Type	Date
1	İ.D.	55+	University Graduate	Retired - Newcomer & Head - City Council	In-Depth	10.03.2016
2	M.B.	50+	H. School Graduate	Headman - Yaylaköy Village	In-Depth	10.03.2016
3	C.A.	-	University Graduate	Lawyer - ÇEHAV	In-Depth	17.03.2016
4	N.D., E.O.	-	University Graduate	Lawyers - Izmir M. Municipality	In-Depth	24.03.2016
5	B.Z.	-	University Graduate	Planner - RÜZGEM METU	In-Depth	29.03.2016
6	Repr.	-	University Graduate	Consultant- Wind Decision	In-Depth	07.04.2016
7	M.A.	-	University Graduate	Deputy - Izmir Provincial Directorate of Environ. & Urban.	In-Depth	23.04.2016
8	Ç.Ç.	-	University Graduate	Planner - Izmir M. Municipality	In-Depth	23.04.2016
9	Z.O.	55+	University Graduate	Retired - Newcomer & Representative - K. Common Life Plat.	In-Depth	20.04.2016
10	A.Ç.	55+	University Graduate	Retired - Newcomer & Representative - Penin. Common Life Plat.	In-Depth	28.04.2016
11	N.B.	65+	H. School Graduate	Headman - Tepeboz Village	In-Depth	20.05.2016
12	O.S.	65+	H. School Graduate	Headman - Hasseki Village	In-Depth	20.05.2016
13	T.İ.	55+	University Graduate	Representative - EGEÇEP	In-Depth	21.05.2016
14	H.B.	-	-	Headman - Bozköy Village	Short Contact	22.05.2016
15	H.Y.	-	-	Headman - Sarpıncık Village	Short Contact	22.05.2016
16	H.T.	50+	-	Farmer- Native (Eğlenhoca)	In-Depth	20.06.2016

List of Interviews (continued)

17	H.Ç.	70+	H. School Graduate	Farmer - Native (Yaylaköy)	In-Depth	20.06.2016
18	B.Y.	70+	-	Native (Yaylaköy)	In-Depth	20.06.2016
19	N.M.	70+	H. School Graduate	Farmer - Native (Mordoğan)	In-Depth	20.06.2016
20	G.U.	65+	P. School Graduate	Native (Bozköy)	In-Depth	15.07.2016
21	M.Ü.	70+	P. School Graduate	Native (Bozköy)	In-Depth	15.07.2016
22	A.B.	65+	P. School Graduate	Native (Bozköy)	In-Depth	15.07.2016
23	A.F.	70+	-	Farmer - Native (Sarpıncık)	In-Depth	17.08.2016
24	A.M.	70+	-	Farmer - Native (Sarpıncık)	In-Depth	17.08.2016
25	M.Y.	55+	University Graduate	Retired- New Comer (Tepeboz)	In-Depth	17.08.2016
26	A.Ç.	65+	University Graduate	Mayor - Karaburun Municipality	In-Depth	17.08.2016
27	M.Ş.	55+	H. School Graduate	Retired - Native (Yaylaköy)	In-Depth (Phone Call)	23.08.2016
28	S.H.	55+	University Graduate	Newcomer (Karaburun)	In-Depth (Phone Call)	01.09.2016
29	B.G.	55+	-	Native (Salman) & Municipal Councilor	In-Depth (Phone Call)	01.09.2016
30	E.A.	-	University Graduate	Representative - Chamber of City Planners	In-Depth	02.09.2016
31	M.Ö.	-	University Graduate	Planner - Çalık En. Company	In-Depth	06.09.2016
32	A.G.	-	University Graduate	Engineer – Ayen En. Company	In-Depth	06.09.2016
33	Repr.	-	University Graduate	Planner – Dep. of Development Plans, MEU	In-Depth (Rejected)	07.09.2016
34	M.T.	-	University Graduate	Renewable Energy Consultant	In-Depth	07.09.2016
35	M.C.	-	University Graduate	Engineer - Lodos Company	In-Depth (Phone Call)	16.09.2016