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## 1.1

Type of power plant (wind, hydroelectric, geothermal, sun)	Wind power plant
Established power capacity (Megawatts)	135 MW
The number of workers, technician, engineer, employees in plant	3-engineers 15-technicians 2-employees 10-security guards
The name and surname of the person who is taken information  The profession of the person(machine, electric ... engineer, technician, worker)	Sedat USTURALI  The head of technicians
Is it state or private establishment? What is the name of it?	Private establishment - Rotor Electric Power Production INC. (Zorlu Energy Group)
How long the plant was completed? (Year or month)	Approximately, 4 years
How many Euros was spent for the power plant to establish?	1,000,000 Euros for 1 MW
What is salary of a staff which is working, approximately?	Approximately, 2,000 TL
Which features have employees to work in the power plant? (engineer, technician, employee)	Should be industry knowledge and foreign language for engineers  Should be graduated from institution of higher education had the working document under the high voltage, experience in the energy sector and english for technicians

What is the history of plant? Why is this type of plant selected?

It established in Osmaniye between the years of 2006 and 2010. Wind power plants were began to establish in Turkey in these days. Wind power plants are very green and clean plants. They don't throw wastes to the nature. This sector is very profitable sector in windy areas, in areas which has high yield. Because of these reasons has been entered in this sector.

What are the regional and national labour force market effects of the plant?

It doesn't have a large number of staff working at the plant. But it has the benefit for tradesmen in environment. So, operators of the hotel take advantages from the plant. There are benefits of the power plant as a regional in this way.

What are the future developments about the plant? What is the place of the plant in the national and international perspective?

The largest power plant in Turkey is Gökçedağ wind power plant which has 135 MW force, now. Coming soon 44 wind turbine is planned to established more. And, the plant will grow in this way. In addition, I can say that a bright future of wind power plants. We could come to able to benefit from new and renewable energy sources like Germany for energy necessity in the future.

What will the future development related to the plant bring to labour force market as regional and national levels?

There is always need for energy sector. Also, there is usually worker gap of this sector. The workers are sent to education to close this gap. This sector is the opportunity for a business for new graduates and it will grow more and more with the developments which will become in this power plants.

## 1.2

Type of power plant (wind, hydroelectric, geothermal, sun)	Wind power plant
Established power capacity (Megawatts)	90 MW
The number of workers, technician, engineer, employees in plant	1-engineer 14-technicians 15-employees
The name and surname of the person who is taken information  The profession of the person(machine, electric ... engineer, technician, worker)	Burhan KIRAÇ  Managing Director - Electrical Electronical Engineer
Is it state or private establishment? What is the name of it?	Private establishment- Bergama WEPP Power Generation INC. (Bilgin Energy Investment Holding INC.)
How long the plant was completed? (Year or month)	5 years  -measurements are done in the first4 years  -Assembly made and construction was completed in one year
How many Euros was spent for the power plant to establish?	-
What is salary of a staff which is working, approximately?	-
Which features have employees to work in the power plant? (engineer, technician, employee)	For engineers and technicians, a foreigne language is a condition(English or German). They are able to Express themselves with foreign language they know and be able to read.  For workers a qualification is not indicated for certain. They need to be honest.

What is the history of plant? Why is this type of plant selected?

The power plant consist of 36 wind power turbiner which placed on 4 parallel hills to the line stretching Northwest-Southwest, Atçılar village neighbourhoad, Aliğa and Pergamum districts, İzmir. Measurements were performed during 4 years. The power plant was thought to establish or not and at the and of this 4 years, assembly was started. Assembly processes took approximately 1 year and completed in the power plant. Now, it's working for 8 months.

This type of power plant was chosen, because of these results are not more than the absence of wind power plants, the sector to be new and not yet developed, an environmentalist, the economic return is good and the ease of operation listed under the headings.

What are the regional and national labour force market effects of the plant?

Estimated annual production is 300 million kWh of the power plant. The annual production of Turkey is 200 billion kWh. We can understand the impact of the power plant to the national and regional labor market.

What are the future developments about the plant? What is the place of the plant in the national and international perspective?

Currently, A power plant that operates for 8 months is a new one. It is a new market in Turkey and is trying to became permanent.

What will the future development related to the plant bring to labour force market as regional and national levels?

An important features of the power plant are clean and to not excrete wastes to environment. Oils that are used in machines are being chosen periodically. These variable wastes ar given waste disposal companies and these companies destroy them. These environment companies gives environmental document to the power plant. These documents given are being checked by the Ministry of environment and the approval is taken.

The majanity of turbines currently in power plant is being imported from abroad. But industry side will overcome in Turkey and the last time, it will be carried forward for people. In addition, the power plant provides job opportunities to people in surroundings. Apart from these, the power plant takes care of participation in social responsibility projects.

### 1.3

Type of power plant (wind, hydroelectric, geothermal, sun)	Wind power plant
Established power capacity (Megawatts)	90MW
The number of workers, technician, engineer,	1-engineer

employees in plant	20-technicians 10-officers
The name and surname of the person who is taken information The profession of the person(machine, electric ... engineer, technician, worker)	Tayyar IRGAÇ Managing Director- Electrical Electronical Engineer
Is it state or private establishment? What is the name of it?	Private establishment- Soma WEPP (Bilgin Energy Investment Holding INC.)
How long the plant was completed? (Year or month)	Approximately, 2 years
How many Euros was spent for the power plant to establish?	-
What is salary of a staff which is working, approximately?	-
Which features have employees to work in the power plant? (engineer, technician, employee)	Engineers and technicians should know a foreign language, high voltage and PLC.

What is the history of plant? Why is this type of plant selected?

The Soma WEPP which performed on the basis of measurements made since 1998, is located in Manisa. And it consists of two separate parts. The Western part of the Project contains 24 wind turbines which have 60 MW in the North of Soma. The Eastern part of Project consists 12 wind turbines which have 30 MW in the North of Kırkağaç. It started to work in August of 2010. So, this power plant was established before 5 months. Because of renewable energy source, a plant of this type was chosen.

What are the regional and national labour force market effects of the plant?

The power plant provide to people that are in surrounding villages for job opportunities and necessary help. In addition, Soma WEPP produce 320 millions kWh of electricity for a year. It provides 190.000 tons of carbon emission reduction.

What are the future developments about the plant? What is the place of the plant in the national and international perspective?

There isn't a development plan for the future. It is thought to continue working in the same way, because it is a renewable energy. It doesn't damage to environment. Although not too much at the moment, wind power will be more popular in Turkey.

What will the future development related to the plant bring to labour force market as regional and national levels?

There isn't a development about the power plant. Many of wind power plants which will be established in the future can provise contributions to labour force market as regional and national levels.

**1.4**

Type of power plant (wind, hydroelectric, geothermal, sun)	Wind power plant
Established power capacity (Megawatts)	42.5 MW
The number of workers, technician, engineer,	1-engineer

employees in plant	2-technicians 1-employee
The name and surname of the person who is taken information  The profession of the person(machine, electric ... engineer, technician, worker)	Nurullah ÇELİK  Electrical engineer
Is it state or private establishment? What is the name of it?	Private establish- İnnores Electric Power Production INC.
How long the plant was completed? (Year or month))	Approximately, 1,5 years
How many Euros was spent for the power plant to establish?	52,000,000 Euros
What is salary of a staff which is working, approximately?	-
Which features have employees to work in the power plant? (engineer, technician, employee)	Elctrical or mechanical engineer is sufficient.  A employee must be graduated high school at least.

What is the history of plant? Why is this type of plant selected?

This power plant is located in surroundings Yuntdağ, Balaban, Koyuneli, Kurutepe. It started in March 2008. Because of renewable energy, this type of power plant was chosen.

What are the regional and national labour force market effects of the plant?

It cut the share of natural gas, inspite of this wind enrgy is utilized.

What are the future developments about the plant? What is the place of the plant in the national and international perspective?

It has a share as much as force in energy market of Turkey.

What will the future development related to the plant bring to labour force market as regional and national levels?

There isn't a very big contribution of the plant to labour force market. And it gives a few job to staff.

**1.5**

Type of power plant (wind, hydroelectric, geothermal, sun)	Wind power plant
Established power capacity (Megawatts)	30 MW
The number of workers, technician, engineer, employees in plant	1-engineer

	8-technicians 6-security guards 1-cook
The name and surname of the person who is taken information  The profession of the person(machine, electric ... engineer, technician, worker)	Mehmet TOKER  Managing Director- Electrical Electronical Engineer
Is it state or private establishment? What is the name of it?	Private establishment- Mazi-3 WEPP Electric Power Production INC. ( Bilgin Energy Investment Holding INC.)
How long the plant was completed? (Year or month))	9 months
How many Euros was spent for the power plant to establish?	-
What is salary of a staff which is working, approximately?	-
Which features have employees to work in the power plant? (engineer, technician, employee)	An engineer should be expert and an engineer should speak English.  Technicians are electric or machine technicians and they know a foreign language.  Security has a driving licence and document of gun transporting.

What is the history of plant? Why is this type of plant selected?

Project of Mazi-3 WEPP was established on the hills which are paralel to the see and overlooking Mersinli Gulf in İzmir, Alaçatı. It was decided to invest as a result of examination of wind measurement, in 1998 buy international organizations.

Power plant which is consist of 12 wind power turbines became to produce in September 2009. A power plant has been established for reasons such as lack of damage to environment and renewable energy.

What are the regional and national labour force market effects of the plant?

The power plant take staff from central around, shopping and small jobs are becoming in cities and villages.

What are the future developments about the plant? What is the place of the plant in the national and international perspective?

A power plant which is 50 MW will be done. And total power capacity will be 80 MW.

What will the future development related to the plant bring to labour force market as regional and national levels?

If the capacity is increased in the future, the power plant will take staff. In addition, staff taking and various exchanges will be in building sites.

## 1.6

Type of power plant (wind, hydroelectric, geothermal, sun)	Wind power plant
Established power capacity (Megawatts)	10.8 MW
The number of workers, technician, engineer, employees in plant	3-technicians 5-employees
The name and surname of the person who is taken information	Regaip EREN

The profession of the person(machine, electric ... engineer, technician, worker)	Technician
Is it state or private establishment? What is the name of it?	Private establishment- Deniz Electric Power Production Limited Company (Aksa Energy)
How long the plant was completed? (Year or month))	6-7 months
How many Euros was spent for the power plant to establish?	22,000,000 \$
What is salary of a staff which is working, approximately?	1,200 TL approximately for technicians 600 TL approximately for employees
Which features have employees to work in the power plant? (engineer, technician, employee)	Technicians must be graduated from electricity department and they should have high voltage licence and experience.

What is the history of plant? Why is this type of plant selected?

Karakurt Wind Power Plant was started to production in May 2007. This power plant was chosen to prevent pollution of environment and export dependence.

What are the regional and national labour force market effects of the plant?

It provides a lot of job opportunities to people is living around the power plant.

What are the future developments about the plant? What is the place of the plant in the national and international perspective?

Installation will continue for power plant in between 2011 and 2012.

What will the future development related to the plant bring to labour force market as regional and national levels?

It will produce more energy.

## 1.7

Type of power plant (wind, hydroelectric, geothermal, sun)	Wind power plant
Established power capacity (Megawatts)	7.20 MW
The number of workers, technician, engineer, employees in plant	2-technicians 4-security guards
The name and surname of the person who is taken information	Mehmet TARAKÇI Electrical Technician
The profession of the person(machine,	

electric ... engineer, technician, worker)	
Is it state or private establishment? What is the name of it?	Private establishment- Ares Alaçatı Wind Energy Power Plant
How long the plant was completed? (Year or month))	Approximately, 6 months
How many Euros was spent for the power plant to establish?	-
What is salary of a staff which is working, approximately?	Approximately 2000 TL for technicians. Minimum wage for security guards
Which features have employees to work in the power plant? (engineer, technician, employee)	An engineer should be an electric engineer. A technician must be graduated from electricity or mechanical part and they have a document of working under high voltage. No quality for security guards

What is the history of plant? Why is this type of plant selected?

The aim is to produce electrical energy from taking advantage of the wind, of course. The power plant was started to produce in 1998. It is also the first wind power plant which was done the model of Do-Operate-Transfer in Turkey.

What are the regional and national labour force market effects of the plant?

The power plant is connected to the network. Therefore, the electricity produced here is used in the region around the central. In addition the power plant provides very little opportunity for business.

What are the future developments about the plant? What is the place of the plant in the national and international perspective?

There isn't any expected developments related to power plant in the future. It will go on by this way.

What will the future development related to the plant bring to labour force market as regional and national levels?

1.8

Type of power plant (wind, hydroelectric, geothermal, sun)	Wind power plant
Established power capacity (Megawatts)	1.50 MW
The number of workers, technician, engineer, employees in plant	In that area; 1-engineer 4-technicians 3-security guards
The name and surname of the person who is taken information	Halil DURUTÜRK
The profession of the person(machine, electric ... engineer, technician, worker)	Electrical Engineer

Is it state or private establishment? What is the name of it?	Private establishment- Alize Energy Electric Power Production INC.
How long the plant was completed? (Year or month))	Approximately, 2 months
How many Euros was spent for the power plant to establish?	-
What is salary of a staff which is working, approximately?	Approximately 1100-1400 TL for a service technician.
Which features have employees to work in the power plant? (engineer, technician, employee)	Technicians have informations about electricity and mechanic. No quality for other personels.

What is the history of plant? Why is this type of plant selected?

The power plant was started to production in İzmir/Çeşme in 1998. This type of a power plant was chosen. Because wind power plants which are more profitable structure in the long run is believed.

What are the regional and national labour force market effects of the plant?

As a result of a small power plant doesn't have effect to regional and national labor market, too much. Because, there are less employees in the power plant. It was the first wind power plant in Turkey. So it has helped to overcome the Money bureaucratic hurdles.

What are the future developments about the plant? What is the place of the plant in the national and international perspective?

There isn't any development plan about it in the future. Now, it is producing electricity and it will continue. When the plant complete the mechanical life, it will be pulled up and that region will continue as if nothing has been there before. In addition, this power plant is the first wind power plant in Turkey was heard in national and regional perspective and the course of the Project was followed.

What will the future development related to the plant bring to labour force market as regional and national levels?

There will not be any development related to the power plant. So return to the labor market will not change.

## 1.9

Type of power plant (wind, hydroelectric, geothermal, sun)	Wind power plant
Established power capacity (Megawatts)	1.20 MW
The number of workers, technician, engineer, employees in plant	Nobody
The name and surname of the person who is taken information  The profession of the person(machine, electric ... engineer, technician, worker)	İsmail TEKNİK  Electrical Engineer
Is it state or private establishment? What is the name of it?	Private establishment- Sunjüt INC.
How long the plant was completed? (Year or month))	Approximately, 9 months
How many Euros was spent for the power	Approximately, 1,500,000 \$

plant to establish?	
What is salary of a staff which is working, approximately?	Nobody
Which features have employees to work in the power plant? (engineer, technician, employee)	Nobody

What is the history of plant? Why is this type of plant selected?

The power plant is in İstanbul/Hadımköy. It was set up to meet a portion of its energy needs. It is considered as a clean energy and it doesn't excrete waste to the environment. It is an important feature of this power plant and this type of a power plant was chosen for this reasons.

What are the regional and national labour force market effects of the plant?

It doesn't give energy to out. Because, it doesn't meet their own needs full of energy.

What are the future developments about the plant? What is the place of the plant in the national and international perspective?

There is no situation that such the power plant will not be any development.

What will the future development related to the plant bring to labour force market as regional and national levels?

There will not be any development.

## 2.1

Type of power plant (wind, hydroelectric, geothermal, sun)	Geothermal power plant
Established power capacity (Megawatts)	Dora-1 8.5 MW Dora-2 11.2 MW
The number of workers, technician, engineer, employees in plant	Both of two power plants are managed together, 2- electric engineers 2-machine engineers 1-administration director(machine engineers) 1-general manager 8-electricity operators 5-mechanical operators For Dora 1, 5-security guards, For Dora 2, 5-security guards
The name and surname of the person who is taken information	Fasih KUTLUAY

The profession of the person(machine, electric ... engineer, technician, worker)	Managing Director
Is it state or private establishment? What is the name of it?	Private establishment - Menderes Geothermal Electric Power Production INC.
How long the plant was completed? (Year or month))	Both of them (Dora-1 and Dora-2) approximately 36 months
How many Euros was spent for the power plant to establish?	For each MW approximately 2,000,000 \$
What is salary of a staff which is working, approximately?	Approximately, 2,000-5,000 TL
Which features have employees to work in the power plant? (engineer, technician, employee)	Electricity operators should have documents about this profession and experiences.  Mechanical operators should have a weld certificate.  Engineers should speak a foreign language and have experiences. In addition, new engineers should develop.

What is the history of plant? Why is this type of plant selected?

For Dora 1, construction Works are started in 2004 and was commissioned in 2006. For Dora 2, construction works are started in 2007 and was commissioned in 2009. This type of a power plant was chosen because of this results are high temperature, rich geothermal resources and a renewable energy in this region. (Approximately 170 C°at both power plants)

What are the regional and national labour force market effects of the plant?

There is a great contribution to the energy sector of the plant. Firstly it provides employment and have integrated event.Greenhouse and drying power of the power plant is taken advantage of in the region. These areas around the power plant are located in rural areas and carried out activities in arable fields and greenhouses in the agricultural sector being born in a competitive environment. A part from these, the power plant have produced carbondioxide

and the carbondioxide used in food industry. Linde gas at Dora 1 and Habaş at Dora2 take and use produced carbondioxide.

What are the future developments about the plant? What is the place of the plant in the national and international perspective?

Salavatlı area is belong to the power plant and as long as desined performance it open to development. In Turkey, the first closed loop was maked at these power plants. It was a Pioneer and companies began to enter the new and renewable energy supply sector.

## 2.2

Type of power plant (wind, hydroelectric, geothermal, sun)	Geothermal power plant
Established power capacity (Megawatts)	15 MW
The number of workers, technician, engineer, employees in plant	7-engineers(director, müdür yardımcısı) 20-technicians 1-chemist
The name and surname of the person who is taken information  The profession of the person(machine, electric ... engineer, technician, worker)	Hüseyin Murat GÜLER  Plant Engineer- Electrical Engineer
Is it state or private establishment? What is the name of it?	Private establishment – Zorlu Natural Electricity Generation INC. (Kızıldere GPP)
How long the plant was completed? (Year or month))	Approximately, 4 years
How many Euros was spent for the power plant to establish?	Approximately, 30,000,000 \$
What is salary of a staff which is working, approximately?	-
Which features have employees to work in the power plant? (engineer, technician,	An engineer have to know English, using computer and should have experiences. In

employee)	addition, military service is a condition for men. Technicians should have experiences, knowledge of computer, welder certificate, diploma, working certificate under high voltage.
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What is the history of plant? Why is this type of plant selected?

The power plant was established in Denizli/Sarayköy in Karataş village at Kızıldere geothermal basin. According to reports which is done by MTA, 6 number of wells are suitable for the production of electricity energy. Fuel cost of electricity without the institution of Turkey as a result of initiatives to improve energy production and technology in this direction has been to establish a power plant region. The power plant construction works have started at the end of 1980 and it was opened to operation on 11 February 1984. The power plant is the first in Turkey and the second in Europe. So, it constitutes leadership. It gives the water to 50 acres of greenhouse and 2 hotels. 2200 numbers of residential is heated. With waste water in Sarayköy. It has 55 personels and it provides job opportunities. Also, gas in the steam from the power plant is pulled with compressors and it gets carbondioxide gas to be used linde gas, cola, soda pop etc.

What are the regional and national labour force market effects of the plant?

The power plant is the first in Turkey and the second in Europe. So, it constitutes leadership. It gives the water to 50 acres of greenhouse and 2 hotels. 2200 numbers of residential is heated. With waste water in Sarayköy. It has 55 personels and it provides job opportunities. Also, gas in the steam from the power plant is pulled with compressors and it gets carbondioxide gas to be used linde gas, cola, soda pop etc.

What are the future developments about the plant? What is the place of the plant in the national and international perspective?

60 MW of an additional power plant construction was started.

What will the future development related to the plant bring to labour force market as regional and national levels?

A new power plant that builds will be the largest power plant of Turkey.

### 2.3

Type of power plant (wind, hydroelectric, geothermal, sun)	Geothermal power plant
Established power capacity (Megawatts)	6.85 MW
The number of workers, technician, engineer, employees in plant	Total 12 people
The name and surname of the person who is taken information  The profession of the person(machine, electric ... engineer, technician, worker)	Orhan DEMİR  Electrical Electronical Engineer
Is it state or private establishment? What is the name of it?	Private establishment- Bereket Geothermal Power Generation INC. (Kızıldere GPP)
How long the plant was completed? (Year or month))	Approximately, 1.5 years
How many Euros was spent for the power plant to establish?	-
What is salary of a staff which is working, approximately?	-
Which features have employees to work in the power plant? (engineer, technician, employee)	Personels should have knowledge of electrical or mechanical infrastructure. They should be an expert in turbine.

What is the history of plant? Why is this type of plant selected?

It was chosen because of existing hot geothermal water.

What are the regional and national labour force market effects of the plant?

Geothermal is gained to fluid economy.

What are the future developments about the plant? What is the place of the plant in the national and international perspective?

Renewable energy sources instead of fossil fuels used in.

What will the future development related to the plant bring to labour force market as regional and national levels?

It will serve to improve with reducing the amount of natural gas and oil derivatives from abroad and using their own resources.