



Fondazione Culturale  
**RESPONSABILITÀ ETICA**

## **ENEL - Annual General Meeting 2013**

### **Questions on Point n°1 of the AGM Agenda**

#### **1. Coal project in Galati, Romania**

In a meeting with Fondazione Culturale Responsabilità Etica (on 22/10/2012) Enel has stated that the Galati project for the construction of a coal-fired 800 MW thermal power plant in the eastern part of Romania would still have a long way to go and would currently be in stand by, since the current regulation of the energy market in the country (where the energy prices are kept low by lignite and hydroelectric plants) wouldn't make the Galati plant viable from an economic point of view.

Enel has also stated that the current business plan for the Galati plant doesn't take into account the possibility of fiscal benefits in the Galati Free Zone, since these benefits wouldn't apply to the thermal power plant but rather to the industrial development of the area as a whole.

Questions to Enel:

**1.1** Do you confirm that the projects for Galati plant are currently in stand by and the plant won't be developed unless Romania changes its energy legislation?

**1.2** Do you confirm that the Galati plant won't benefit from fiscal benefits linked to the Galati Free Zone?

#### **2. Nuclear energy: Cernavoda 3 and 4**

According to Art. 127-ter of the Testo Unico della Finanza, Fondazione Culturale Responsabilità Etica (Fcre) exercised the right to pose some questions to Enel's management on Cernavoda before the 2012 AGM. Enel replied in written form in May 2012 that the feasibility studies and the authorisation processes with reference to Cernavoda 3 & 4 project were not concluded yet, and that Enel wouldn't decide about its participation to the project until it will receive the results of the on-going studies.

One year after the above mentioned communication Fcre:

**2.1** asks the management if it has taken a final decision over Enel's participation to the Cernavoda 3&4 project;

**2.2** If this should be the case, Fcre asks the management if the specific measures for the plant's upgrade have been put in place and submitted to independent review as requested by the European Commission.

### **3. Nuclear energy: Kaliningrad**

Also for what concerns the Baltic nuclear power plant (NPP) in Kaliningrad, Enel replied in written form to the three questions posed by Fcre before the 2012 AGM, that all the analysis of the documentation linked to the above mentioned project were still in process (as per May 2012 when the written replies were published by the company), and that therefore Enel would be waiting to receive the results of these analyses and only after that the company would take a final decision both on its participation to the project and on the dimension of this participation.

One year after the above mentioned communication Fcre:

**3.1** asks the management if it has taken a final decision over Enel's participation to the Baltic NPP project in Kaliningrad;

**3.2** moreover, Fcre asks to the management if - after more than two years from its signature -the MOU with INTER RAO UES, is still valid;

**3.3** in case the management has decided to go ahead with the project, considering Enel's current financial situation, how is the management planning to find resources for the implementation of the project?

### **4. Hidroaysen hydroelectric project in Chile**

In a meeting with Fondazione Culturale Responsabilità Etica (on 22/10/2012) Enel has stated that Enel will continue to invest in the project only if:

- the project will be declared as priority for Chile, independently from the governments that will be in power;
- the initial conditions for the project will be approved (and not new plans with new conditions);
- the project will confirm the initial level of expected profits;
- the distribution of the risks between Enel and Colbùn will be considered as acceptable;
- the government will take-charge of the environmental problems connected to the transmission line.

Enel has committed itself to provide to Fcre updated data on the costs for Hidroaysén in 2011 and 2012.

Questions to Enel:

**4.1** Which have been the costs for the project for Enel in 2011 and 2012?

**4.2** How much has Enel invested to date (and since the beginning of its involvement in the Hidroaysen project) for studies and other related activities?

**4.3** In an interview with the Wall Street Journal on 08/04/2013, Fulvio Conti has said that "Enel will continue supporting Hidroaysen as long as the government, both at the national and local level, supports it"

(<http://online.wsj.com/article/SB10001424127887323550604578410530064066260.html>)

What kind of support Enel is exactly asking to the government?

**4.4** When will the EIA for the transmission line be submitted to the relevant authorities?

## **5. Palo Viejo hydroelectric project in Guatemala**

Despite the commitment taken during the 2012 AGM and, later, in the October meeting with Fcre, Enel hasn't answered to Fcre's questions on Palo Viejo yet. So we propose the questions again:

**5.1** Considering the list of foreseen actions aimed at benefiting the communities of San Juan Cotzal, El Pinal Vinaikab, Santa Avelina, Ojo de Agua, Sajubal, Tzinala, El Mirador Santa Avelina, Chichel, Cajixay and San Pedro, which projects have been completed? What is the overall investment and what is the breakdown of each project (updated at the latest available date)?

**5.2** Which economic returns has the project generated so far?

**5.3** How does ENEL explain the fact that, after having signed an agreement to start a dialogue with the Maya-Ixiles Indigenous Community, the company has recently signed an agreement with the elected mayor of San Juan Cotzal excluding the ancestral authorities?

## **6. El Quimbo hydroelectric project in Colombia**

Questions to Enel:

**6.1** How much money has been allocated to pay land compensations (as a consequence to the flooding of fertile land for the construction of the plant)?

**6.2** How many people have been identified as "affected people" to be compensated?

**6.3** What is the state of the compensations: how many people have been already resettled and compensated? How many people are still waiting for the compensation?

**6.4** What is the state of the project and when will the project be completed?

**6.5** Can the ongoing investigation related to the environmental license create concrete risks for the project to be sooner or later stopped?

## **7. Enel's projects in Italy**

### **Rossano (Progetto Integrato Policombustibile)**

At the time of its construction the power plant located in Rossano (CS) raised many perplexities and remonstrance from local public opinion, especially because it is located in the middle of the Sibari gulf, an area with great touristic and agricultural potential.

In 2005 Enel proposed a new project called "Progetto Integrato Policombustibile" (integrated, poly-combustible project) for the "conversion" of the existing plant, although it actually consists in the construction of a new plant including the total demolition of the four existing oil boilers and the construction of a new coal-fired boiler of 800 MW. The project has been presented as "poly-combustible" although, according to the available information, 95% of the used combustible would be coal dust.

Questions to Enel:

- 7.1** What are the current operating costs of the plant, also considering the possible combinations of natural gas and oil?
- 7.2** Has the company, also through subsidiaries, disbursed funds to the municipalities of the region in relation to the Sant'Irene plant in recent years?
- 7.3** Has the company, also through subsidiaries, disbursed funds to institutions or local public or private associations in recent years?
- 7.4** The company said that the current plant "will be dismantled in the short-medium term" (Studio di Impatto Ambientale, "Progetto Integrato Policombustibile"). What are the future perspectives for the plant and its workers?
- 7.5** Has the company planned a process of land acquisition?
- 7.6** Which is the estimated cost for dismantling the current plant?
- 7.7** Which measures has the company put in place in order to safeguard the sensitive surrounding environment in relation to the alleged stationing of hazardous waste in the area? Which is the treatment line envisaged for special waste?
- 7.8** Is the company planning to assess the health impact of the electromagnetic fields generated by the power line?
- 7.9** Is the company assessing the opportunity to use the Rossano plant - after the necessary technical adjustments - with combustible derived from waste (CDR or CSS)?

About the conversion project:

- 7.10** Does the company intend to present a new conversion project for the Rossano site?
- 7.11** Is the company assessing the opportunity of presenting a project with combustible derived from waste (CDR or CSS)?
- 7.12** Does the company intend to evaluate the impact of external costs for maritime traffic?
- 7.13** The coal transport to the plant is planned with the use of floating barges. Is the company able to quantify the environmental and landscape impacts of this process?
- 7.14** Is the project in line with the Regional Energy Plan (PEAR) and the Provincial Territorial Coordination Plan (PCTC)?
- 7.15** How does the company evaluate the environmental impact, safety and road conditions for the transportation plan?
- 7.16** According to which data has the company considered as irrelevant the increase of maritime traffic connected to the project?
- 7.17** Does the company envisage - as far as the conversion project is concerned - the payment of royalties, benefits or specific funds in favour of municipalities and other institutions in the area?

### **Coal plant "Eugenio Montale" in La Spezia**

The thermal power plant of La Spezia called "Eugenio Montale" has been built in 1962

and renovated in 2000 with the construction of two new natural gas plants and the partial modernization of a coal unit. The plant produces over 90% of energy through the combustion of coal.

The first AIA (integrated environmental authorisation) hasn't been released yet. Hopefully it will lead to the use of better available technologies for both the combustion process (emissions) and related operations like loading, transport and storage of the coal.

Given the current obsolete state the plants, it is reasonable to argue that the upgrading operation will result in a long stop and considerable investments in technology. Even more significant if we consider that the plant has gradually reduced its energy production over the years. However the modernisation of the plant is constantly postponed, waiting for the release of the AIA (which is still pending).

On 26 March 2013, in La Spezia, there has been a spill of ashes following the breaking down of a storage container's valve. This was the latest accident which produced a cloud of ash that was deposited in the surrounding area (and beyond). The plant is located in a densely populated area including two nearby schools.

Questions on the "Eugenio Montale" coal plant

**7.18** Considering that the Gulf of La Spezia hosts an ENI regasification plant which already supplies the gas used in the Enel's central, wouldn't it be cheaper for Enel to dismiss the coal unit, while operating instead the two natural gas groups already available, which aren't practically used?

**7.19** Why aren't the better available technologies spontaneously implemented by Enel, regardless of the legal impositions and even in the absence of the AIA provisions?

**7.20** Regarding the spill of ashes in March, is the company able to determine whether the "fly ashes" were containing carcinogenic Polycyclic aromatic hydrocarbons or not? Were the ashes radioactive? To which degree? How does the company envisage to compensate citizens for the consequences caused on their health by the bad functioning of the plant (abnormal smoke emission, dispersions of coal dust from the dock, etc.)?

## Geothermal plants on Mount Amiata

The quantity of carbon dioxide (CO<sub>2</sub>) produced by the geothermal power plants on the Amiata area in Tuscany - as verified by the Tuscany Region administration - is equal to about 852 tons/GWhe, while a natural gas cogeneration power plant produces about 350 tons/GWhe and a thermoelectric plant produces about 700 tons/ GWhe. Paradoxically the geothermal power plants of Amiata would release in the atmosphere 152 tons of carbon dioxide more than an oil power plant. In addition, they release also tons of methane, another climate-altering gas, sulphuric acid, ammonia and large quantity of mercury, arsenic and boric acid .

The Tuscany Region - by resolution of the Board no. **344/2010** - has fixed in 2 Kg/h the limit value for emissions of ammonia from geothermal power plants. The resolution also states that the authorisation for the construction of new power plants should be subordinated to "the implementation of adequately tested abatement systems, able to achieve at least the target value output as described in Table 4.3". This value is 2 kg per hour, equal to 48 Kg per day.

Enel has already begun the construction of a new power plant, "Bagnore 4" (40 MW) declaring - in the in Integration Document related to the emissions' scenarios - that the

cumulative impact of "Bagnore 3" (20 MW) and "Bagnore 4" will be of 1,630 kg per day of ammonia while the maximum quantity admitted by the Tuscany Region would be equal to 96 Kg for the two plants.

The (flash) technologies that Enel keeps using for the plants are outdated considering the binary cycle power plants of second and third generation, with reduced impact, that are built in the rest of the world.

Moreover, particular concern has been expressed by some experts and by the "Working Group on the definition of Amiata Water Resources" about the strategic implications of geothermal activity on the local aquifer, which represents the Tuscany's most important fresh water reserve. The concerns aren't only related to the quantitative aspects (e.g: the constant lowering of the water level in the aquifer) but also the qualitative ones, since the increase of arsenic in recent years has resulted in some non-potable water sources.

Questions on the Monte Amiata geo-thermal plants:

**7.21** How does the company justify its failure to comply with the regional regulation 344/2010?

**7.22** Why is Enel continuing to plan flash geothermal plants with potential high emissions in the atmosphere and doesn't take into consideration the binary cycle technology that envisages the complete re-injection of fluids into the ground?

**7.23** Which are the costs that Enel would need to afford for binary cycle plants (second and third generation)? Are those costs higher than the ones required to build flash plants? (first generation)? What is the costs' difference?

**7.24** What sums has Enel paid to the Tuscany Region annually and to the involved municipalities in the last ten years? Which are the new amounts considering that energy production from geothermal sources has been doubled in the Amiata area? What is the breakdown (of payments) between the Region and the involved municipalities?

**7.25** Are green certificates awarded for all the plants in the Amiata region? Has Enel received green certificates for the PC2 geothermal power plant? Which is the average annual amount of green certificates related to the Amiata projects that are awarded to Enel every year?

**7.26** What is the cost per Kw/h of the electricity generated by the geothermal plants in the Amiata region?

**7.27** What is the opinion of ENEL about the latest research commissioned by the Region to the University of Florence in relation to the MOBIDIC aquifer model?

**7.28** Why hasn't an Health Impact Assessment for "Bagnore 4" been produced yet?

**7.29** The Regional Health Agency commented the EIA for "Bagnore 4" saying that "the whole paragraph dedicated to health issues seem very illustrative and not adequate to describe the state of health of the population potentially affected by the construction of the new plant". What is the position of Enel to this regard?

### **Torrevaldaliga Nord power plant - Civitavecchia**

In December 2000 Enel stated its intention to re-convert the power plant of Torrevaldaliga Nord to coal and, despite decades of citizens' protests and numerous legal obstacles, the power plant has been operational for five years now. A number of incidents occurred on the site, both during construction and operations: these accidents have caused three deaths and dozens of injuries.

The data on public health in the area of Civitavecchia - after 25 years of operations of the various plants existing in the area - are alarming: Civitavecchia is in the first place in

the Lazio region and the third in Italy for mortality rate due to lung, trachea and bronchial cancer, with a significantly higher spreading of leukaemia and lymphomas comparing to the national average. The spread of asthma, allergies and other respiratory syndromes among children and youths living in Civitavecchia is by far the highest in the Lazio Region .

Torrevaldaliga Nord is built on the sea and the ingestion of mercury absorbed into fish tissue is a constant threat to the population of the area.

The thermal power plant of Torrevaldaliga Nord is located in the middle of a SCI (Site of Community Interest) called "ondali tra Punta Sant'Agostino e Punta della Mattonara" (Natura 2000 code: IT 6000005) and it is surrounded by an area of strong agricultural and touristic vocation with environmental and cultural treasures recognized as World Heritage Sites by UNESCO (Tarquinia and Cerveteri).

A popular consultation was held on 6 October 2002, which registered over 11,000 "no" to coal conversion in Civitavecchia (84.7%) and 4,800 no in Tarquinia (96%). Originally, an official referendum was supposed to be held, but the company submitted an appeal to the Administrative Court against the referendum, effectively preventing the citizens to express their legally binding opinion.

Torrevaldaliga North, declared "at risk for major accidents" according to Articles 6, 7 and 8 of Legislative Decree n ° 334 August 17, 1999 lies in an area where other four plants are placed and which are equally included in the same "National Inventory of infrastructures which are likely to cause major accidents" as per art. 15, paragraph 4 of Legislative Decree 17 August 1994, N. 334" (Seveso Law), which are Praoil (code NN065), Sodeco (code NN016), Italtipetroli (cod.DN014) and Sipic (code DN031) that are respectively located at 2,67 Km (Praoil and Sodeco) and 2,87 km (Italtipetroli and Šipić) from Torrevaldaliga North chimney.

The centre of Torrevaldaliga North in Civitavecchia burns coal with a sulphur content of around 1%, notwithstanding the Restructuring Plan of Air Quality of the Lazio Region approved by resolution of the Regional Council no. 66 of 10 December 2009, published on B.U.R.L. 11 of 20 March 2010, which indicates the requirement to use fuel with a sulphur content of <0.3%. Enel has filed an extraordinary appeal to the Head of State against the Lazio region plan. The choice of fuel with a higher sulphur content appears to be dictated by the difference in the cost of the various types of coal (so by the lower cost of fuel with higher sulphur content).

Enel's new business plan for the years 2013-2017 foresees an increase in the use of coal to overcome the 50% of the total national electricity production. By calculating the externalities, the health, environmental and economic costs of such production is estimated at approximately 2 bn EUR a year. Applying the software required by the European Commission (EXTERNEE) to the emission data of the coal-fired power plant Torrevaldaliga North (TVN) provided by the company, it emerges that, after 25 years, the company's expenditure for the possible damages caused by emissions similar to those reported could be more than 200 Mn EUR for mortality and 100 Mn EUR for morbidity.

In the MAP (Ministry for Productive Activities) decree n ° 55/02/2003 with which the conversion and exercise of the coal power plant of Torrevaldaliga North was authorized, Enel is required to provide as compensatory measure to create (in the former reservoir area) a forested area covering approximately 40 h, called "Parco dei Serbatoi", "whose realisation by Enel will be considered binding for the continuation of construction works and operation of the power plant."

With prot. DVA-2013-0001735 dated 22.01.2013, the Ministry of Environment has made it clear that the requirement in question has a double profile: that of the "environmental

compensation" and that of "socio-economic compensation" - the latter being connected to the use of public area and the construction of the bike path - and ordered that the recovery of the entire green area should be a priority after carrying out a survey to ascertain the level of the threshold concentration of contamination (CSC) in relation to soil, subsoil and groundwater, and giving to Enel 60 days to start the work. At the same time, it foresees the reshaping of the agreement with the City of Civitavecchia for the already planned actions in the project of the "Parco dei Serbatoi" as "socio-economic compensation".

In March 2013 the conference of services on the Environmental Permit has granted the company further concessions with respect to the authorisation decree of the power plant: the plant will be allowed to operate at maximum load for 7,500 hours per year (312 days instead of the 250 declared in 2003), to burn 4,500,000 tons of coal per year (therefore 900,000 tons more than planned), to use coal with a sulphur content up to more than three times than that permitted by the Regional Plan on Air Quality, to issue a maximum amount of 120 mg/Nm<sup>3</sup> of carbon monoxide - therefore much more than double the amount expected with the use of Best Available Technologies, while keeping the allowed annual limit of sulphur dioxide emissions (2,100 tons) and nitrogen oxides (3,450 tons) unchanged.

Questions on Torrevaldaliga:

**7.30** What has been, on average, the net return of each MW of electricity produced from coal in 2012?

**7.31** Given the above characterisation of the area and considering that the plant is located on the border of a urban and heavily populated area, what are the precautions that have been taken to prevent, in the case of accidental event, the risk of a domino effect?

**7.32** Where are the Torrevaldaliga North radioactive ashes disposed and how high is the cost of disposal?

**7.33** Which is the amount of the compensations to local municipalities for each single municipality? Would it be possible to have a list of the granted compensations?

**7.34** How much is the total amount paid by the company or its subsidiaries to institutions and associations, public or private? Which is the breakdown of the amount for town? We also would like to know where these figures are presented in the company's balance sheet.

**7.35** How much is the average expenditure for economic/environmental compensation of each power plant on the Italian territory and how much is instead the same figure for power plants outside the Italian territory?

**7.36** How much are the legal and court fees that the company is envisaging in order to deal with the legal proceedings connected to Torrevaldaliga and how many and which directors and employees, current or former, are involved in the proceedings and for which reasons?

**7.37** How much is the cost per ton of coal of the currently used type? What would be the cost for the supply of coal with a sulphur content <0.3%?

**7.38** At what point is the process of realisation of the above mentioned "Parco dei Serbatoi"? Have the works (both for the characterisation plan and for the realisation of the green itself) already been contracted and to whom? How much is the amount allocated for such intervention (detailed for each intervention) and how much is the quantification of what the Ministry of Environment in the opinion of the VIA / VAS n.1099 of 30 November 2012 defines as "socio- economic compensations"?

**7.39** With the agreement for the regulation of mutual relations between the municipality of Civitavecchia and Enel Spa, undersigned at the Presidency of the Council of Ministers on 30 April 2003 and finally signed on 19 June 2003, the area where the former power plant "Enel Fiumaretta" was located has been transferred to the City of Civitavecchia. We would like to know if that area has been subjected to a reclamation procedure in accordance to the existing environmental regulations and, if so, how many resources have been allocated and used to that purpose.

## **8. Discharge of toxic waste**

In recent years the investigations "Leucopetra" and "Poison" conducted by State Forestry Corps and Financial Police revealed the illegal discharge of toxic waste from industrial sites including the coal-fired plant "Federico II" in Brindisi.

In particular the investigation "Leucopetra" revealed that the gypsum and mud from the Cerano (in the province of Brindisi) plant were taken over by a consortium of companies formed by Caserta snc, Ikos and Sabatelli, which practiced the declassification of hazardous waste to non-hazardous waste, reusing the waste for the production of bricks.

Gypsum and mud were then transported to the "Lazzaro" clay pit, in the municipality of Motta San Giovanni (RC), and in the brick industry Caserta snc where they have been buried about 300 meters from the sea in an area identified as SCI (Site of Community Importance) called "Fondali da Punta Pezzo a Capo dell'Armi".

Investigators have estimated that, between 2006 and 2007, nearly one hundred thousand tons of toxic waste were disposed in this way, about 90 cubic meters, for a total profit of about 6 Mn EUR.

Enel stated that company was not involved in this deal but in May 2009 the Reggio Calabria's GIP (Preliminary Investigation judge) issued precautionary measures against ten people, including two senior executives of Enel: Michele Palermo, responsible for the procurement in the south of Italy and Diego Baio responsible for security in the Brindisi plant.

In addition, investigation conducted by the State Forestry Corps showed that waste was previously exposed to illegal mixing processes .

The second operation, called "Poison", carried out in July 2010 by the Financial police, has revealed a similar mechanism of waste traffic resulting from the plant in Brindisi.

The hazardous waste, containing various toxic materials including high percentages of nickel, vanadium and chromium, was taken over by some companies namely Sabatelli Vito, Lavori Ecologici Srl, Ecoservizi Srl, all companies from Brindisi, before being transported to Calabria and being taken over by the brick factory Fornace Tranquilla Srl. The last company was burying the waste without any precaution into an agricultural lands in the area of San Calogero (in the province of Vibo Valentia).

The investigation revealed that through this mechanism approximately 130,000 tons of toxic waste have been treated, with an estimated profit of around 18 Mn EUR.

Also in this case Enel declared to have nothing to do with the facts but the judicial authorities ordered precautionary measures for Enel managers Calogero Sanfilippo and Luciano Mirko Pistil, responsible of the Business Units of the Brindisi plant, Carlo Aiello, responsible of the materials movement line (including waste) at Federico II plant, Giuseppe Incampo and Diego Baio, responsible of environment and security for the plant.

The health and environmental impacts of such operations perpetrated in location with great touristic values as well as agricultural lands led to a damage that it hasn't

been possible to estimate so far. Due to economic and technical reasons the competent authorities haven't implemented the necessary precautions yet in order to avoid contamination of aquifers and the proliferation of land and air poisoning: the only measure adopted until now, taken by the Prefect of Vibo Valentia, is the order of destruction of all agricultural products harvested in 2010 in the surrounding of the disposal site of San Calogero.

Questions to Enel:

- 8.1** Has ENEL initiated the necessary internal procedures to verify any responsibility by the Enel managers in the two cases?
- 8.2** Has ENEL taken disciplinary action against the involved managers?
- 8.3** Has ENEL quantified the external costs of the waste disposal in both cases?
- 8.4** Has ENEL quantified the possible savings generated from such a disposal circuit?
- 8.5** How does the company expect to handle the reputational damage caused by the investigations?
- 8.6** Is ENEL considering to finance or co-finance the restoration of the involved sites?
- 8.7** Did the company put in place any system to prevent such events, ensuring the final destination of the toxic waste derived from its plants?

## **9. Porto Tolle coal power plant**

In November 2011, following the publication of a report by the European Environment Agency (EEA) on the on the health, economic and environmental impacts of air pollution for the major European industrial plants, Greenpeace commissioned to SOMO, a Dutch independent institution, an evaluation of the thermal power plants of Enel, with the aim of highlighting the excess mortality related to the plants' pollution. The research - published in April 2012 - has been carried out introducing a comparative assessment for the conversion to coal of the Porto Tolle power plant. Comparing the emissions planned for the conversion of Porto Tolle (1,980 MW) to coal with the alternative of a conversion to natural gas, the data have indicated a health impact for the coal option (that has been adopted by Enel) which is about 5.5 times higher in terms of premature mortality, while the overall external costs of coal production are nearly 2.5 times higher than the natural gas option. The same result has been obtained applying the EEA methodology. As regards the health costs expressed in terms of "years of life lost" the relative ratio between coal and gas is 6.9 times worse for coal.

The "SIA" (Environmental Impact Statement) presented by ENEL Spa doesn't consider as relevant the project's impact on health and doesn't present a cost-benefit analysis of different options (for instance the natural gas option). In terms of external environmental and health costs - based on the model adopted by SOMO and EEA - the coal option would have an external cost of 238 Mn EUR per year against a 96 Mn EUR for the gas option. The difference between the two options is therefore beyond the 142 Mn EUR per year. If we multiply this amount by the 40 years of life of a coal plant, the final amount would be equal to 5.68 bn EUR of higher environmental and health costs.

The update version of Enel's SIA for the plant (paragraph 4.3.5, pag. 718) just dedicates a short paragraph to health impacts, stating that "model simulations conducted in the update of SIA to identify the pattern of emissions' dispersion of the future central compared with the current one indicate that the new structure will enable an improvement of parameters for air quality connected with thermal generation, as well as a full compliance with the applicable legal requirements relating to the protection of

human health. Based on these considerations and the elements acquired to their support, it can be concluded that the transformation of the plant according to the proposed project can't be associated to concerns from the point of view of health protection for the population".

The paragraph does not make clear which models have been used and says nothing about the impact in terms of fine particulate matter in the area affected by the emissions from the plant. This is because in previous paragraphs of the SIA (4.2.1.2.4 on pag. 412 and following), Enel exclude that this kind of effect is produced by the plant - if not at a great distance from the central - quoting the FARM model, published by Nomisma Energia.

In our opinion, the assertion that "Enel can't associate any ground for concern from the point of view of health protection" is contradicted by the CAFE methodology, which is the reference methodology for EEA and even more by the simulations performed with the EcoSenseWeb model that includes the EMEP/MSC-W model.

The fact that the impact of the formation of PM2.5 takes place "at a great distance" from the plant does not mean that there isn't a measurable impact also in terms of health effects. The basic argument used by the SIA on the formation of PM2.5 is linked to the height of the chimneys and the resulting increased rate of dispersion. This argument is absolutely questionable (and outdated): the larger the area of dispersion, in fact, the greater the population exposed to PM2.5 and ozone peaks.

Moreover, the SIA doesn't adequately specify neither the quantity nor the destination of the waste products. The issue is very sensitive in absence of an approved Regional Plan for the Management of Special Waste and given that the facility is in an area that - according to the Regional Plan for the Remediation of Polluted Areas - is a priority for remediation, since two landfills for MSW (municipal solid waste) are already present in the area, for polluted estimated volume of about 20,000 cubic meters, for which the remediation plan already envisages a removal intervention (p. 99 of the SIA), without adequately indicating the destination of the waste products.

Questions to Enel:

**9.1** Which models have been use to support Enel's statement on paragraph 4.3.5, pag. 718 of the SIA, according to which "the new structure will enable an improvement of parameters for air quality" and the "transformation of the plant can't be associated to concerns from the point of view of health protection"?

**9.2** Why doesn't the SIA present a cost-benefit analysis based on different options? (e.g.: the natural gas option)

**9.3** Why doesn't Enel take into consideration the CAFE methodology applied by EEA?

**9.4** Which will be the quantity and destination of waste products and why doesn't Enel indicate these in the SIA?