



# ENVIRONMENTAL LAW IN GREECE

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11th annual review: Focus on energy

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# EXECUTIVE SUMMARY

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WWF Greece's annual review of the status of environmental law and policy in Greece now runs in its 11<sup>th</sup> year: the first review was published in June 2005. Each annual review presents and discusses the developments in environmentally relevant a) laws and policies and their implementation at the national, EU and international levels, and b) case law by Greek courts and the EU's Court of Justice. The fields of environmentally relevant policy analysed in each annual review include access to information, environmental impact assessment, nature conservation, energy and climate change, waste treatment, air pollution, control of environmental crime, spatial planning, water resource management, and the operation of a national Green Fund.

Through each annual review, WWF Greece sheds light on the often incomprehensible institutional framework and court rulings dictating or undermining the protection of the environment in Greece. It also highlights the non-transparent and fragmented process by which environmental degradation is achieved, also demonstrating how vested interests are served by fast-tracking procedures and tailor-made regulations. Further to facilitating actual understanding of the legislative process, thus empowering citizens who more often than not stand powerless before the legislative maze.

Published only a few days before the programmatic statements by the new government, this year's review gains particular political significance as it tracks the successes, failures and lost opportunities of the political and legislative initiatives of two consecutive outgoing governments: the coalition government of Antonis Samaras (until December 2014) and the re-elected coalition government of Alexis Tsipras (until July 2015).

The findings of this year's review are the political compass for the incumbent government's policies on environment, energy and, ultimately, the development of a living economy that can sustainably lead Greece out of the economic crisis.

The reporting period was marked by the following milestones and developments:

1. Dramatic increase in the number of EU environmental law infringement cases: from 25 in 2013 to 36 in 2014.
2. New rulings by the EU Court of Justice against Greece on important cases: on landfills (subject to financial penalty), inadequate protection status of the sea turtle *Caretta caretta*, and water pollution by nitrates.
3. Paralysis of the national protected area system, due to lack of funding and political support.
4. Approval of the National Strategy on Biodiversity, with the challenge of its implementation remaining open and uncertain.
5. Approval by the Ramsar Convention on Wetlands of International Importance of a resolution on the conservation of small island wetlands in the Mediterranean; the resolution was officially submitted to the Ramsar Secretariat by Greece, and was supported by WWF Greece.
6. Further diminution of the system of environmental governance through the incorporation of the environment sector to agricultural production and industry under the new Ministry of Productive Reconstruction, Environment and Energy.
7. Downgrading of the Environmental Inspectorate, which is now staffed with no more than 17 inspectors covering the entire country, and representing the system of environmental crime control.
8. New round of legalisation of illegal constructions, which in many cases results in the abolition of imposed financial penalties, and the loss of substantial income (one single decision for example for an illegal construction may imply a fine up to half a million euros)).

9. New round of shoreline and beach concessions within Natura 2000 sites, for the establishment of canteens, bars and sunbeds despite the relevant decision of the supreme court (Council of the State), without prior appropriate assessment of their impact on the ecosystem.
10. Adoption and implementation of new anti-forest laws that allow for the development of settlements within ecologically sensitive forest areas and legalise confirmed law violations.
11. Constant contempt of environmental legality by the Public Power Corporation (PPC), through the inclusion of its own illegal constructions in the new permits signed by the former Minister for Productive Reconstruction, Environment and Energy for the new 660MW lignite power plant Ptolemaida V.
12. Approval of final construction permits for the financially and environmentally unsustainable new lignite power plant Ptolemaida V.
13. Application to the European Commission for exclusion from the 2010/75/EU Industrial Emissions Directive of the old and polluting lignite plant Ptolemaida III, which will immerse Greece deeper into a fossil-fueled energy future.
14. Worrying data on the extent and economic impacts of environmental crime in all Europe, Greece included, issued by Europol and Interpol.
15. Increasing lack of transparency in the operation of the Green Fund.
16. Dramatic decline in the quality of legislation and the transparency of the law making process, primarily due to the immeasurable lot of uncoordinated clientelist and oftentimes cryptic provisions, which serve particular interest groups and 'settle' established infringements, at the expense of legal certainty and in mockery of law abiding citizens and businesses.
17. New bailout agreement, which includes provisions for the re-examination and possible repeal or improvement of environmentally catastrophic and clientelist legal provisions on forestry and spatial planning, which were voted in 2014.

WWF Greece's annual law review is published in Greek. Selected chapters are also published in English, focusing on a) nature and biodiversity, b) energy, and c) Greece's bailout programmes.

# FOCUS: ENERGY & CLIMATE CHANGE

## 1. European and international policy

2030 Climate and Energy Package: The adventurous process of reaching an agreement on a European climate and energy policy framework for 2030, which started in the spring of 2013, reached its peak at the European Council held in Brussels on October 23<sup>rd</sup> 2013<sup>1</sup>. The EU heads of state, following intense negotiations and under enormous and conflicting pressure, finally agreed to a weak climate and energy package that calls for at least 40% reduction in Greenhouse Gas (GHG) emissions, an at least 27% share of Renewable Energy Sources (RES) in the energy consumed and an at least 27% energy reduction, as well as a number of other related policy measures.

These targets are clearly insufficient to effectively tackle climate change and to make full use of the comparative advantages that the European economy has in the sectors of energy efficiency and renewables. Indicative of the pressure exerted on the European Council was the decision on energy efficiency. Europe's political leaders finally adopted an "indicative at least 27% target", which is strikingly lower compared to Europe's potential, but agreed to re-examining it by 2020, "*with regard to a 30% target at EU level*".

Greece's disappointing change in stance was certainly one of the factors that contributed towards this conservative outcome and adopting this confusing statement. Unfortunately, energy savings and efficiency was simply a media flag for the Ministry of Environment, Energy and Climate Change (MEECC), as Minister Yiannis Maniatis had repeatedly committed to a 30% target by 2030.<sup>2</sup> Furthermore, in 2014, as part of the negotiations for the 2030 climate and energy package, Minister Maniatis went a step further by endorsing Denmark's initiative for a binding (rather than indicative) target: upon this initiative, WWF Greece had publicly congratulated him<sup>3</sup>. However, in the days prior to the crucial European Council in October, Greece agreed to the frail 27% target, without questioning the nature of the commitment, which ended up as indicative.

Equally ambiguous was Greece's stance regarding renewables: while on a number of occasions the political leadership often appeared to favour a 30% target<sup>2</sup> when addressing domestic audiences, a 27% business-as-usual target was ultimately adopted in the final decision of the European Council.

Instead of actively promoting renewables and energy efficiency in the crucial European Council of October 2014, the Greek government unsuccessfully tried to secure increased funding from the auction of CO<sub>2</sub> emission allowances, by proposing an increase in the related per capita GDP indicator from 60% to 80%. It also focused on extolling the importance of exploiting its "national energy sources", i.e. lignite and - the yet to be found - hydrocarbons. In the end, the other EU country leaders brought to a halt the Greek Government's optimism regarding the country's hydrocarbon reserves, emphasizing in the recommendations of the proposal the need to "*capitalise on safe and sustainable low carbon technologies*".

UN Climate Change conferences in Lima (COP20) and Paris (COP21): Following two weeks of tough negotiations, the UN Climate Change Conference was concluded in Lima, Peru, on 12.12.2014 (COP20). Indicative of the difficulties encountered in reaching an agreement is the fact that the final document was released following a marathon session that lasted more than 36 hours<sup>4</sup>. In essence, it was a roadmap until the next, extremely important UN Climate Change Conference in Paris, in December 2015.

Perhaps the greatest accomplishment of COP20 was that, for the first time, the commitments to devising plans for greenhouse gas (GHG) emissions reduction address both developed and developing

<sup>1</sup> European Council. (2014, 23 October). Conclusions on 2030 Climate and Energy Policy Framework. Retrieved from: [http://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ec/145397.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/145397.pdf)

<sup>2</sup> ELETAEN. (9.4.2014). RES targets: From 2020 to 2030. The development of Wind Energy and RES in Greece and in Europe. (Workshop). Retrieved from: <http://goo.gl/h54zww>

<sup>3</sup> WWF Greece blog. (2014, 14 June). Bold and clean solutions for energy safety. (in Greek). <http://wwf.gr/blog/post/2014-06-18-14-19-5>

<sup>4</sup> Conference of the Parties, Twentieth Session, Lima 1-12 December 2014. Further advancing the Durban platform. <http://unfccc.int/resource/docs/2014/cop20/eng/l14.pdf>

countries, even large polluters, which had up until then avoided discussing any measures, thus obstructing the efforts to tackle climate change.

In the shadow of US President Barack Obama's catalytic commitment to a 26-28% emissions reduction by 2025, compared to 2005 levels, the European Union's climate policies were dominated by introversion and conservatism, thus sacrificing its position as a global climate leader: at COP20, the EU reiterated the October 2014 EU Council decision on reducing emissions by a mere 40%, which was mostly the result of short-sighted compromises, rather than a decisive step forward.

The European Union was among the first to submit its plan for contributing to the global target (Intended Nationally Determined Contribution, INDC) in February 2015, while at the same time it presented its vision for the agreement it will aim at reaching at the Paris Conference in December 2015<sup>5</sup>. Unfortunately, the European commitments confirmed the low ambitions that were already set out in the conclusions of the European Council in October 2014 for "a minimum 40% reduction in GHG emissions by 2030 compared to 1990 levels". Achieving this goal by 2030 requires a 43% GHG reduction in the sectors covered by the EU Emissions Trading System (EU ETS) and a 30% reduction in the remaining sectors, compared to the corresponding 2005 levels. The EU hopes that these commitments will put pressure on other countries in order to reach an agreement in Paris that will ensure the reduction of global emissions by 2050 by 60% compared to 2010 levels. This constitutes one of the most conservative targets at a global level, as some countries are calling for zero or almost zero emissions by 2050.

*European Union Emissions Trading System (EU ETS):* The most important reform of recent years towards increasing the efficiency of the ETS is the establishment of the Market Stability Reserve (MSR). The MSR will essentially function as a reserve that will store redundant emission allowances and feed them back to the market when the surplus drops below a certain level. This mechanism was designed in order to deal with the biggest structural issue of the EU ETS, i.e. the high allowance surplus, which inevitably leads to low CO<sub>2</sub> prices that are unable to push forward the necessary reforms in Europe's energy model.

The corresponding agreement was adopted by the European Parliament on 8 July 2015<sup>6</sup>, validating in this way the outcome of the tripartite consultation between the European Parliament, Commission and Council, which was concluded on 6 May 2015<sup>7</sup>, significantly altering the initial January 2014 proposal of the Commission. The final agreement includes the following: a) accelerating the launch of the MSR by two years, b) placing in the MSR reserve 900 million allowances that will gradually be withdrawn between 2014-2016 through the backloading mechanism but were to be re-injected in the market in 2019-2020, as well as c) placing 600 million unallocated allowances in the reserve. These three changes are expected to lead to a significantly higher increase in CO<sub>2</sub> emissions allowances costs compared to those that were expected based on the initial proposal of the European Commission.

Despite the fact that the MSR will be launched in 2019, analysts estimate that it will have an immediate impact on carbon market prices. Specifically with regard to Greece, it is expected that the public revenue from trading emission allowances will exceed €6 billion between 2015-2025<sup>8</sup>. The increase in prices will also continue beyond 2025, when it is expected to skyrocket to 30 €/ton around 2030<sup>9</sup>, compared to today's 7.5 EUR/ton.

This development will have detrimental effects on Greek lignite in particular, due to its exceptionally low quality, which renders it especially vulnerable to strains of this magnitude on the operating cost of the lignite units.

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<sup>5</sup> European Commission. (25.2.2015). EU sets out vision for Paris agreement alongside Energy Union Strategy. Retrieved from: [http://ec.europa.eu/clima/news/articles/news\\_2015022501\\_en.htm](http://ec.europa.eu/clima/news/articles/news_2015022501_en.htm)

<sup>6</sup> European Parliament. (8.7.2015). Parliament adopts CO2 market stability reserve. Retrieved from: <http://www.europarl.europa.eu/news/en/news-room/content/20150703IPR73913/html/Parliament-adopts-CO2-market-stability-reserve>

<sup>7</sup> European Parliament (6.5.2015). ETS market stability reserve: MEPs strike deal with Council. Retrieved from: <http://goo.gl/ovzX5n>

<sup>8</sup> Point Carbon. (27.4.2015). Future of EU carbon market still at stake as governments remain at odds: analysis from Point Carbon at Thomson Reuters. <http://www.changepartnership.org/wp-content/uploads/2014/10/Point-Carbon-2015-MSR-insight-27-April-2015.pdf>

<sup>9</sup> Thompson Reuters. (15.7.2015). Reviewing Europe's carbon market: fight for free allocation, slightly higher prices - Carbon prices are estimated to reach €30/t in 2030, according to Point Carbon analysts. <http://goo.gl/EUoZxw>

## 2. National legislation and policy

Lignite: Following a heated public debate over the ownership structure of PPC, the law establishing the “small PPC” was eventually voted on 9 July 2014. The small PPC is a vertically integrated power company that will acquire 30% of the PPC’s total capacity and clientele, along with the associated liabilities<sup>10</sup>.

According to law 4273/2014, the new company will acquire the lignite units located in the Florina prefecture, which add up to a total 1380 MW of capacity (Amyntaio I and II and Meliti I), along with the license for constructing the new lignite unit Meliti II. It will also acquire the Amyntaio, Meliti, Komninion, Kleidi and Vevi lignite mines. In addition, the new company will own two hydropower plants along the Nestos river (Thisavros and Platanovrisi), two on the Arahthos river (Pournari I and II), as well as the hydropower plants along Agras and Edessaiois, totalling 903 MW, 384 MW of which correspond to the pumped hydro storage unit of Thisavros. Finally, the asset portfolio of the “small PPC” will also include the 485 MW combined cycle natural gas plant in Komotini.

The political standoff regarding the ownership structure of the PPC overshadowed the cross-party consensus on committing the country’s energy mix to the heavily polluting lignite for the decades to come. This consensus, which was criticised by WWF Greece<sup>11</sup>, was evident throughout the debate on the associated legislation, but was more clearly reflected on the government’s and the opposition’s vote in favour of a last-minute amendment that attempts to “bind” both the potential future owners of the “small PPC” and the parent company to a lignite-based electricity generation model.

Specifically, the 1561/196 amendment in law 4273/2014 states that with regard to the small PPC “the offers accepted will be those that include a thorough, well-documented and binding investment plan for using the production permit of the 540 MW Meliti II power unit.” In other words, the future investors of the “Small PPC” are required to construct the new Meliti II lignite unit. The economic sustainability of Meliti II has been disputed by WWF Greece in a special report<sup>12</sup>, and that has, to date, progressed only to the point of having its production permit approved.

The aforementioned amendment protects the future of the “big” PPC as well, leaving absolutely no doubt as to where the money received from selling the “small” PPC will be allocated: *“The aforementioned amount will be allocated for the investment needs of PPC S.A. and by priority to those related to replacing and environmentally upgrading the existing expired PPC lignite units in the Lignite Centre of Western Macedonia (LCWM)”*. In essence, this means that the money earned by the PPC through the sale of the “small PPC” will be used for the construction of the new Ptolemaida V lignite unit and for the upgrades of the existing units required by EU legislation.

Due to the new government’s strong opposition against selling any PPC assets, the implementation of the associated legislation came to a halt immediately after the January 25<sup>th</sup> 2015 elections.

The priority of the government has explicitly been the construction of the new, 660MW Ptolemaida V unit. The political will was made clear during the first visit of the (as of now former) energy minister Panagiotis Lafazanis at the Lignite Centre of Western Macedonia, when he announced the issuance of the required licenses<sup>13</sup>. According to the minister, the only obstacle appeared to be the high cost of construction.

The total construction cost of approximately €1.4 billion for Ptolemaida V has not yet been secured by the PPC: €739 million constitutes part of a loan guaranteed by Euler Hermes, the German export credit insurance company, under the guidance of KfW-IPEX, the German government-owned development bank. This amount will be allocated for the purchase of equipment from a German-Japanese company. For this reason, and following his visit in Western Macedonia, the Minister attempted to negotiate the cost of the new unit with the Japanese ambassador in Athens<sup>14</sup>, as well as

<sup>10</sup> Law 4273/2014 “Establishment of a new vertically integrated power company” (A146)

<sup>11</sup> WWF Greece. (2014, 14 July). Lignite forever with cross-party consensus. <http://www.wwf.gr/en/news/1294-2014-07-14-13-04-39>

<sup>12</sup> WWF Greece. (June 2013). Ptolemaida 5 and Meliti 2. Economic viability report of the new lignite units. <http://www.wwf.gr/images/pdfs/PtolemaidaVMeliti%CE%99%CE%99.pdf>

<sup>13</sup> Ptolemaida.tv. (24.3.2015). The visit of EECC Minister Panagiotis Lafazanis and his statements on the new Lignite V unit, the PPC and on networks. <http://goo.gl/MXeQ12>

<sup>14</sup> Ministry of Reconstruction of Production, Environment and Energy. (2015, 7 May). Meeting of Minister Panagiotis Lafazanis with the Japanese ambassador in Athens. [http://ypeka.gr/Default.aspx?tabid=389&snif\[524\]=3685&language=el-GR](http://ypeka.gr/Default.aspx?tabid=389&snif[524]=3685&language=el-GR)



with German representatives of Mitsubishi Hitachi Power Systems Europe, the company leading the consortium that will construct Ptolemaida V<sup>15</sup>.

Due to a radical shift of orientation in the global financing system regarding the funding of new power infrastructure using the most polluting energy sources (lignite, coal) over the past 1.5 years, the PPC has been unable to secure funding for the remaining approximately €700 million. Hence, if the investment is to move forward, the Public Power Corporation will have to retrieve this sum using its own funds. One of the main obstacles it faces is that €400 million of the amount will need to be provided straight away, in two €200 million instalments, during the first six months following the commencement of works at the new unit, in a time when PPC's financial situation is at its worst<sup>16</sup>.

Prior to the visit of Panagiotis Lafazanis, Minister for the Reconstruction of Production, Environment and Energy, to the Lignite Centre of Western Macedonia, WWF Greece released<sup>17</sup> its report "Clean Alternatives to Ptolemaida V"<sup>18</sup>. WWF's report demonstrates that the construction of Ptolemaida V was not Greece's only option: hybrid combinations of pumped hydro energy storage stations with wind and PV units can adequately and reliably meet the base load that Ptolemaida V has been designed for. Most importantly, many of these hybrid solutions have a lower levelised cost of electricity (LCOE), compared to that of Ptolemaida V. As the pumped hydro energy storage stations that are proposed in the report will result from converting existing PPC hydroelectric plants, the implementation of this solution will lead to significant economic benefits for the company, minimizing at the same time the environmental impact. In addition to large scale solutions, domestic PV systems were also examined, which not only contribute towards the country's autonomy from lignite, but also create a new role for citizens, who will be given the opportunity to produce the energy they consume, rather than simply consume electricity. An economic sustainability assessment of household PV systems concluded that their development potential is excellent both with and without the use of batteries, given the recent technological advances, the introduction of the net metering mechanism in self-consumption and Greece's high levels of insolation. The increased use of household PVs will further reduce the power demand for central power plants such as Ptolemaida V, further increasing the risk of the investment.

Following the release of the report, WWF Greece publicly requested to meet with Minister Lafazanis in order to discuss its findings. The Minister never responded to the request, despite the fact that it was accompanied by an AVAAZ petition signed by 48,000 citizens<sup>19</sup>. WWF Greece insisted on the request, through a new letter addressed to the new EECC Minister that was appointed following a government reshuffle and to the German bank KfW<sup>20</sup>. Apart from presenting the findings of the report on the alternative solutions to Ptolemaida V, WWF Greece also stresses the deterioration in the economic sustainability potential of the planned unit, brought on by the changes in European legislation over the past months.

Specifically, the decisive factor that will crucially affect the economic sustainability of the planned unit is the cost of CO<sub>2</sub> emissions allowances. This cost is already a considerable burden on the operating cost of the lignite units - for instance, the cost in 2014 alone reached €217 million. However, the very recent EU decision on the operation of the Market Stability Reserve (MSR) is expected to raise CO<sub>2</sub> costs from today's 7.5 €/ton to 30 €/ton between 2025 and 2030<sup>21</sup>, i.e. during the first years of operation of the new unit and long before it has managed to pay back its particularly high construction cost. It should be noted that according to PPC's own estimates, at 30 €/ton of CO<sub>2</sub>,

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<sup>15</sup> Ministry of Reconstruction of Production, Environment and Energy. (2015, 28 May). A request for a substantial reduction in the cost of constructing the PPC Ptolemaida 5 power unit was submitted by the EECC Minister P. Lafazanis to the Executive Director of the construction company. [http://ypeka.gr/Default.aspx?tabid=389&snid=524\]=3736&language=el-GR](http://ypeka.gr/Default.aspx?tabid=389&snid=524]=3736&language=el-GR)

<sup>16</sup> PPC S.A.. (June 2015). Annual Economic Report (January 1st 2014 - December 31st 2014) <https://www.dei.gr/Documents2/%CE%95%CE%9A%CE%98%CE%95%CE%A3%CE%972014%CE%A44.pdf>

<sup>17</sup> WWF Greece. (10.3.2015). Lignite or cheaper and cleaner energy? <http://www.wwf.gr/news/1370-2015-03-10-10-43-54>

<sup>18</sup> WWF Greece. (February 2015). Clean Alternatives to Ptolemaida V. [http://www.wwf.gr/images/pdfs/Ptolemaida\\_V\\_Alternatives\\_GR\\_web.pdf](http://www.wwf.gr/images/pdfs/Ptolemaida_V_Alternatives_GR_web.pdf)

<sup>19</sup> WWF Greece. (8.4.2015). 48,000 citizens against PPC's new lignite. <http://www.wwf.gr/news/1382-48-000>

<sup>20</sup> WWF Greece. (28.7.2015). Reality is leaving Ptolemaida V behind. Will the PPC insist?. <http://www.wwf.gr/news/1415-v>

<sup>21</sup> Carbon Market Watch. (July 2014). What's needed to fix the EU's carbon market. Recommendations for the Market Stability Reserve and future ETS reform proposals. [http://carbonmarketwatch.org/wp-content/uploads/2014/07/ETS-POLICY-BRIEF-JULY-2014\\_final\\_1.pdf](http://carbonmarketwatch.org/wp-content/uploads/2014/07/ETS-POLICY-BRIEF-JULY-2014_final_1.pdf) (bottom right figure, page 5)

Ptolemaida V is expected to be less competitive than natural gas units in the energy market<sup>22</sup>, which will lead to fewer operating hours and consequently less income.

The significant implications that the rise in CO<sub>2</sub> costs is expected to have on the operation of Ptolemaida V and on the PPC's finances in general, has been publicly recognized by the PPC's board of directors<sup>23</sup>. In order to deal with this, the PPC is requesting that Greece is included in article 10c derogation of the - currently under review - 2003/87/EU Directive, so that it can be given free CO<sub>2</sub> emission allowances for electricity production. PPC even suggested a rise in the associated per capita GDP limit, in order to be considered eligible. However, and following long deliberations, the final recommendation of the revision that was submitted by the European Commission<sup>24</sup>, retained the per capita GDP limit for the eligible countries at 60%, i.e. the exact level agreed by European leaders in October 2014 as part of the agreement on the 2030 climate and energy package. Greece does not fall within that limit. Therefore, and for the period beyond 2021, Ptolemaida V - if constructed - and the other conventional power units will keep being charged for each ton of CO<sub>2</sub> that they emit. In any case, PPC's request to be exempted was against the spirit of the directive, as such exemptions are offered to help the transition of countries to a low carbon energy model, provided that they push forward the necessary upgrading investments. This transition is already happening in Greece, taking into account the increase in RES use and the respective fall in lignite use over the past years.

Moreover, apart from CO<sub>2</sub> costs, the economic sustainability of the planned unit will be significantly affected by the changes that will be required in its abatement technologies. The unit might be publicised as being in line with the latest technologies, but that is far from reality: According to the environmental permit of the unit<sup>25</sup>, its Nitrogen Oxides (NO<sub>x</sub>), Sulfur Dioxide (SO<sub>2</sub>) and dust emissions will fall exactly on the allowable upper limit of the 2006 Best Available Techniques (BAT)<sup>26</sup>, which apply to all EU countries, while the efficiency of the unit will not meet the 2006 requirements. Most important of all, the BAT review that was agreed in an advisory meeting as part of the Seville process, in June 2015, will lead to stricter limits compared to Ptolemaida V's environmental permit, which will need to be implemented by 2020 (4 years after the reviewing procedure will have been completed). The PPC will therefore need to install new, more expensive abatement technology even before the new unit is set in operation, which will, in turn, affect both the installation and the operational costs of Ptolemaida V.

The government's commitment to the revival of lignite is not limited to constructing Ptolemaida V. Former RPEE Minister Panagiotis Lafazanis, under the pressure of certain local authorities, MPs of the region and employees, submitted to the European Commission a request<sup>27</sup> for extension of the operation of Ptolemaida III beyond 2015, by placing it in a "limited life time derogation" status, according to article 33 of the 2010/75/EU<sup>28</sup> Industrial Emissions Directive. The PPC's oldest unit was shut down in November 2014 due to a fire, 13 months before the expiration of its environmental terms. The unit used to provide district heating to the city of Ptolemaida, along with two units belonging to LIPTOL's Thermal Power Station (TPS), but this operation was later taken over by units III and IV of the Kardina TPS, which also have a higher combined thermal capacity.

Responding to this absurd request, WWF Greece pointed out<sup>29</sup> that

- The environmental permit of Ptolemaida TPS in 2011 was issued on the explicit condition that all its units would be shut down by 31.12.2015<sup>30</sup> at the latest.

<sup>22</sup> Leonardos, Marios, PPC Mines Planning and Performance Director. (6.12.2014). The PPC strategy and the plan for the role of lignite in the Greek Power System. Presentation at the Green Institute workshop "Transition of Greece and of Western Macedonia in specific to a post-lignite era - challenges and opportunities". <http://www.greeninstitute.gr/files/LEONARDOS.pdf> (page 2)

<sup>23</sup> M. Piou (24.6.2015). PPC is asking for free emission allowances. Imerisia <http://goo.gl/nvF64r>

<sup>24</sup> European Commission. (15.7.2014). Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments. [http://ec.europa.eu/clima/policies/ets/revision/docs/com\\_2015\\_337\\_en.pdf](http://ec.europa.eu/clima/policies/ets/revision/docs/com_2015_337_en.pdf)

<sup>25</sup> Ministry of Environment, Energy and Climate Change. (3.5.2012). Decision: Environmental Terms Approval of the installation and operational terms of the PPC's production unit of 660 MW gross nominal power, running on lignite powder of a 140 MW<sub>th</sub> thermal power potential, for district heating, in the Komanos depleted mine and the Ptolemaida lignite field areas, located in the Eordaia municipality in the Kozani prefecture. (ΑΔΑ: Β4990-9ΝΒ)

<sup>26</sup> European Commission. (July 2006). Integrated Pollution Prevention and Control. Reference Document on Best Available Techniques for Large Combustion Plants. [http://eippcb.jrc.ec.europa.eu/reference/BREF/lcp\\_bref\\_0706.pdf](http://eippcb.jrc.ec.europa.eu/reference/BREF/lcp_bref_0706.pdf)

<sup>27</sup> Ministry of Reconstruction of Production, Environment and Energy (27.5.2015). Letter of the EECC Minister Panagiotis Lafazanis to the European Commission, regarding the resumption of operations in Unit III of the PPC's Ptolemaida lignite thermal power station. <http://ypeka.gr/Default.aspx?tabid=389&snid=524&3730&language=el-GR>

<sup>28</sup> Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on Industrial Emissions (integrated pollution prevention and control) (Official Journal of the European Union L 334 of 17.12.2010, p. 17-119)

<sup>29</sup> Mantzaris N. (15.5.2015). Ptolemaida III: Reopening by "way of derogation" from logic? Energypress, <http://energypress.gr/news/ptolemaida-iii-epanaleitoyrgia-kata-pareklisi-tis-logikis>

- Apart from its particularly low efficiency, the unit is also heavily polluting. As can be inferred from the official data provided by Greece to the EU, its dust emissions exceed more than twice the 460 ton limit, which correspond to this particular unit according to the National Emissions Reduction Plan (2009-2013 average: 1093 tonnes/year).
- The request to include the unit in article 33 derogation of 2010/75/EC is largely overdue, as the associated deadline was 1/1/2014.
- Due to its high thermal power, the unit does not fit the criteria required in order to be placed under the exemption from article 35 of 2010/75/EU regarding units used for district heating. Hence, the only option for extending the operation of Ptolemaida III beyond 2015 is for the unit to comply with the notably stricter emission limits of 2010/75/EU, which will be implemented on 1.1.2016 and will require costly retrofits.

PPC had the opportunity to place Ptolemaida III under the “limited life time derogation” by 1.1.2014, and extend in this way its operation until 2023 (at the latest), which was precisely the procedure applied to the Amyntaio and Kardias stations. The fact that PPC didn't include Ptolemaida III among the lignite units for which the request (placement under article 33 of 2010/75/EC) was filed, means it is fully aware of the fact that prolonging the operation of such an inefficient unit is unfavourable in economic terms.

It is particularly interesting that almost two months after the Greek request was submitted to the European Commission, the newly elected president of the PPC labour union “GENOP-DEI” asserted that the request acts against the interests of the company and serves only political interests<sup>31</sup>. The Western Macedonia department of the Technical Chamber of Greece also expressed its objections on the matter and called for the examination of alternative proposals (biomass, natural gas via the Trans Adriatic Pipeline, dry lignite) for the district heating of Ptolemaida<sup>32</sup> that would be as disconnected as possible from PPC.

With regards to the other existing lignite units, the European Commission approved on 7 July 2014 the second, modified Transitional National Plan (TNP)<sup>33</sup> developed in line with article 32 of the 2010/75/EU Directive, while on 20.8.2015 the TNP was transposed into national legislation<sup>34</sup>. The plan includes 8 PPC lignite units (the 5 units of TPS Agios Dimitrios, Meliti I, Megalopolis III and Megalopolis IV), which in essence are given a deadline extension in order to comply with the new and stricter emission limit values (ELV) for nitrogen oxides, sulphur oxides and dust.

The Greek TNP includes a timetable for reducing current emissions to levels that comply with the 2010/75/EU Directive, along with a timetable of retrofits on the aforementioned 8 lignite units in order to reach a gradual compliance with the emissions limit values of the new EU Directive by June 2020. It should be noted that Greece is already behind schedule in the retrofits it has agreed with the European Commission, as many of them, especially wet flue gas desulfurization, are particularly costly in a time when the PPC is facing a constant and severe lack of liquidity. One should also bear in mind that the remaining 6 lignite units (2 units in Amyntaio and 4 in Kardias) will be granted another exception starting 2016, the so-called “limited life time derogation” of article 33 of the Industrial Emissions Directive, which essentially allows them to prolong their operation until 2023 (at the latest), provided that they will operate for less hours<sup>35</sup>. Finally, it is noted that the first Greek TNP approved by the European Commission<sup>36</sup> covers a total of 10 lignite units, including units III and IV of the Kardias TPS. Considering however the high retrofit costs for these 2 units, PPC opted for

<sup>30</sup> MEECC. (7.11.2011). Decision: Environmental Terms Approval for the operation of the Ptolemaida Thermal Power Station (TPS) of PPC S.A. in the Kozani prefecture. Page 43 (ΑΔΑ: 457Β0-ΑΟΙ)

<sup>31</sup> GENOP-PPC (13.7.2015). Speech of the GENOP/PPC president at the general assembly of the PPC S.A. stakeholders - in written. <http://goo.gl/Tbgz88>

<sup>32</sup> TCG W. Macedonia. (31.7.2015). TCG/TWM intervention regarding the Ptolemaida district heating. <http://goo.gl/uOaWPP>

<sup>33</sup> European Commission. (7.7.2014). Commission Decision on the notification by the Hellenic Republic of a modified transitional national plan referred to in Article 32 of Directive 2010/75/EU on industrial emissions. C(2014) 4533.

<sup>34</sup> Joint Ministerial Decision 34062/957/E103. (20.8.2015). Approval of the Transitional National Emission Reduction Plan (TNERP), according to article 28 of the 36060/1155/2013 joint ministerial decision “Definition of the regulatory framework, measures and procedures for an integrated prevention and control of environmental pollution as a result of industrial activities, in line with the 2010/75/EU Directive clauses “regarding industrial emissions (integrated pollution prevention and control)” of the European Parliament and Council on 24th November 2010” (B' 1450), as has come into force. Amendment of the 36060/1155/2013 joint ministerial decree (B' 1450)”. (B'1793)

<sup>35</sup> For more information on the state of the existing lignite units in Greece today, please visit the relevant section in WWF Greece's website at: <http://wwf.gr/sustainable-economy/clean-energy/lignite/lignite-today>

<sup>36</sup> Commission Decision C(2013) 8133 of 26 November 2013 on the notification by the Hellenic Republic of a transitional national plan referred to in Article 32 of Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions. (Official Journal of the European Union L 317 of 28.11.2013, p. 35-37)

limiting their operational hours rather than including them in the lignite “fleet” that is expected to operate beyond 2023 - one that will require major retrofits and is now limited to the 8 units of the latest TNP. Finally, it is worth noting that, as of today, all eight units (Ag. Dimitrios TPS, Militi TPS, Megalopolis IV TPS) are operating without an environmental permit and an environmental impact assessment.

During this reporting period, the judicial dispute between the PPC and the European Commission regarding the PPC’s exclusive access rights to lignite reserves unfolded. On 17 July 2014, the Court of Justice of the European Union decided in favour of the appeal that had been brought on by the European Commission<sup>37</sup> against the initial verdict of the General Court of the European Union (T-421/09, EU:T:2012:450), according to which the latter had revoked the decision of the Commission that ruled illegal the exclusive right of PPC to search and exploit lignite reserves in Greece. The Court of Justice of the EU, by reference to established case law, specified that in order to implement the EU law provisions under dispute, it is required (but is also sufficient) for a member state to adopt a measure that grants exclusive rights to a public company, in a way that creates inequality of opportunity between businesses and can therefore lead to the company abusing its prominent position. In other words, it pointed out that regardless of whether abusive behaviour is actually taking place, the crucial point is whether these rights as such can create unfair competition in the market.

In this respect, and in order to comply with the European Court of Justice, the former government issued a ministerial decree<sup>38</sup> for leasing to “Aktor S.A.” the right to investigate and exploit public lignite reserves in the area of Vevi (Florina prefecture). However, the decision was put on hold due to the opposition of the new government to handing over reserves to private undertakings.

*Oil and gas:* On 18 September 2014, the Hellenic Parliament approved the first three concession contracts related to exploring and exploiting hydrocarbons in the Katakolo<sup>39</sup> and in the Patras Gulf (West)<sup>40</sup> marine areas, and in a terrestrial area in the region of Ioannina<sup>41</sup>, while the Minister for Productive Reconstruction, Environment and Energy also announced the establishment of the assembly of the Hellenic Hydrocarbons Management Company (HHMC) S.A. Board, whose president and vice-president had been appointed 10 months earlier. These three concession contracts had been signed by the Greek government and the three consortia on 14 May 2014 as part of an “open door” competition<sup>42</sup>.

On 5 August 2014, the procedure for the exploration and drilling concessions in 20 marine areas in the Ionian Sea, South Peloponnese and South Crete was initiated<sup>43</sup>. Due to a dramatic drop in oil prices and the deterioration in Greece’s investment climate, the interest of oil companies in these areas was limited, leading the ministry to extend the deadline of the competition until July 2015<sup>44</sup>, without however much success, as by the deadline there were offers placed for only 3 out of 20 areas<sup>45</sup>. The outcome of the competition for terrestrial blocks in Arta-Preveza, Aitolokarnania and Northwest Peloponnese was similar, as its conclusion saw only two bids placed by Greek companies<sup>46</sup>. Indicative of the deterioration in the climate surrounding hydrocarbon exploration and exploitation

<sup>37</sup> Judgment of the Court (Third Chamber) 17 July 2014, European Commission v Federal Republic of Germany, C-525/12, “Appeal — Competition — Articles 82 EC and 86(1) EC — Maintenance of preferential rights granted by the Hellenic Republic in favour of a public undertaking for the exploration and exploitation of lignite deposits — Infringement — Decision — Incompatibility with EU law — Subsequent decision — Establishment of specific measures — Solution to the anti-competitive effects of the infringement — Action for annulment” Retrieved from: <http://goo.gl/cIRw0t>

<sup>38</sup> Ministerial Decree 22.10.2014. “Leasing of the right to investigate and exploit public lignite reserves in the area of Vevi, Florina, to ‘Aktor S.A.’ company” (ΑΔΑ: 6ΗΥ20-Ο7Φ)

<sup>39</sup> Law 4298/2014 “Ratification of the Leasing Agreement between the Hellenic Republic and the ENERGEAN OIL & GAS and TRAJAN OIL AND GAS LIMITED companies regarding the concession of the hydrocarbon exploration and exploitation rights in the KATAKOLO sea area” (Α’ 220 / 03.10.2014)

<sup>40</sup> Law 4299/2014 “Ratification of the Leasing Agreement between the Hellenic Republic and HELLENIC PETROLEUM S.A., Edison International S.p.A. and Petroceltic Resources plc regarding the concession of the hydrocarbon exploration and exploitation rights in the GULF OF PATRAS (West) sea area” (Α’ 221 / 03.10.2014)

<sup>41</sup> Law 4300/2014 “Ratification of the Leasing Agreement between the Hellenic Republic and ENERGEAN OIL & GAS and PETRA PETROLEUM INC. regarding the concession of the hydrocarbon exploration and exploitation rights in the Ioannina region” (Α’ 222 / 03.10.2014)

<sup>42</sup> Ministry of Reconstruction of Production, Environment and Energy. (2014, 14 May). Signing Ceremony for the Agreements regarding hydrocarbon exploration and exploitation in Katakolo, Ioannina, Patras Gulf, as part of the “open door” competition. [http://ypeka.gr/Default.aspx?tabid=389&snl\[524\]=3112&language=el-GR](http://ypeka.gr/Default.aspx?tabid=389&snl[524]=3112&language=el-GR)

<sup>43</sup> Ministerial Decree 31.7.2014. International Competition Announcement for the concession of the hydrocarbon exploration and exploitation rights in twenty (20) sea areas in Western Greece (Ionian Sea) and south of Crete. <http://www.ypeka.gr/LinkClick.aspx?fileticket=vci9tS86Eck%3d&tabid=785&language=el-GR>

<sup>44</sup> MEECC. (30.3.2015). Two-month extension to the competition for the concession of the hydrocarbon exploration and exploitation rights in 20 sea areas. [http://ypeka.gr/Default.aspx?tabid=389&snl\[524\]=3597&language=el-GR](http://ypeka.gr/Default.aspx?tabid=389&snl[524]=3597&language=el-GR)

<sup>45</sup> Liaggou, H. (15.7.2015). Three bids for the oil reserves in the Ionian Sea and Crete. Kathimerini. <http://goo.gl/Wuhl0Z>

<sup>46</sup> Floudopoulos, H. (6.2.2015). ELPE and Energean bids for Western Greece oil. Capital.gr. <http://www.capital.gr/story/2222902>



in Greece is the fact that the Italian company ENEL, which had submitted the request that led to the competition announcement in May 2014<sup>47</sup> for conceding the rights to explore and exploit hydrocarbons in these areas, withdrew its interest before the bidding process had even been completed. Finally, it was announced that the extraction of the confirmed oil reserves in the gulf of Kavala, which amount to approximately 30 million barrels<sup>48</sup>, will be carried out using a new auger.

The political will of both the current and the former governments regarding hydrocarbon exploration and exploitation was not accompanied by the same eagerness for protecting the environment from the dangers arising from hydrocarbon extraction. As a result, Greece missed the 19th July 2015 deadline for transposing the 2013/30/EU Directive on the safety of offshore oil and gas operations in its national legislation<sup>49</sup>. Besides, a working group had been formed for this purpose in October 2013<sup>50</sup>, which was supposed to have completed its mission by September 2014<sup>51</sup>. Given the fact that in the case of Greece there two contracts approving offshore operations have already been signed, without the directive having yet been transposed into Greek law, one can easily question whether the qualifying companies are in a position to economically withstand the environmental restoration costs that a possible accident would induce, based on the content of article 4 of the new directive.

Apart from their sustained efforts to exploit national hydrocarbon reserves, both Greek governments that were in power during the reporting period focused on promoting the construction of natural gas pipelines. On 12 September 2014, a Ministerial Decree approved the environmental terms for the Trans Adriatic Pipeline (TAP)<sup>52</sup>, designed to transport natural gas from Azerbaijan to Europe (Italy) via Turkey, Greece and Albania, with a capacity of 10 billion cubic meters per annum, which has the potential to double in the future.

Former environment minister Panagiotis Lafazanis aimed particularly at reaching an agreement on constructing the South European pipeline (Turkish-Greek stream), which will transfer natural gas from Russia to Europe via Turkey. In the same time, he had repeatedly stated his support for the the East Med pipeline, which will transfer natural gas from the Eastern Mediterranean<sup>53</sup> to Europe. The persistence of the former minister and the new government on constructing the Turkish-Greek Stream coincides with a heated period in EU-Russia relations. In fact, the EU is examining the extent to which Gazprom practices are opposed to EU monopoly policies<sup>54</sup>. It is also making a comprehensive effort to reduce its dependence on Russian natural gas imports and to diversify the sources it uses to meet natural gas demands.

Renewable energy: The development of Renewable Energy Sources (RES) in Greece was rather stagnant during the reference period of the report. Between July 2014 - July 2015, only 151 MW of wind energy and 13 MW of PV stations were installed<sup>55,56</sup>, including rooftop PVs, as a result of the unstable investment climate and the policies followed against increasing the RES share in the energy mix, particularly in the past.

However, the ministerial decree on self-consumption and net metering that was signed only a few days prior to the elections was a bright exception and a sign of hope for a new era in the development of PVs in Greece<sup>57</sup>. The scheme offers citizens the opportunity to install small PV systems in their houses and use them to produce most of the energy they consume, slashing down the electricity bills

<sup>47</sup> MEECC. (21.5.2014). EECC Minister accepts the ENEL request for terrestrial areas in Arta-Preveza, Aitolokarmania and NW Peloponnese [http://www.ypeka.gr/Default.aspx?tabid=785&snf\[524\]=3118&language=el-GR](http://www.ypeka.gr/Default.aspx?tabid=785&snf[524]=3118&language=el-GR)

<sup>48</sup> Energyworld. (10.2.2015). Energean Oil & Gas: Gigantic auger in Greek seas <http://goo.gl/TS4xhb>

<sup>49</sup> Directive 2013/30/EU of The European Parliament and of the Council of 12 June 2013 on safety of offshore oil and gas operations and amending Directive 2004/35/EC (Official Journal of the European Union L178, 28.6.2013, p.66-105) <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:178:0066:0106:En:PDF>

<sup>50</sup> Establishment of a Working Group for the transposition of the 2013/30/EU Directive to national policy. <http://static.diavgeia.gov.gr/doc/%CE%92%CE%9B%CE%9B%CE%99-%CE%9F%CE%9D%CE%A8>

<sup>51</sup> Amendment of the D1/A/19276/21.10.2013 decision of the Energy and Climate Change General Secretary "Inauguration and establishment of a Working Group for the transposition of the 2013/30/EU Directive to national policy", <http://static.diavgeia.gov.gr/doc/%CE%92%CE%99%CE%99%CE%A9-%CE%98%CE%9F>

<sup>52</sup> Ministerial Decree 12.9.2014. "Approval of Environmental Terms regarding the construction and operation of the 'High Pressure Natural Gas Trans Adriatic Pipeline (TAP) & Associated Installations - Greek Part'" (ΑΔΑ: 6ΔΓ90-ΝΜ5)

<sup>53</sup> Ministry of Reconstruction of Production, Environment and Energy. (20.6.2015). PANAGIOTIS LAFAZANIS: "The Southern European pipeline is a 'Model of fair public-private collaborations and a strategic model of mutually beneficial investments'" <http://goo.gl/iU0w0b>

<sup>54</sup> European Commission. (22.4.2015). Antitrust: Commission sends Statement of Objections to Gazprom for alleged abuse of dominance on Central and Eastern European gas supply markets. [http://europa.eu/rapid/press-release\\_IP-15-4828\\_en.htm](http://europa.eu/rapid/press-release_IP-15-4828_en.htm)

<sup>55</sup> LAGIE S.A. (June 2015). RES and high-efficiency CHP. Information Bulletin. <http://goo.gl/j7Axmm>

<sup>56</sup> HEDNO S.A. (June 2015). Information Bulletin on Production in Non-Interconnected Islands for June 2015 <http://goo.gl/DNxdA8>

<sup>57</sup> Ministry of Environment, Energy and Climate Change. (30.12.2014). Decision on "Installing self-generators RES units with net metering, by way of implementing article 14A of law 3468/2006". Α/Π ΑΠΕΗΛ/Α/Φ1/οικ.24461. <http://goo.gl/K8ucL5>

they are required to pay today. Net metering and the "rooftop PV" scheme - which is based on a Feed-in-Tariff (FiT) - have 2 main differences.

While the FiT scheme compensates self-generators for the energy they feed into the grid, and hence encourages them to install the highest RES capacity possible, net metering is based on a completely different philosophy: since it offers zero compensation for the energy surplus fed into the grid, it aims at covering as much of the producers' needs as possible and not to maximise the energy they feed into the grid. Therefore, net metering leads to smaller sized PV systems compared to the FiT scheme. The second major difference has to do with the fact that net metering does not place a burden on LAGIE's RES fund, as was the case with the "rooftop PV" scheme.

Prior to the decision there was a consultation on the draft ministerial decree submitted by the Hellenic Electricity Distribution Network Operator S.A. (HEDNO) to the Regulatory Authority of Energy<sup>58</sup>. WWF Greece made detailed recommendations as part of the consultation<sup>59</sup>, emphasizing the need for the scheme to be flexible in its implementation and rational regarding the billing of self-generators for services of general interest and for the renewable power levy, by means of it being calculated based only on the energy drawn from the grid and using annual offsetting. The decree that was finally signed by the Minister was improved, compared to HEDNO's draft plan, as some of the recommendations were ultimately taken into account.

Summarizing the content of the MD, it should be highlighted that the energy offset is annual and there is no compensation offered to self-generators for PV production surplus. In addition, and against the recommendations made during the consultation, self-generators will need to pay SGI duties to the power supplier based on the total energy they consume, including that produced by PVs. Regarding the renewable energy levy, the initial MD plan brought to consultation made provisions that were similar to those of SGI duties. In light, however, of the criticism that followed, and through an amendment that was voted as part of the new forest law 4315/2014, it was decided that self-generators should pay RES levy only for the power that they draw from the grid. This arrangement does not cancel the RES levy entirely, but rather limits it to the part of PV generated energy that is not consumed simultaneously. Network transport and distribution charges for the self-generator are calculated in a similar way. On 8 May 2015, and based on the current Ministerial Decree<sup>60</sup>, HEDNO started accepting applications for new connections, which exceeded 1,000 within the first 45 days<sup>61</sup> following the announcement.

WWF Greece's calculations show that the potential for application of net metering in Greece is exceptional and will offer important benefits to consumers<sup>18</sup>. To give an example, buying and installing a PV system has a payback of less than 10 years (assuming a 9MWh annual consumption in the Attiki prefecture) which means that for the remaining approx. 15 years in the system's lifespan, any energy generated will be free of cost.

A few days prior to the elections and following huge delays, another ministerial decision was regarding the distribution of household charges to 272 villages where wind farms and small hydro units have been installed; the fees add up to 1% of the gross income generated from power sales<sup>62</sup>.

Particularly important for reducing oil dependency and developing RES in the islands is the agreement signed on 10 September 2014 between the IPTO and the private undertakings involved with carrying out the first phase of the works related to interconnecting part of Cyclades<sup>63</sup> with mainland Greece. The project was initially budgeted at €240 million and is expected to connect Lavrio to Syros, Tinos, Mykonos and Paros; it is split up into 4 sub-projects and is scheduled to be completed within 22 months from the date of commencement.

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<sup>58</sup> RAE. (31.7.2014). RAE National Consultation on the implementation framework of article 14A of law 3468/2006, regarding RES self-generation with net metering <http://goo.gl/QXxz6C>

<sup>59</sup> WWF Greece. (27.8.2014). WWF Greece recommendations on the Ministerial Decree regarding net metering. [http://www.wwf.gr/images/pdfs/WWF\\_net\\_metering\\_.pdf](http://www.wwf.gr/images/pdfs/WWF_net_metering_.pdf)

<sup>60</sup> HEDNO S.A. (27.3.2015). Admission of applications for the connection of self-generating PV systems with net metering to the low voltage network. <http://goo.gl/nv58M6>

<sup>61</sup> Econews.gr. (26.6.2015). Photovoltaics: news on net metering applications. <http://goo.gl/kpScLH>

<sup>62</sup> Ministry of Environment, Energy and Climate Change. (5 January 2015). Household charges will be distributed to 272 villages with Wind Parks. <http://goo.gl/rZK7pE>

<sup>63</sup> Independent Power Transmission Operator. 2014 , 10 September). Agreements signed regarding the power interconnection of the Cyclades to the mainland network. <http://goo.gl/alqbO6>

Given that the additional costs for electricity generation in the islands are distributed to all consumers in Greece, and based on RAE's annual calculations on these charges for 2012 and 2013<sup>64</sup>, the interconnection of this part of Cyclades is expected to reduce PPC utility bill by approximately €65 million annually.

Energy efficiency: Pushing forward energy saving has by no means been a priority for Greek governments during the reference period of the report. Particularly alarming was a related statement by RPEE Minister Panagiotis Lafazanis during the EU Energy Council held in Riga: *"Improving energy efficiency offers nothing to citizens and households that have no energy resources, and perhaps even to weak economies that are under the pressure of stagnancy and economic recession"*<sup>65</sup>. WWF Greece felt it was necessary to respond to this misperception expressed by the Minister, by pointing out that adopting energy saving policies can offer huge opportunities for the recovery of the national economy<sup>66</sup>.

Indicative of the low importance that Greek governments have given to energy efficiency is the delay in the transposition of the 2012/27/EU Energy Efficiency Directive into national legislation. The former government brought a bill to public consultation<sup>67</sup>, which was not however submitted to the Parliament for vote before to the 25<sup>th</sup> January 2015 elections. As a result, the new government prepared a new bill of its own, but waited for 9 months before bringing it to consultation<sup>68</sup>. In the meantime, in February 2015, the European Commission released a reasoned opinion<sup>69</sup> - that was pending since June 2014 - to Greece and Portugal regarding the delays in transposing the 2012/27/EC Directive into national legislation.

At the same time, a study by the Buildings Performance Institute of Europe (BPIE) underlined that the Greek government had delayed announcing an overall strategy on upgrading the building stock for at least 6 months<sup>70</sup>, while a similar delay was noted in making public the measures included in article 5 of the Directive<sup>71</sup>.

According to the new draft bill, each April, Greece is required to release a report on its progress towards achieving the energy savings target. The new draft bill does not include an older article, according to which the requirement for upgrading the building stock could be extended to include buildings beyond central public administration, through a Ministerial Decree. According to the Directive, the upgrade of public buildings up to 500m<sup>2</sup> should have started by 1 January 2014, a deadline that Greece missed. In addition, the directive requires enlisting the buildings that require an upgrade, along with their energy performance. The buildings were enlisted, but no energy performance data was provided.

Electricity market: This reporting period finds the electricity market largely disrupted, not only due to its long-standing flaws, but also due to the pending issues brought on during the negotiations for the new macroeconomic adjustment programme for Greece.

On 30 December 2014, the Regulatory Authority for Energy (RAE) proposed hikes in the levy on renewables covering all customer categories, in order to rebalance the LAGIE renewables fund<sup>72</sup>. These increases were approved three months later, in March 2015, and are presented in the table below, along with the previous levels of the RES levy:

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<sup>64</sup> RAE. (14.7.2014). Annual calculation of Public Utilities (PU) costs for 2012 and 2013.

[http://www.rae.gr/site/categories\\_new/about\\_rae/factsheets/2014/major/14072014.csp](http://www.rae.gr/site/categories_new/about_rae/factsheets/2014/major/14072014.csp)

<sup>65</sup> Ministry of Reconstruction of Production, Environment and Energy. (15.4.2015). The statement of energy minister Panagiotis Lafazanis during the Informal EU Energy Ministers Council held in Riga, Latvia regarding Energy Efficiency <http://goo.gl/e6yzLO>

<sup>66</sup> Prodromou, M. (2015, 8 May). Blackout in energy saving. Capital.gr. <http://www.capital.gr/story/2299993>

<sup>67</sup> Ministry of Environment, Energy and Climate Change. (2014, 16 September). Public Consultation for incorporating the Energy Efficiency Directive into Greek legislation <http://www.opengov.gr/minenv/?p=6288>

<sup>68</sup> Ministry of Environment, Energy and Climate Change. (2014, 16 June). Public Consultation for the transposition of the Energy Efficiency Directive into Greek law.

<http://www.opengov.gr/minenv/?p=6692>

<sup>69</sup> European Commission. (2015, 26 February). February infringements package: main decisions. [http://europa.eu/rapid/press-release\\_MEMO-15-4489\\_en.htm](http://europa.eu/rapid/press-release_MEMO-15-4489_en.htm)

<sup>70</sup> BPIE. (2014, November). Renovation strategies of selected EU countries: A status report on compliance with article 4 of the energy efficiency directive. <http://goo.gl/NmxBb4>

<sup>71</sup> BPIE. (2014, June). Setting the 3% target for public buildings renovation. <http://goo.gl/YwJQSa>

<sup>72</sup> RAE. 772/2014 (2014, 30 December). "Related to the coefficient numerical values of the distribution methodology of the Special Fee of article 143 par.2 con. C of l. 4001/2011, as is currently applied, for the 2015 calendar year" (ΑΔΑ: 6Ω0ΥΙΔΞ-ΒΑΣ)

Customer Category	t charge (€/MWh)	charge - RAE (€/MWh)	% Difference
High Voltage (HV)	2.23	2.94	31.8
Medium Voltage, consumption >13 GWh (MV)	2.31	3.04	31.6
Medium Voltage, consumption <13 GWh (MV)	12.77	12.30	-3.7
Medium Voltage Agricultural use (MV)	10.83	12.30	13.6
Low Voltage Agricultural use (LV)	11.39	12.94	13.6
Low Voltage Household use (LV)	26.30	27.46	4.4
Low Voltage Other uses (LV)	30.89	31.30	1.3

The largest increases (almost 32%) are noted in the energy-intensive industry, in high and medium voltages, while the increase in the agricultural sector reaches 13.6%. The levy increase in household consumption is much smaller (4.4%). On 3 April 2015, Panagiotis Lafazanis (Minister for the Reconstruction of Production, Environment and Energy until 20 July), invoked the protection of households against RES levy increases and cancelled all new charges: the decision was inserted as an amendment to the bill "Arrangement of issues related to the Public Service Broadcaster, Greek Radio Television S.A. and Amendment of article 48 of law 2190/1920"<sup>73</sup>.

The increase in the renewables levy essentially supports the energy-intensive industries through compensating for their CO<sub>2</sub> costs. In practice, this decision transforms the "polluter pays" principle - which underpins European environmental law - into a one-of-a-kind "the polluter gets paid" principle. On 9 December 2014, the Greek government decided to implement this regulation, and hence reserved a part of public income deriving from the auction of CO<sub>2</sub> emission allowances in order to support the energy-intensive industry; the total sum is estimated at approximately €20 million annually, for the time period between 2013-2020<sup>74</sup>. Given the fact that the sum received from the auction of CO<sub>2</sub> emission allowances is used exclusively to support the RESF (at least until the end of 2015), offsetting CO<sub>2</sub> costs for energy-intensive businesses increased the RESF deficit. To deal with the latter, RAE tried to increase the RES levy, however its plan was revoked by the EECC Minister. As a result, and if no other measures are taken, the LAGIE RES Fund, which is used to compensate RES producers, will remain in deficit.

Apart from rebalancing CO<sub>2</sub> costs, both Greek governments aimed at supporting the energy-intensive industry by implementing the "interruptibility" contracts measure. In essence, the measure offers the ability to the Independent Power Transmission Operator (IPTO) to provide compensation in exchange for limiting or cutting power supply to heavy power consumers, when it finds it necessary in order to avoid a blackout or a general system imbalance. Its implementation is expected to yield €60-70 million annually to Greek industries. Since Autumn 2013, the "interruptibility" contracts measure was adopted by legislation, but was never implemented due to disagreements between Greece's lending institutions. The disagreement revolves around its method of funding. Greek governments excluded the possibility of transferring the cost to consumers, as is the case in many European countries where the measure is implemented, and hence the responsibility falls on power producers, and mostly RES producers, who are unable to transfer the additional cost to consumers. The "interruptibility" contracts measure was reinstated in the final agreement of the 3rd Memorandum (see the report's special chapter on the Memorandum) as a compensatory measure for wiping out the

<sup>73</sup> Ministry of Reconstruction of Production, Environment & Energy. (2015, 3 April). Submission of the amendment revoking SDRAPÉ increases. <http://goo.gl/SYkMJn>

<sup>74</sup> Law 3304/2014 Pr. No. APEIL/ec.21906 "Support for businesses in sectors and sub-sectors that are exposed to increased danger of carbon leakage, due to EU ETS allowances costs being transferred to power prices (support for indirect emission cost), in line with the 2003/87/EU Directive as that was amended and in force by the 2009/29/EU Directive, as well as the European Commission announcement No. SWD(2012) 130 and 131 final (Guidelines on certain State aid measures in the context of Greenhouse Gas Emission Allowance Trading Scheme beyond 2012 - EU 2012/C 158/04). Procedure for the aid provision on behalf of LAGIE S.A., for the 2013-2020 period, beneficiaries, maximum support sum and method of delivering the sum." (B' 9-12-2014)



20% discount to industrial power supply, which had been approved by the PPC's General Assembly in early 2014.

The "interruptability" contracts measure is also linked to reforming the capacity credit system for conventional plants. According to proposal brought forward by RAE<sup>75</sup>, the reform of the capacity credit system that was in place till 31 December 2014, will consist in linking the compensation of conventional power plants to the ability to cut-off power supply to heavy consumers. RAE's proposal includes a drastic cut in the total amount of compensation for available power compared to previous years, down to €225 million from €567 million in 2013. This cut, if implemented, will benefit significantly PPC, which will receive 55% of the sum, and at the same time it will place an additional burden on natural gas power producers.

As was evident, however, in the proposals submitted by the Greek government to its creditors during the negotiations<sup>76</sup>, the former was aiming at even greater capacity credit cuts for 2015 (€112 million for the time period between January-October 2015). The issue is still pending, as is also the case of reinstating the Variable Cost Recovery Mechanism (VCRM), proposed by RAE<sup>77</sup>. The repeal of the measure in July 2014<sup>78</sup> was a major blow to natural gas producers, who were the ones mainly supported by the mechanism, as it provided them with €461 million in 2012 and €556 million in 2013. At this point, one should note that the share of natural gas in Greece's interconnected system energy mix dropped from 24% in 2013 to 12.5% in 2014.

Privatising the Independent Power Transmission Operator (IPTO) is yet another issue that remained unresolved. The reform had been pushed forward by the previous parliament with law 4237/2014<sup>79</sup>, according to which 66% of the PPC's shares in IPTO would be sold to a private investor, while the remaining 34% would stay with the Greek state. The issue was brought back on the table during the government's negotiations with the Institutions. Hence, the prior actions of the 12<sup>th</sup> July 2015 agreement between Greece and the Institutions include privatising IPTO or taking equivalent measures, which in all cases will require IPTO and PPC to be separated.

Finally, equally stagnant remained the privatisation of Greece's National Natural Gas System Operator (DESFA). It should be noted that on 21 December 2013, the previous government had signed an agreement between the Hellenic Republic Asset Development Fund (HRADF) and Hellenic Petroleum S.A., and the State Oil Company of Azerbaijan Republic (SOCAR) related to selling 66% of DESFA shares for €400 million. According to the agreement, 66% of the shares of DESFA would be sold to SOCAR, which corresponds to the 31% share held by the HDRAF and the 35% share held by Hellenic Petroleum S.A.<sup>80</sup>. The remaining 34% would stay with the Greek state. Considering that it would be the first time that a non-EU company would be involved in European networks, the agreement has not yet been approved by the European Commission, despite the fact that the current government is not opposed to it, as is the case with the PPC and IPTO privatisations.

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<sup>75</sup> Energypress gr. (2015, 6 February). The Ministry of Reconstruction of Production, Environment & Energy is considering changes to the "new PAR" plan. <http://goo.gl/gGnx3S>

<sup>76</sup> Greek proposal for reaching an agreement with the Institutions. (May 2015) Agreement on the economic policy, the reforms of the period 7/2015-31/3/2016 and the completion of the current program. Staff Level Agreement. <http://goo.gl/uD2UqP>

<sup>77</sup> RAE. (25.2.2015). Public Consultation on the Development of the Variable Cost Recovery Mechanism, <http://goo.gl/sNAJtn>

<sup>78</sup> RAE. 338/2013, 11.07.2013 "Amendment of provision in the Legislation for Managing the Greek Power Transport System (ΦΕΚ Β' 103/31-1-2012) and the Power Transaction Legislation" (B' 104/31-1-2012), [http://www.rae.gr/site/file/categories\\_new/about\\_rae/actions/decision/2013/2013\\_A0338?p=files&i=0](http://www.rae.gr/site/file/categories_new/about_rae/actions/decision/2013/2013_A0338?p=files&i=0)

<sup>79</sup> L. 4237/2014. "IPTO S.A. arrangements and other provisions" (A' 36/12-2-2014)

<sup>80</sup> Extracts from the speech of EECC Minister Giannis Maniatis, during the signing of the agreement on selling DESFA shares to SOCAR, [http://ypeka.gr/Default.aspx?tabid=390&snif\[524\]=2874&language=el-GR](http://ypeka.gr/Default.aspx?tabid=390&snif[524]=2874&language=el-GR)

## Acronyms

DESFA: National Natural Gas System Operator

HEDNO: Hellenic Electricity Distribution Network Operator S.A.

HHMC: Hellenic Hydrocarbons Management Company

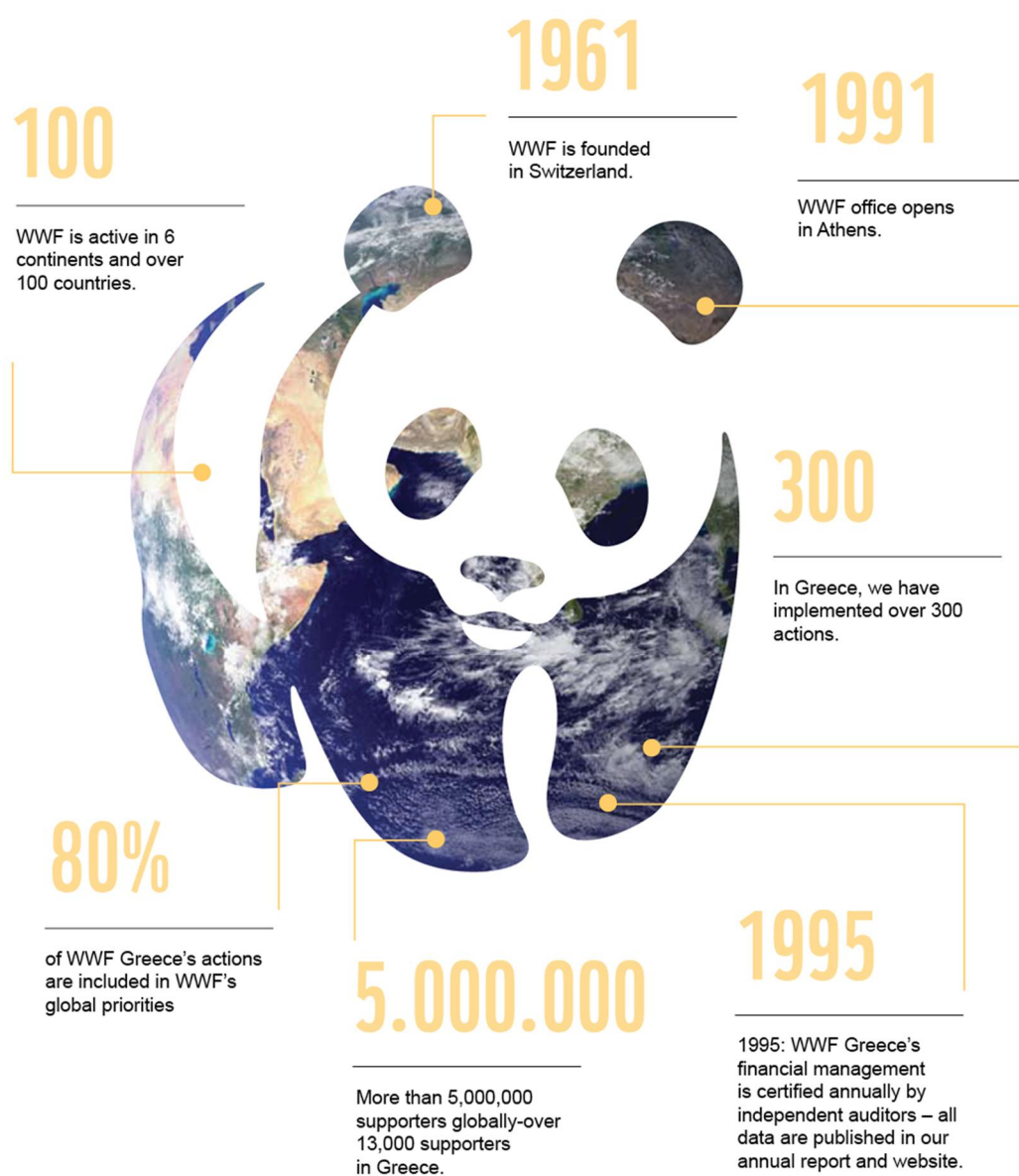
HRADF: Hellenic Republic Asset Development Fund

IPTO: Independent Power Transmission Operator

MEEC: Ministry of Environment, Energy and Climate Change (until January 2015)

MRPEE: Ministry for the Reconstruction of Production, Environment and Energy (February-August 2015)

RAE: Regulatory Authority for Energy



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