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Bioliqid-Burning Units at the Mesolonghi-Aitoliko Lagoon: Environmental Problems, Legal Irregularities, Alternatives

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Key points

In 2014, the installation of four biomass processing units, near the National Park of the Mesolonghi – Aitoliko Lagoon was approved by the regional authorities. By 2016, through continuous amendments, these units are now planned to operate with the burning of imported bioliquids. The burning of these bioliquids and the emitted pollution will have serious environmental implications on an area characterized as a national park and protected by international and European conventions. During the investment's licensing process numerous legal irregularities were conducted, as new environmental studies were not submitted after the amendments, the presence of endangered bird species was not taken into consideration, neither the high risk of potentially destructive floods, inaccurate data about other industrial activities in the area was presented and there was no consultation with the local authorities and the citizens, in violation of both national and European legislation.

This policy brief recommends:

- Relocation of the units far from the protected area of the lagoon.
- At least partial re-orientation of the plan to the initial proposal of the use of biomass.
- Better coordination between regional and local agencies during the investment licensing process.

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Introduction

Overview of the issue

The roots of the problem date back to 2014. This year, an Environmental Impact Study (EIS) was conducted, on the installation of four biomass processing units, at the area Paleokamares of Mesolonghi, near the National Park of Mesolonghi – Aitoliko Lagoon. According to the investors, the units' purpose was electricity production with the use of biomass, which is considered as a renewable form of energy by the European Union. The justification for the selection of this specific location was the fact that it is an area of high agricultural output and thus the units would have the advantage of being near the source of their necessary raw material, agricultural remnants. By December the plan had gained approval, with an Authorization of Environmental Terms (AET) of the plan being issued by the General Secretary of Decentralized Administration (D.A) of Peloponnese, Western Greece and Ionian¹

Until August 2016, through three amendments, the original plan had been completely changed. The plan for biomass processing units was fully redrawn and the four units were now to be exclusively used for the burning of bioliquids, wholly imported from other countries².

This plan was published in local media just at the beginning of 2016. An immediate reaction of the local society soon followed. A citizen's movement was created in Mesolonghi, for the sensitization of the public and the cancellation of the proposed investment, which, according to the citizens, will inflict irreparable damage to the natural environment of the lagoon and the whole ecological and economic development of the area. The citizens appealed to city councils, ministries, the Decentralized Administration and many other agencies and organized an important number of informational conferences and speeches. In February 2018, the Deputy Environment and Energy Minister, Sokratis Famellos, issued a document in which he recognized the investment's issues and called for its cancellation. But now this process seems to have "frozen" and the government agencies demonstrate full inaction regarding this serious problem.

Problems and legal issues of the plan

When objectively examining the proposed investment, one cannot but recognize a large number of irregularities in the investors' plans.

The most obvious among these is the selected location of the investment. The Mesolonghi – Aitoliko Lagoon has been declared a National Park, is under protection of the Ramsar Treaty and is part of the European network of ecological protection Natura 2000.



According to Law 4014/2011, Article 10, Paragraph 5³, as well as Directive 2011/92/EU, Article 6⁴, for every construction activity which impacts areas inside the aforementioned network, the opinion of the administrative protection agency of this specific area is required. In this case, during the investment licensing process, the opinion of the Administrative Agency of the Mesolonghi – Aitoliko Lagoon on the AET amendments was not asked.

One of the initial justifications of the investors for the installation of the four units in this specific area, was its proximity to their source of raw material, the biomass produced from local agricultural remnants. But with the amendments of the four AETs, AET nu. 3156/166926//04-12-2014, AET nu. 3157/166930/04-12-2014, AET nu.3155/166891/04-12-2014 and AET nu 2380/112272/04-12-2014 in 2015 and 2016, these units are now to be used for the burning of imported bioliquids and are thus converted from agricultural to industrial level units, without issuing a new EIS. They are thus violating Law 4014/2011, Article 6, Paragraph aa and essentially refuting their own previous justification⁵.

The environmental studies presented by the investors display many more inaccuracies. They insist that no other industrial and/or polluting activity is currently taking place in the area and that the only pollution source is the movement of vehicles on the nearby roads, totally ignoring the Salt Industry and the Pynailaiourgio, to give just a few examples. They also guarantee the creation of many new job positions. Examples of similar units in other areas refute this statement, as bioliquid burning units are nearly fully automated and the new job positions will thus be inconsequential. Also, it was not taken into consideration the fact that the location of the units, near the lagoon, is under serious threat of potentially critically destructive floods, as stated by the Technical Chamber of Aitoloakarnania. Their installation thus violates Directive 2007/60/EC⁶. No ornithological study was conducted, despite the presence of many endangered bird species in the lagoon area.

A fundamental problem of the units is the energy source they are planned to use. Biomass is considered a renewable form of energy by the EU, according to Directive 2009/28/EC, though recent studies are negating this claim. The burning of biomass and especially of bioliquids, such as those that the four units are planned to use, produce high quantities of nitrogen oxide (NOx). Some of these, like palm oil, also produce large quantities of carbon dioxide (CO2) when burned. The claim that biomass is a renewable form of energy is based on the hypothesis that the growth of plants and trees used for biomass production absorb a quantity of CO2 equal to that emitted from its burning⁷. In the case of the lagoon: 1st) the bioliquids used are imported, thus the emitted pollution is higher, as they must be transported from another country to Greece 2nd) the pollution is emitted in an area too far away from the one in which the bioliquids were originally produced 3rd) the four units are estimated to emit around 55 tons of NOx annually, which is nearly equal to the tripling



of the number of cars in the area of Mesolonghi, thus massively and negatively impacting the natural environment and 4th) there is a high possibility that the units will use palm oil, due to its low production and transportation costs, whose burning, as mentioned before, is highly polluting and will thus increase the negative environmental impact. The pollution-limiting technology is unlikely to be used in this case, as its costs are high⁸. Despite the investors' claim to the contrary, guaranteeing that only "environment-friendly" bioliquids will be used, their actions until now, the continuous amendments, inaccurate environmental studies and legal irregularities exhibit their untrustworthiness, especially when taking into consideration that the more "environment-friendly" bioliquids' cost is higher.

Last but not least, the failure to properly and timely inform the public on the details of the investment. Adequate information about the investment was available to the local public only in 2016. There was no prior consultation with the local authorities and citizens, who are obviously impacted from this investment. This was a violation of Directive 2011/92/EU (Articles 6, 9 and 11) as well as the Aarhus Convention⁹.

To conclude, this investment will harm the local natural environment and the economic and especially the tourist development of the area, for which the preservation of the lagoon's environment is of vital importance. The investment's approval is against the framework introduced by the Article 191 of the Lisbon Treaty¹⁰, which outlines the targets of the union's environmental policy, as well as the European Landscape Convention of 2000¹¹, of which Greece is member.

Recommendations

It is thus important for the investment plan to be reworked, in order to protect the natural environment as well as promote business activity in the area of Mesolonghi.

- The units should be relocated to an area in a safe distance from the National Park, so that their operations do not cause serious environmental damage.
- The functioning of the units should be, through consultations between the investors and the local authorities, at least partly re-oriented towards the burning of locally produced biomass, in conjunction with bioliquids. In this way, both the reduction of emitted pollution and the benefit of local agricultural activity will be achieved.
- The coordination between regional and local authorities should be improved, to avoid such incidents in the future. The regional authorities should have consultations with local agencies before approving such investments and the citizens should be adequately informed, which are required by both national and European legislation.



Conclusion

It is essential to combine, during the next steps, the needs for environmental protection and for economic development, as well as the concerns of all those whose interests are aligned with the investment. The taking of the appropriate decision, based on the aforementioned calculations, will possibly function as an example for the settlement of similar future situations.



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