

SOCHIAS Statement on the INNA project: an early termination

Santiago, 21st February 2025

On Thursday, February 20th, the Ministry of the Environment (MMA) released its observations on the INNA project, presented by the company AES Andes, whose Environmental Impact Study is currently in the first stage of evaluation at the SEA. The INNA project seeks to establish an industrial complex for the production of green hydrogen and ammonia in the municipality of Taltal, just a few kilometers from world-renowned astronomical centers (Paranal Observatory, and the future ELT and CTA). These industrial operations, associated with light pollution, turbulence, and suspended dust, could significantly compromise and negatively impact the development of astronomy in this area, as previously communicated by SOCHIAS, along with many voices from the Chilean and international astronomical community and civil society in Chile.

Through an extensive report published by the MMA, and signed by the Regional Secretary of the Ministry of the Environment for the Antofagasta region, the authority details each of its observations, which question the accuracy and sufficiency of certain basic foundations of the project promoted by AES Andes. Among the observations made by the MMA, the continuation of the project is contingent upon providing new data, some of which require three years of measurements on elements considered substantial, which the company has not included in its environmental impact study.

SOCHIAS believes that the MMA's observations are serious enough to warrant the early termination of this environmental evaluation process.







In particular, the three main observations from the MMA are:

• Location within areas designated for energy projects:

The company claimed that the project would be located within the so-called *Taltal Wind Reserve*. Later, the company's main justification for the proposed location was that the site is included in the *Electric Generation Development Poles (PDGE)*, areas defined by the state to promote renewable energy. However, the MMA states that the INNA project is not located within the polygons defined by the PDGE for the Antofagasta province, despite the company's claims:

"From the review of the resulting polygons, it is observed that the project under evaluation is not located within any of the polygons defined by the PDGE for the Antofagasta province." (Official Letter ORD. N° EXP CP 4005/2025, p. 1, paragraph 2)

Since the company has based its location on these strategic areas, the MMA demands that it justify the choice of site. Furthermore, it requests a detailed analysis of the alternatives considered and the criteria used for selecting the project's location. The authority additionally requests an evaluation of the possibility of relocating the project.

Compliance with light pollution regulations:

AES Andes has assured that the project complies with current light pollution regulations and that the impact on nearby observatories would be insignificant.

However, the MMA refutes these claims based on a detailed technical analysis. Specifically:

"There is a lack of relevant and essential information, a relevant receptor has not been evaluated, and based on the values presented, there would be a significant increase in sky brightness, which leads to total uncertainty about the need for mitigation, repair, and compensation measures, and whether these would be sufficient to properly address such a significant impact."

Therefore, the authority requests:

"The submission of a new, updated, and corrected study to address all aspects requested regarding the prediction and evaluation of the impact of artificial light emissions on astronomical sites."

Distance to astronomical observatories:

The company has argued that the project is located approximately 30 kilometers from the Paranal and Armazones observatories, which, according to the company, would place them outside the project's area of influence.

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The SEREMI also questions how AES Andes defined the project's area of influence, overlooking critical impacts on nearby observatories:

"The project's area of influence has been defined without considering a rigorous analysis of sky brightness at nearby astronomical sites. Critical parameters such as atmospheric refraction and light scattering based on humidity and altitude have been omitted." (p. 6, paragraph 2)

"There is a need to incorporate an analysis of the impact on the Cherenkov Telescope Array, which has been completely omitted in the evaluation, despite being only 4 km from the project." (p. 8, paragraph 1)

We reiterate our conviction that the ordered use of national territory can allow for energy production and astronomy to coexist and both contribute to the development of Chile. Given the observations made by the MMA, the INNA project, as currently presented, would be technically unfeasible and would suffer from significant inaccuracies and deficiencies, warranting the early termination of its environmental impact study.

Links:

• Report of the Regional Secretary of the Ministry of the Environment for the Antofagasta Region (Spanish)

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