

HWEA HELLENIC WIND ENERGY ASSOCIATION

The local benefits from wind farms in south Evia, Greece

July 2018

At the end of 2017, there were wind farms of total capacity 218.7 MW in south Evia island, which were constructed in the period 1998-2017. On top of that, a capacity of 28.2 MW had been constructed, but not yet put into commercial operation. These existing investments have already attributed and continue to yield significant benefits to the local community, stemming from their operation and construction.

Specifically, more than € 82 million is the total benefit of the local economy and society in the area of south Evia island through the installation and operation of wind farms in the area.

In particular, only from their operation, these wind farms attribute € 3.9 million per year locally without counting direct jobs and other indirect benefits. This amount refers to development works, sponsorships, supplies from the local market and the special tax 3% of the turnover in favor of the municipalities and the citizens.

Implementing the wind farms under construction in the area will multiply these benefits.

Local benefits from operation

The local benefits from the operation of the wind farms come from three main sources:

- 1) The amount which is attributed locally from the operation of wind farms, in a variety of ways including
 - local works local contracts for the operation of the projects
 - local supplies and services
 - compensatory projects, sponsorships, support of local sport clubs, schools, social infrastructure support, various financial payments, etc.

On average, this amount reaches € 2,200,000.00 per year.

- 2) The amount of the special tax which is deducted from the revenues of wind farms (3%) for attribution to local municipalities for the implementation of local development projects or to householders for reducing the electricity bills.
 - In 2017 this amount reached € 1,700,000.00 per year.
- 3) The **direct permanent local jobs** that they have created from their operation. These are jobs for <u>locally</u> employed workers in the operation and maintenance of wind turbines.
 - In 2017 those jobs were at least **62**.
 - For comparison reasons it is mentioned that the first modern-type private gas station of 400MW installed in Greece, created approx. 32 permanent jobs, i.e. 0.08 jobs/MW versus 0.3 local jobs/MW from wind farms in southern Evia (almost 4 times more).



That is, in total for each year, only from the existing wind farms in south Evia, they are directly attributed to the local community € 3,900,000.00 per year, without counting direct jobs and other indirect benefits.

Local benefits from construction

For the construction of these investments in all these years a significant cost has been allocated locally for local contractors, direct jobs in construction, supplies from the local market, etc.

This amount has already exceeded 44,400,000.00 euros.

Total benefit

Overall, the benefits of the local community and economy of Southern Evia from the construction and operation of existing wind farms are summarized in the following table:

Annual average (1998-2017)	4,130,000.00 euros
Total local benefit from the Southern Evia W/F	82,600,000.00 euros
Total benefit from construction	44,400,000.00 euros
Total benefit from the special tax 3%	21,700,000.00 euros
Total benefit from operation	16,500,000.00 euros
Direct permanent jobs locally	62
Total power of wind farms	218.7MW

The above amounts do not include the investments which have already been constructed and they were not completed by the end of 2017.

For example, only the operation of the wind complex 167MW in Kafireas area, still under construction, will:

- create locally 18 new permanent jobs in its operation
- attribute to the local economy at least 3,130,000.00 euros per year
- establish local added value during the construction that exceeds 45,000,000.00 euros

<u>Indicative development local projects and actions funded by wind farms in Southern</u> <u>Evia, Greece</u>

- 1) Fire truck (Renault master van, closed-type) with tank and installed fire extinguishing pump
- 2) Fire extinguishing system (tank and pump) for installation in a municipal car.
- 3) Financial aid to firefighter breeders of Taminaio and Stira municipalities during the period 2007 08, with the supply of building materials (sheets, beams, cement blocks) for the repair



- of the livestock facilities, feed supply, and financial assistance for replacement of mechanical equipment.
- 4) Implementation of emergency flood defense projects in southern Evia to protect against the consequences of the 2007 wildfires in the area. The projects included cleaning, stabilization and repairs at selected locations and lengths of approximately 10 km in the hollows, banks and bridges of the rivers: Manikiatis of Koristron municipality, Hondros and Nileas of Avlonarios municipality, watercourse Aliveriou of Tagamioni municipality and Lilantis of Vasilikos municipality
- 5) Renault Master minivan fifteen-seater
- 6) Truck for the needs of Karystos Municipality
- 7) Repair of rural hospital of Katsaronio
- 8) Prefabricated building for the establishment of a rural hospital (as well as necessary furniture and medical beds) in the community of Panagia Almiropotamos
- 9) Equipment for the rural hospital of Almiropotamos (defibrillator, cardiograph, oximeter, narthex, etc.)
- 10) Contribution in buying of a CT scanner for the General Hospital of Kimi.
- 11) Strengthen infrastructure, computers, etc. in the local schools.
 - Cementing and shaping (pergola, etc.) of the school yard of Primary School in Kalyvia (also serves students of Karystos)
- 12) Financial aid for cultural and sports clubs
- 13) Financial aid of Social Grocery in the Municipality of Karystos
- 14) Donations of diesel, concrete, ect.
- 15) Infrastructure projects (e.g. playground, stream cleaning, road rehabilitation, water supply project)
 - Cement road access to the church of Panagia in the community of Panagia
 - Construction of a pavement and paving in the community of Panagia Almiropotamos
 - Repair of the collapsed section of road Mesohorion-Limniona (construction of a retaining wall and repair of the road's deck)
 - Repair of a faucet in the Rapthei community
 - Construction of a bridge for a local road between Nea Styra and Diliso
 - Cementing of roads in Mylos and Malkounida
 - Square pavement in Paradisi
 - Two waste centers in Karystos
 - Asphalt Paving
 - Water supply for 1,5km 2km in Lala Nikasi Kalyvia
 - Electric lighting Lala Kalyvia.