



Elqui Global Energy

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TABLE 2 COMPARATIVE NOPAL WIND AND PHOTOVOLTAIC ENERGY

Item	Nopal energy	Wind power	Photovoltaic energy
Availability	Continuous 24 X 365 days	Irregular depending on the time of day. 8 hour / day	Irregular depending on the time of day. 8 hours / day
Maintenance	Low in operating condition, every two years painting. Little staff	Low, very understaffed under normal conditions	Low, very understaffed under normal conditions
Maintenance on failures	Fast, and low cost. Medium-skilled staff	Highly qualified personnel with major failures, costly and time-consuming repairs.	Highly qualified personnel with major failures, costly and time-consuming repairs.
Type of energy generated	Electric, biogas, thermal (hot water)	Electrical	Electrical
Power generation efficiency	80-90%	30% of the installed capacity on land.	10 -20% depending on cell cost
Duration of equipment and facilities	15-20 years	20 years	15 years
Environmental benefit	Generates soil, organic fertilizers. It changes the microclimate by retaining water in the soil. Extracts carbon dioxide from the environment. It allows the sale of carbon credits. Fully organic process	It does not emit carbon dioxide. Neutral effect on the environment.	It does not generate carbon dioxide. Neutral effect on the environment.
Environmental damage	Unknown	High impact on migratory routes of birds, Noisy energy production due to the effect of the blades at the rotate. Visually aggressive.	Batteries and cell construction is highly polluting.
Spare parts availability	Available in the national market immediately.	They must be imported	They must be imported depending on the importer and distributor.
Study time and project implementation	Short, 1 year	Long, 8 years minimum to study winds	Short 1 year.
Social benefit	It generates permanent jobs for planting, harvesting, and processing plants.	It generates jobs in the assembly of equipment.	It generates jobs in the assembly of equipment. Applicable on a small scale in marginal sectors.
Positive externalities	Culturally, nopal cultivation is accepted and favored by state institutions. It allows the opening of new markets by being considered a green company that cares for the environment.	Known and globally implemented technology.	Attractive and widely known technology, Widely positive image for its implementation.
Negative externalities	Few plants built in the world. Resistance of environmental groups to occupy a food for energy.	The money leaves the country to the factories of Europe mainly. Money is not invested in local human and technological resources	Batteries generate toxic pollutants. The equipment is fragile to impacts. The money is not invested in local human and technological resources.



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Installed KW cost	US1500—1800 / KWe does not include by-product income.	US2,500 / KW	US2,000 / KW
Return on investment	1 to 2 years	5-8 years	8 years