



Heliosthana 2020 Action Plan

Working group I : Future Energy Supply and Energy Saving

1. Private sector

a. Lighting

- All public, government-owned and business buildings have to switch to energy-efficient lighting by 2015 (not private households)
- NGOs like 'Friends of Helios' will conduct an awareness-raising campaign for private households to explain the advantages of switching to energy-efficient bulbs and hand out some free samples
- Street lamps will gradually be replaced to PV powered, starting with the lamps which are newly produced or replaced/repared at a rate of 5% per year
- Unemployed persons are encouraged to participate in the awareness-raising and the replacement campaigns
- Import duties on old, inefficient light bulbs are severely raised (50%)
- Retailers will be required to take back light bulbs and producers will have to recycle them. There will be a deposit of 50ct on each light bulb sold to encourage the rate of return and collection actions by NGOs or individuals

b. Domestic appliances

- Traffic-light eco-labelling of domestic appliances
- Those labelled red will have to pay an eco-tax of 10% on the selling price
- Government and NGOs to run awareness-raising campaigns for private households, e.g. by showing small advertisements on state-owned TV channels with popular characters
- The energy consumption and price of each programme, of a particular cycle e.g. of a washing machine, dishwasher or microwave should be displayed on a sticker on each appliance
- Larger appliances with a high-energy consumption have to incorporate smart meters from 2020 onwards
- Low-income families will get 0% interest rate loans from the state when they buy green-labelled appliances (Heliosthana Development Agency)
- Tax-credit/deduction of up to 100 euro from income tax when the most energy-efficient appliance on the market is bought

- All green-labelled products will have to pay only half of the normal VAT

2. Economic sector

- Government to establish advisory centres for companies to help them develop plans on how to reduce their energy consumption
- Big plants have to reduce their energy consumption by 20% by 2015, medium-sized ones by 2020
- Co-generation counts towards this 20% goal, government to sign long-term contracts for buying the co-generated heat from these installations for its public buildings and to invest in infrastructure (pipes etc)

3. Individual energy production

- Big buildings of over 1000 m² which are built within 200m from the coastline have to install seawater pumps for heating and cooling by 2020
- In 2012, each big and medium-sized industrial production plant has to have an assessment of its renewable energy production capacities and a plan to build them; by 2020, big plants have to reach 20% self-generated renewable as share of their energy use, plants generating more than 10% profit on their production have to reach this goal already by 2017
- The import duty for energy-intensive products will be raised by 50% (Heliosthana is not a WTO member)
- 5% of the energy production should be decentralised; in 2015 there will be a nationwide review to assess whether this goal has been met by the present measures, otherwise additional measures will be adopted to reach the 5% goal by 2020

4. Residential, public and corporate buildings

- EU funds for renovation of existing buildings to be tapped by NGOs (e.g. low-cost measures to improve insulation for windows, doors)
- Eco-credits combined with a 10% grant for energy-efficiency/saving measures
- All new buildings have to include PV and/or solar thermal installations from next year onwards (planning permissions are not required by the government, everybody can and must build them)
- Investments into insulation and increasing energy-efficiency and production of renewables produced by individual households receive a 10% tax deduction of these costs
- The government will renovate in each municipality a demonstration building with state-of-the art technologies
- Free advisory services provided by NGOs to private households on how to improve their energy efficiency

Working group II : Economic Performance and Special Area City

1. Economic performance of sustainable energy

- Progressive carbon tax
- Employment opportunities through promotion of RE
- Promotion of green tourism
 - Extra cost to tourists: eco tax (promotion of clean Mediterranean)

2. Renewable energy capacities

- Financing and building targets
 - Consider the potential of LFG
 - Financial mechanisms
- Photovoltaic, wind power, concentrated solar power, hydropower
- Prioritise hydropower and define the limits of your compromise.
- Maximum wind potential

	MW/h	Price	Total Investment
CSP	21000000	173	3633000000
Solar Plant	5000000	245	1225000000
Rooftop	6000000	189	1134000000
Wind	22000000	48	1056000000
Hydro	14000000	22	308000000
	68000000		7356

3. Export of renewable energies

- Tender a connection

4. Special Sector City: Urban planning with special regard to sustainability

- New urbanisation providing transport infrastructure
- Regulations on energy efficiency

5. Special Sector City: Transport

- Urban transport
 - Petrol cost reflected
 - Taxing system based on kilometres
 - Smart ticket systems
 - Re-zoning of the transportation system
- Extra-urban transport
 - Promote bus transport

Working group III : Environmental, Social and Management Aspects of the Energy Turnaround

1. Demand and supply analysis

- Mediterranean island, peak consumption in Summer, midday.
- Stable base load, lots of fossils
- Old metering systems, no awareness
- Photovoltaic for peak hours, air conditioning – SEI +EFH
- Smart metering for everybody – Energy Forum + HDA
- Storage with hydro power station – plus re-powering: EFH
- Awareness raising, e.g. efficient light bulbs, labels for efficient appliances, smart meters. CW + SEI

2. Environmental performance

- Close the 2 oldest thermal stations
- Sectoral agreement on BAT for thermal plants (EPS) + low interest rate programme
- Tax on CO₂ with simultaneous reduction in tax on profit or social charges (exemption for companies from sectors with low emissions)

3. Access to energy

- For households:
 - Electricity prices with different levels: minimum access; comfort access; luxury access
 - Insulation and solar roof support programme
 - Special support programme for social housing
- For SMEs:
 - No subsidies on electricity consumption
 - SME green loan programme
 - Advisory role for HDA: environmental plan accredited by HDA
- Large consumers:
 - No subsidies on electricity prices
 - Increased share of RE consumption since suppliers with RPS
 - Energy management programme with HDA
 - Electricity consumption will be tackled through sectoral agreement

4. Grid management

- Priority access for RE
- Support programme for back up power
- Grid managed by public company, including investments for grid upgrades
- Grid operator works in conjunction with internet, TV etc.

