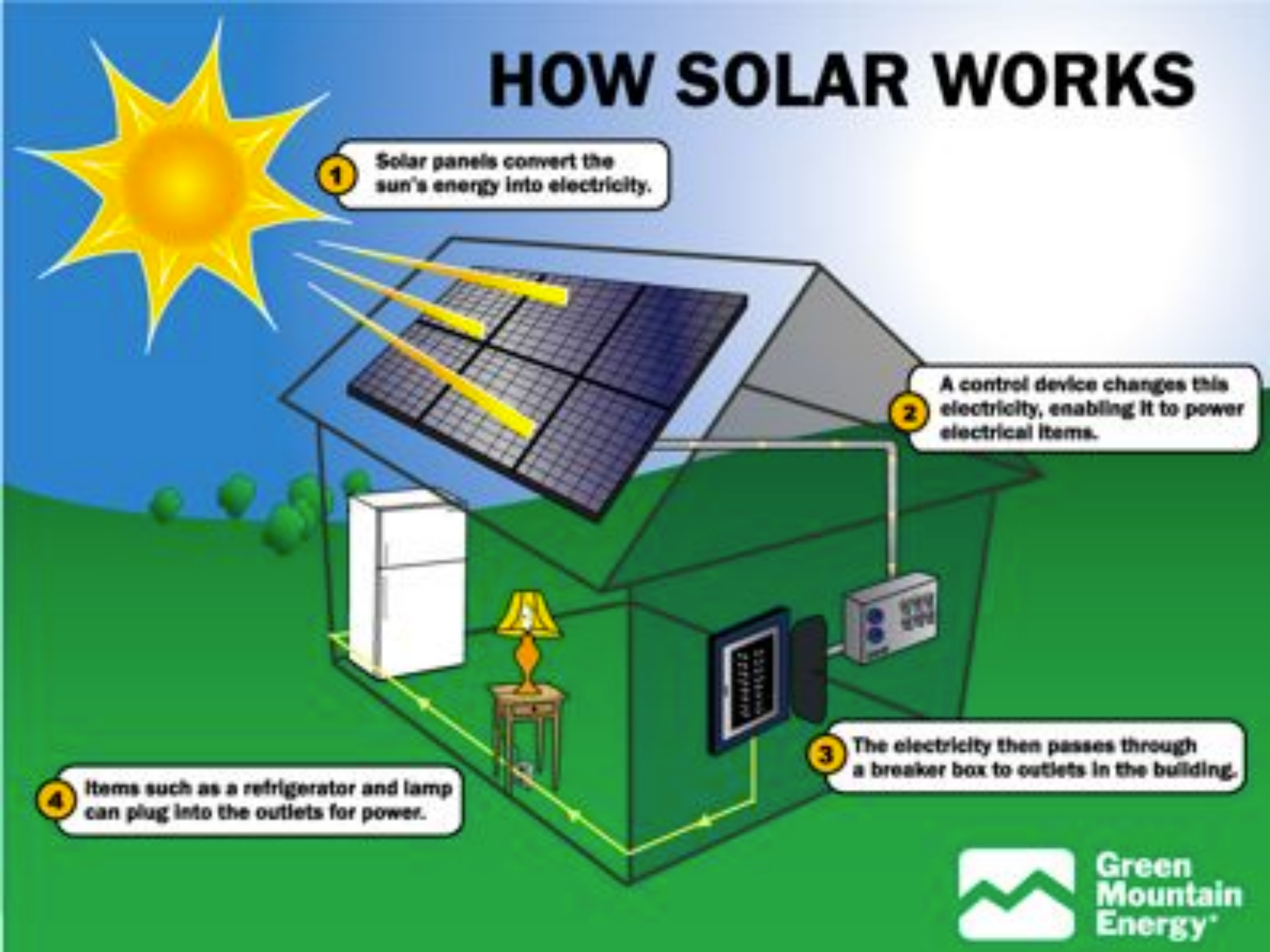
Solar Power in the EU

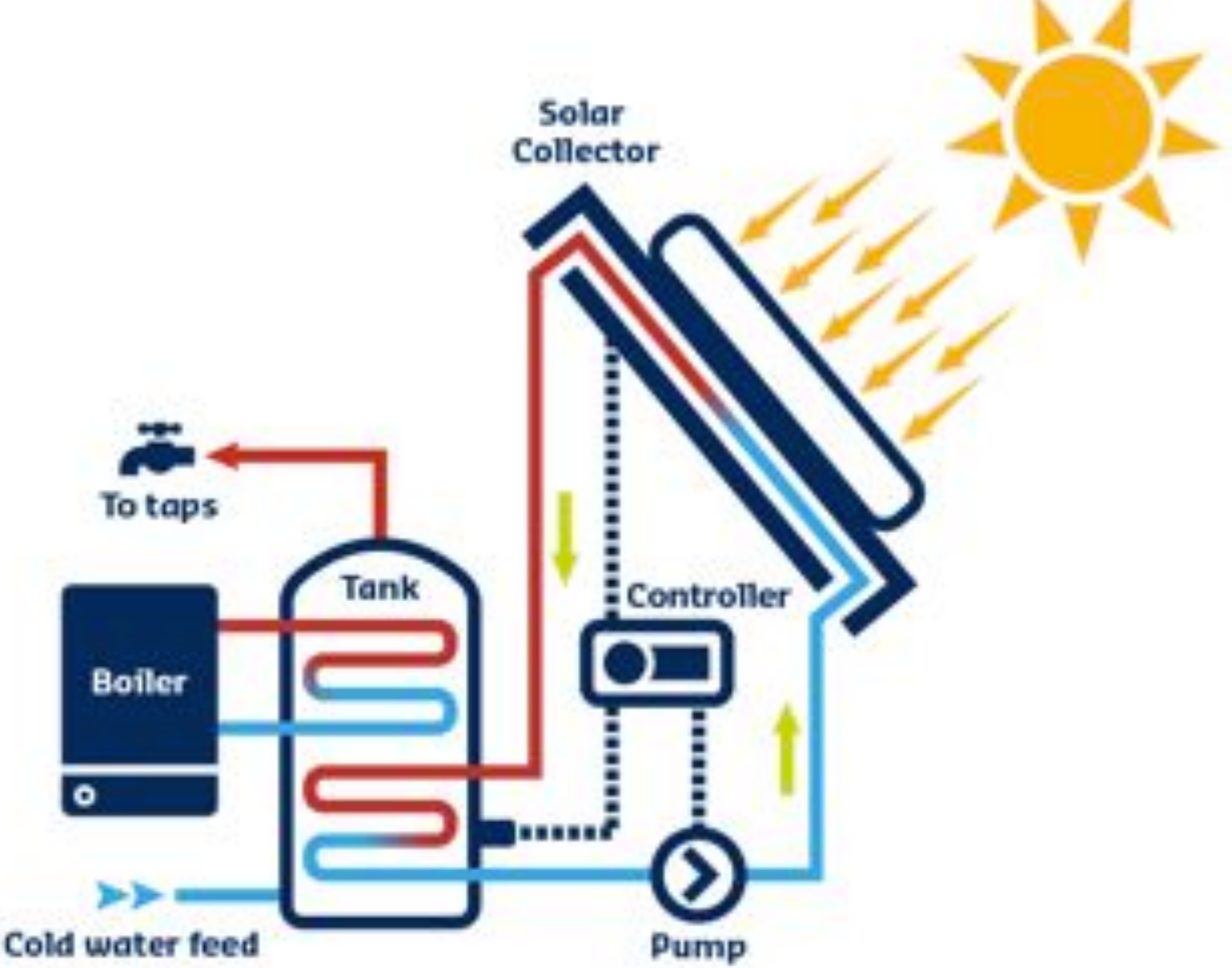
What is solar energy?

- Sustainable and renewable
- Requires little maintenance
- Silent producer of energy
- Continuous development of technology

HOW SOLAR WORKS

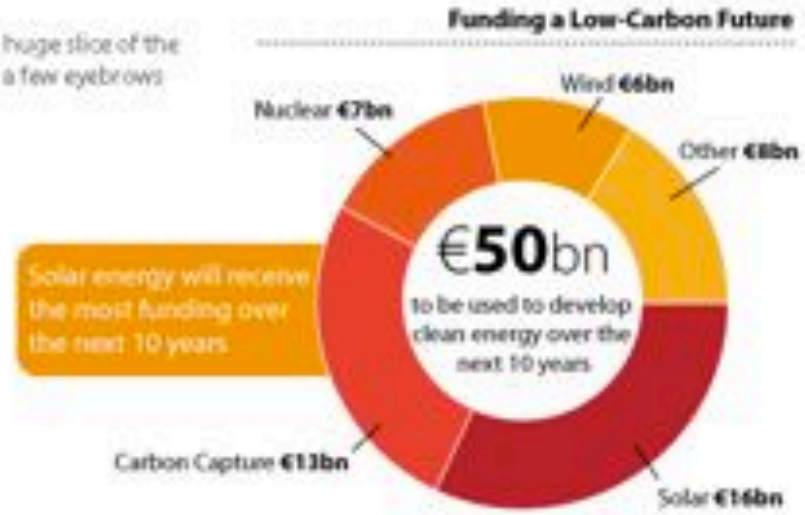


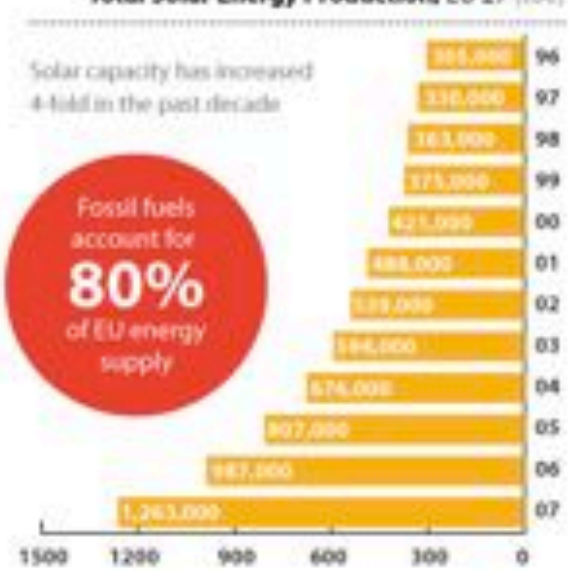
Green Mountain Energy®


Solar
Collector
To taps
Tank
Boiler
Controller
Cold water feed
Pump

Solar Power in Europe

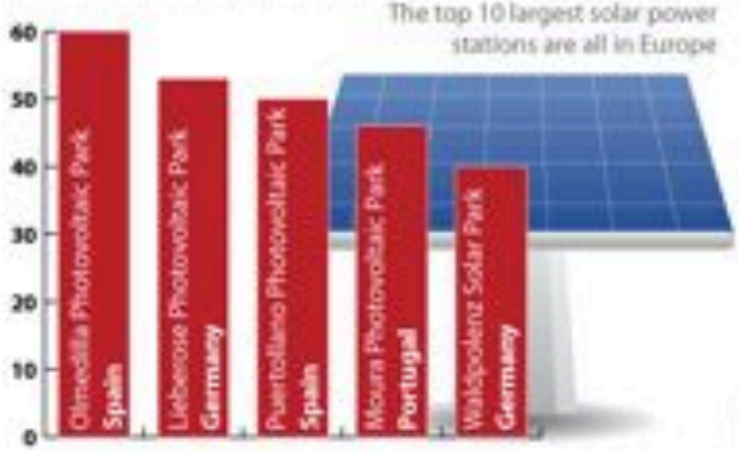
The European Commission's latest plan to reduce carbon emissions by pumping a huge slice of the 50 billion euros available for research and development into solar power, may raise a few eyebrows





World's Largest Photovoltaic Power Stations (Peak Power, MW)

The top 10 largest solar power stations are all in Europe



European Commission's Strategic Energy Technology Plan, Goals to be met by 2020

15%
of EU electricity will be generated by solar energy

20%
of EU electricity will be generated by wind energy

14%
of the EU energy mix will be sustainable bio-energy

Enough solar energy falls on the earth's surface in twenty minutes to meet our needs for a year.

Africa – EU Energy Partnership (AEEP)

- For cooperation on energy issues, particularly energy security and energy access
- For addressing rapidly changing geopolitical, economic and ecological reality with a shared vision and common approach
- For boosting Africa's efforts to increase investment in the energy sector and increase access to energy services

DESERTEC EUMENA

- 20% of power demand in Europe can be obtained by connecting African deserts to European cities
- Build a large number of concentrated solar power plants in MENA countries, and transmit electricity to Europe by means of direct-current cables
- Potential to generate renewable electricity for up to 15–16 hours per day


DESERTEC-EUMENA
Concentrating Solar Power
Hydro
Photovoltaics
Biomass
Wind
Geothermal
DESERTEC FOUNDATION
CSP collector areas for electricity
World 2005
EU-25 2005
MENA 2005
TRANS-CSP Mix EUMENA 2050

What can the EU do?

- Manufacture solar panels in the EU
  - More than 90% of Chinese production has been exported and 80% has gone to the EU
  - Invest in Greece, Spain and Poland
  - Raise import tariffs or block imports altogether
  - Impose tax incentives

Sources

- http://www.greenoughsolarfarm.com.au/solar-energy/what-solar-energy
- http://one-europe.info/infographics/infographic-sollar-power-in-europe
- http://ec.europa.eu/development/icenter/repository/africa_ue_energy_partnership_fiche03_en.pdf
- http://www.voxeu.org/article/rethinking-african-solar-power-europe
- http://www.prosun.org/en/about/fact-sheet.html