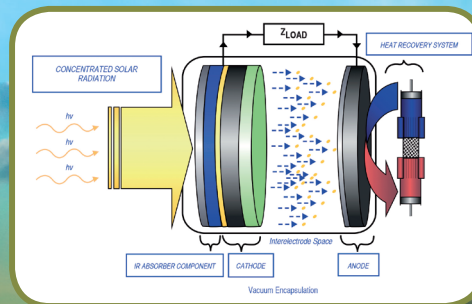


# EU IS FUNDING KEY RESEARCH FOR THE PV INDUSTRY

Europe is leading the world technological research in the area of photovoltaic technologies (PV). In terms of future emerging technologies in this area, Production method of electrical energy by enhanced thermal electron emission by the use of superior semiconductors (PROMETHEUS) project [www.prometheus-energy.eu](http://www.prometheus-energy.eu) aims to revolutionize the industry. The project expects to increase the solar to electric energy conversion efficiency to at least 45% (more than double the efficiency of the common PV systems today), thanks to the use of advanced semiconductors able to work in temperatures up to 1000°C. In terms of beyond-state-of-the-art PV systems, both on- and off-grid installations are being researched and applications range from sustainable agriculture (e.g. Zero-impact innovative technology in forest plant production (ZEPHYR) project [www.zephyr-project.eu](http://www.zephyr-project.eu)) to the built environment. Research on integration of PVs with other technologies to form the most effective technology-mix is particularly important for building retrofits, as buildings use 40% of total final energy in Europe. Enabling significant reductions of building energy demand in the area of 50% through optimal integration of technologies for energy-efficient solutions in the renovation of public buildings is being

investigated by the Retrofitting solutions and services for the enhancement of energy efficiency in public edification (RESSEEPE) project [www.resseepe-project.eu](http://www.resseepe-project.eu).

Namely such and other projects in this area, supported by the European Community framework and new Horizon 2020 programs, will ensure the leading position for Europe in the years to come.



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