

Green HiPo IPCEI Hydrogen Technology Project

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Advent's Green HiPo is a key IPCEI Hydrogen Technology Project

- IPCEI (Important Projects of Common European Interest) Hydrogen Technology is an EU initiative to achieve:
 - Europe's energy and climate targets, in line with the Paris Agreement
 - economic growth and maintaining the competitiveness of the EU industry and economy
 - the technological and energy autonomy of the EU
- **The EU is targeting a scale-up of electrolyser capacity of up to 400GW in 2030. This corresponds to 10 million tons of renewable-produced hydrogen.**
- REPowerEU (8th March, 2022) is a recent EU initiative to reduce the dependence of Europe on external energy markets and augments the IPCEI Hydrogen Technology initiative.



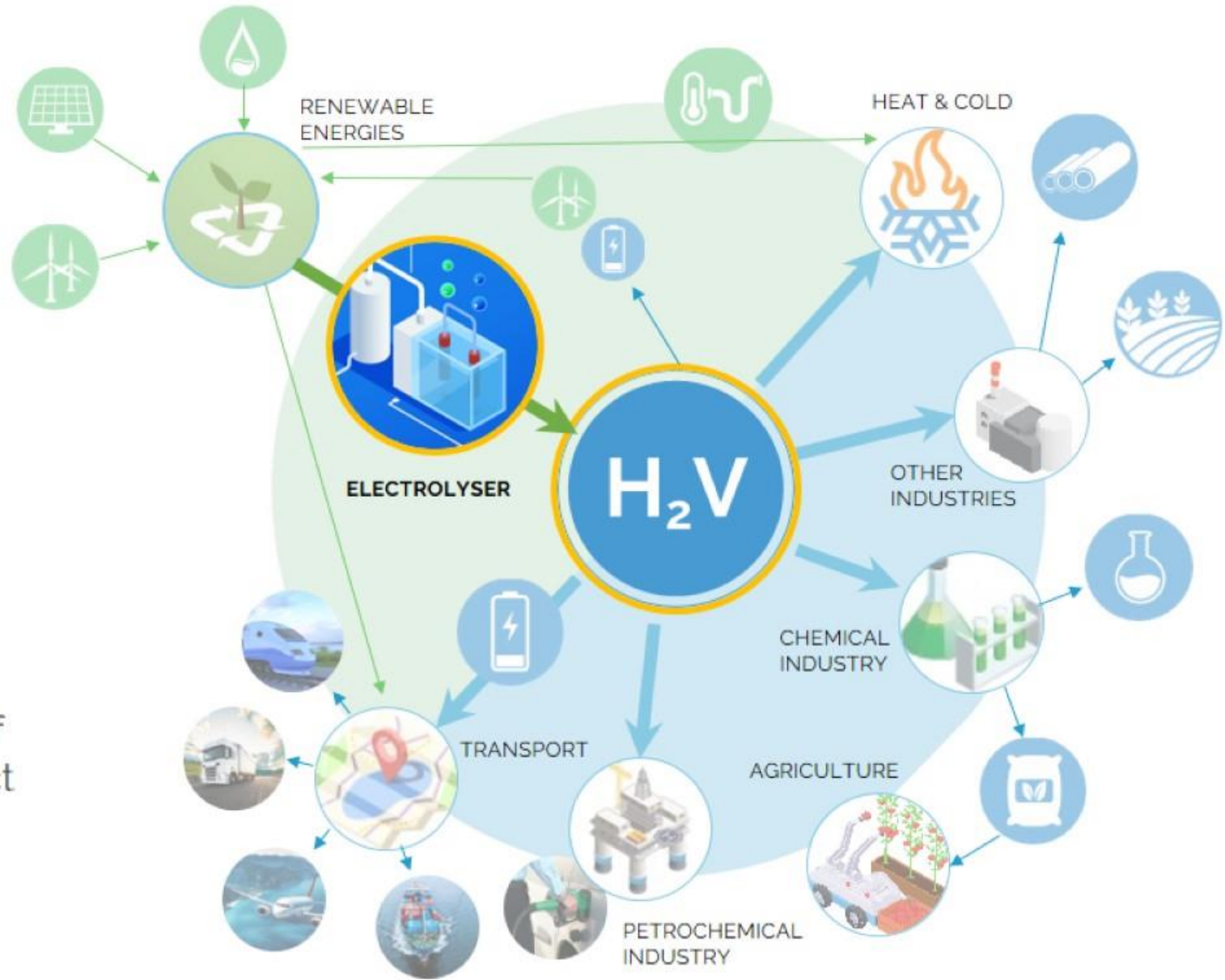
Advent Green HiPo: Electrolysers can be used for the production of green hydrogen

- Advent in collaboration with strategic partners is aiming to provide a modular and versatile solution that is suited for scale-up and serial production. **Through Green HiPo, Advent is aiming to produce electrolysers of total capacity 1.5GW over 6 years in Western Macedonia, Greece.**
- Green Hydrogen can play a major role alongside electricity generation in future low-carbon economies, with the versatility to provide mobility, power system, heat and industrial services.

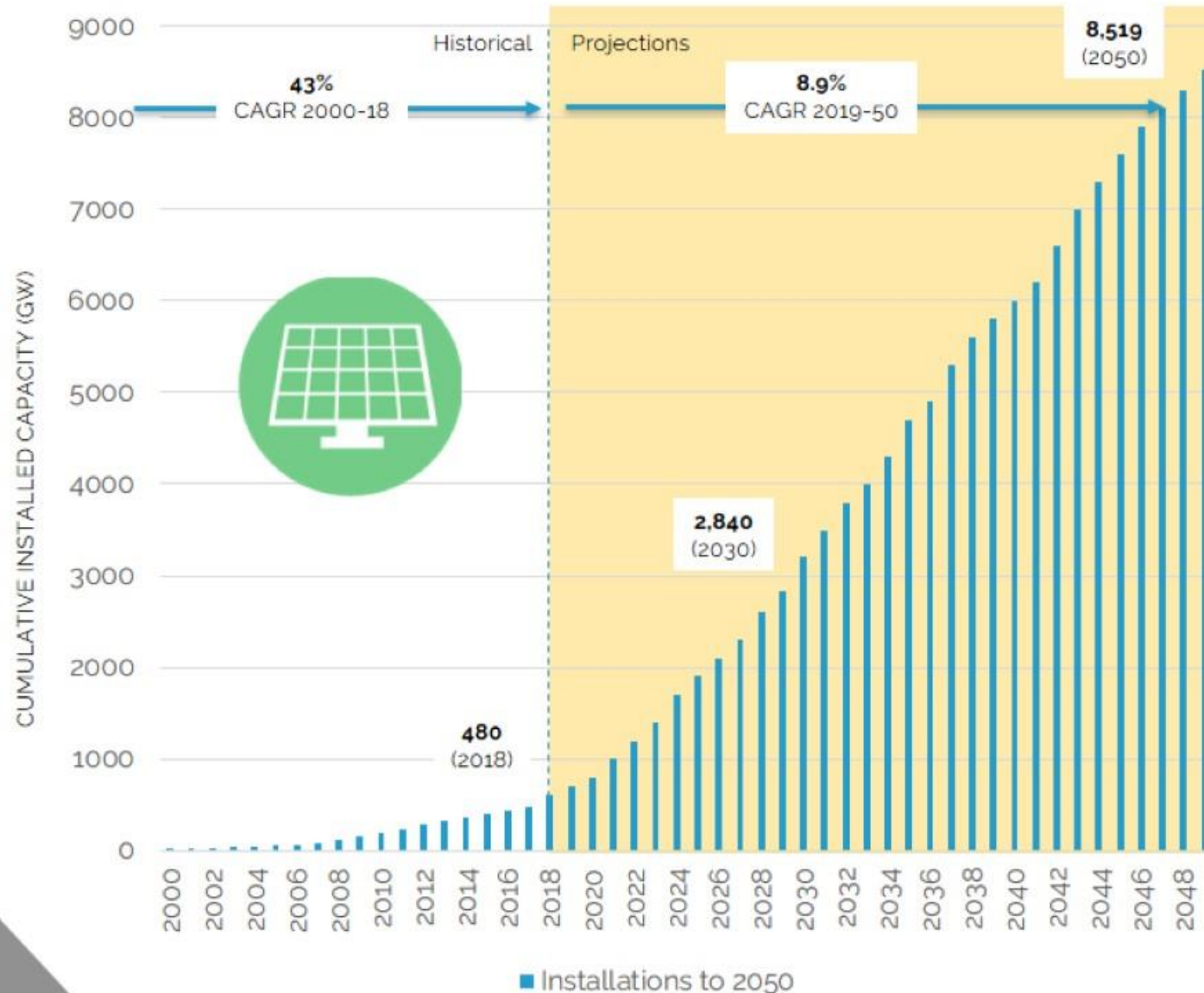


Electrolysers: Off Takers and Applications

Green hydrogen will be a key element in the decarbonization of the planet and will have an impact on numerous industries and sectors.



Rapid Growth in Solar PV



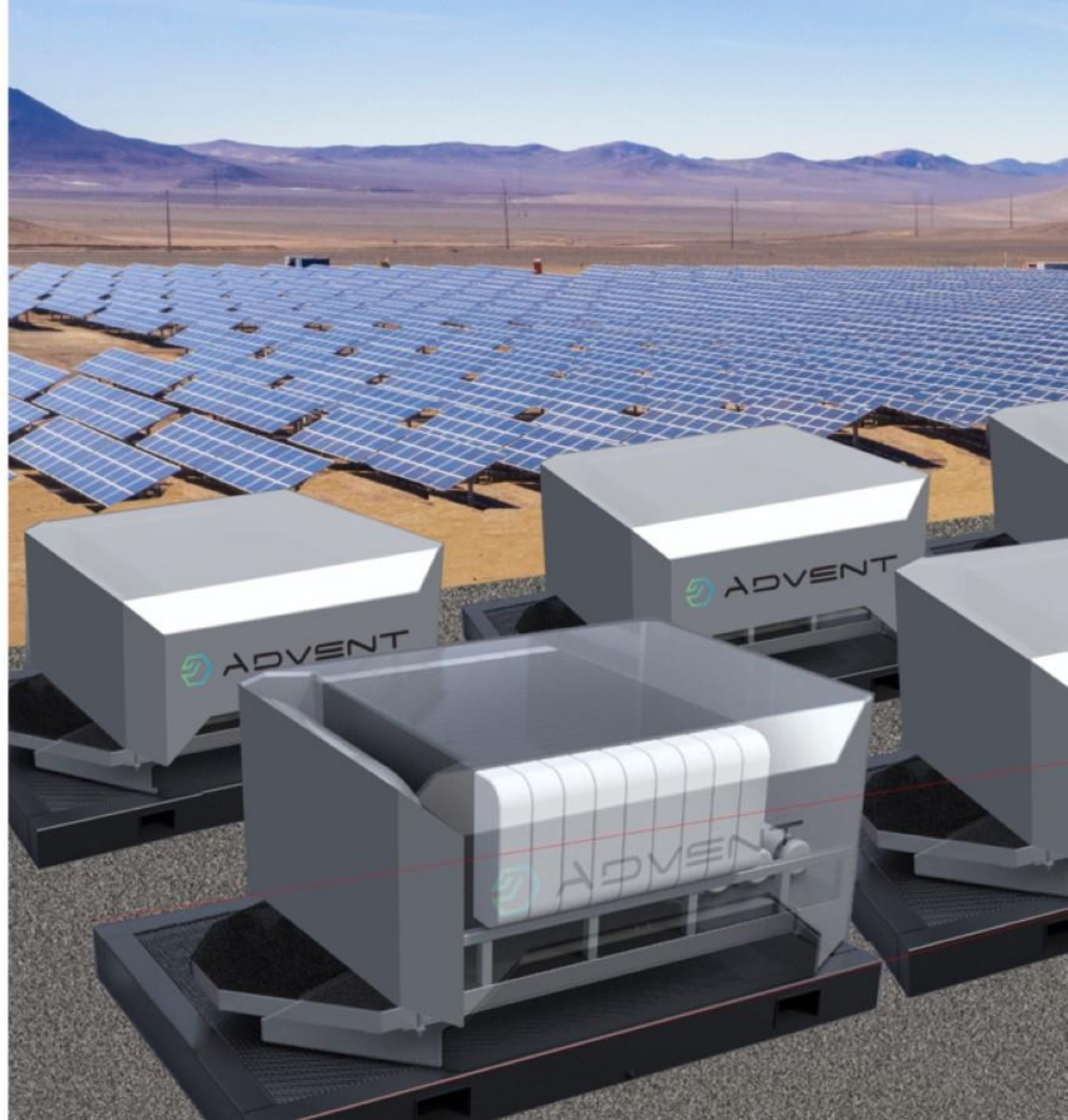
Installations to 2050

- ✓ The global installed capacity of solar PV could rise six-fold by 2030 (2,840GW) and is forecast reach 8,519GW by 2050 compared to installations in 2018 (480 GW).
- ✓ This represents a CAGR of nearly 9% up to 2050.
- ✓ Green hydrogen produced from solar PV/electrolyser combination is a significant opportunity.

Source: FUTURE OF SOLAR PHOTOVOLTAIC, IRENA

Advent Green HiPo: Fuel cells for CHP & mobility markets

- THROUGH GREEN HiPo, ADVENT WILL MANUFACTURE FUEL CELL SYSTEMS OF TOTAL POWER OUTPUT **120MW** WITHIN AN INITIAL PERIOD OF 6 YEARS.
- SEAMLESS, CONSISTENT GENERATION OF CLEAN POWER AND HEAT
- TIES IN WITH THE LARGE DOMESTIC H₂ INFRASTRUCTURE PROJECTS
- IDEAL FOR MOBILITY MARKET
- UNIQUE FOR THE GREEK MARKET
- CONTRIBUTE TO THE NATIONAL GOAL FOR ENERGY TRANSITION TO CLEAN ENERGY



Fuel cells are targeting several sectors (heavy duty mobility, maritime and aviation, stationary and energy-to-hydrogen), having competitive advantages over other alternatives

