

Program

9:30 Greetings

Senator Pietro Lorefice (M5S)

Session I

9:45 MITE “The exemplification of the authorization regime and the RES incentive system”

10:05 ENEA - “H₂ production using solar energy” **A. Giaconia**

Decarbonizing our economy implies best deployment of Renewable Energy Sources while satisfying end-users' demand (industry, transport, etc.). Different technologies can be combined to face the intermittency of non-programmable renewable energy (solar, wind) while securing the supply. This is possible by cost-effective combination of photovoltaic and concentrating solar technologies, integrated with suitable storage systems, to obtain green power “on-demand” and energy carriers such as hydrogen.

10:25 MAN ES - “24h of sun: H₂ and energy storage” **PP. Da Fieno/M. Bertei**

Decarbonization and increasing of the renewable energy share are key steps on every journey towards zero emissions. In addition, switching from fossil fuel to sustainable energy sources contributes to energy security and less vulnerability to global energy price swings, hence increasing resilience of industry and households. South Italy, and Sicily in particular, is blessed with favorable climatic condition for domestic sustainable power generation, ranking on top in respect to solar power potential. Yet the maximum hours of sunshine per day is insufficient to support reliable power generation on an industrial scale. Long Duration Energy Storage Systems (LDES) with a capacity of more than 8 hours are needed to bridge the gap for inexpensive renewable power generation when the sun does not shine and provide an indispensable basis for all green energy dependent industries such as power to X.

10:45 Shanghai Electric Power Generation Engineering Co. - “SEC and DEWA Phase IV 700MW CSP + 250 MW PV project” **Yulian Wei**

SEC is one of the largest integrated equipment manufacture and EPC contractor in China, with its business scope covers CSP, PV, Wind, Thermal, BESS, Nuclear, etc. It has delivered 45GW power projects on turnkey basis since 1990s, and ranked 51st in ENR's 2021 Top 250 International Contractors.

DEWA IV CSP+PV project as the largest CSP project in the world, consists of 100MW CT, 3x200MW PT and 250MW PV. It was started in 2018, and has now finished the solar field for PT, piping blow for CT, and commissioning for PV. SEC as the EPC contractor aims to commission the CSP plant within the year.

11:05 DESERTEC - “Desertec 2.0 - Deserts create prosperity” **M. Schröder/T. Bracht/A. Foppa**

Prosperity from the desert and vacant areas . Reliable energy is a fountain of prosperity, that allows the growth of an oasis of agriculture, recycling and industry around it.

Session II

11:45 CNR - “PV is key to a multi-scale transition to 100% Renewable Power in Italy” **M. Mazzer**

In order to tackle climate change and strengthen energy security in Italy, a deep transformation of the energy supply chain is mandatory. The transition to a 100% renewable power system is both economically and technologically feasible, as supported by models and full-scale experiments. PV can contribute to a large fraction of the energy demand and is implementable at all scales, from large solar farms to small distributed and community-owned plants, as confirmed by the new EU Solar Strategy.

12:25 Eurac Research - “The potential of integrated PV and the opportunities of a new Italian industrial chain” **D. Moser**

PV is widely seen as one of the key technologies to drive the energy transition. The difficulties arise when the targets for PV (usually set at national level) need to be put into practice at regional / local level. Large utility-scale PV installations in open fields are not an option in many regions, due to topography, social acceptance, touristic vocation, landscape, etc. The inherent modularity of PV enables it to be integrated seamlessly into many different objects and contexts, allowing space to be used efficiently and attractively creating opportunities for a local value chain.

Symposium **towards a 100% RES national system**

12:45 Enel GreenPower - *The pathfinder Champion for a European PV renaissance to a more sustainable energy* **F. Bizzarri**

PV is the key tech to reach sustainable and low cost electric production; an open innovation approach along the value chain could relaunch PV industry.

Italy could play a key role leveraging existing assets and ecosystem.

3sun Factory in Sicily starts a roadmap to maintain the excellence in the production of higher efficient solar cell and module.

13:00 Conclusion

- President Senate Commission of Industry **Sen. G.P. Girotto**
- **Presidente Giuseppe Conte**