IEEE European Public Policy Committee Recommendations

Grid integration over multiple time zones - benefit from the inherent time shift between different power consumption profiles, with a beneficial effect on required local storage capacity.

Sector coupling & energy system integration - among energy sectors, including electricity, transportation and water/space Heating and Cooling (H&C), can help provide flexibility and price responsiveness that is required for integration of inherently variable RES.

Storage technologies - at different power scales, are instrumental in exploiting renewable energy not only for shaving peaks in power production.

Demand side flexibility - requires dedicated technology, regulation, markets and practices.

To read the full document, go to: https://www.ieee.org/about/ieee-europe/europe-energy.html
IEEE European Public Policy Committee Recommendations

The effective integration among RES and storage systems with flexible load and grid interaction requires a high level of standardization among the industrial products, at the hardware level as well as at the communication and software level.

Achieving a valuable ‘second life’ for batteries from electric cars will be easier if there are common designs for battery packs in use.

A large amount of the materials in solar panels and windmills can be recycled, but composite blades are a difficulty. Based on current projections, tens of millions of tons of waste will be produced by 2050, so end-of-life planning is key.

With the further growth of RES and less structural demand for conventionally generated electrical energy being anticipated, the current compensation system may not be sufficient to keep enough back-up generation capacity “on-demand” for when it is needed.

To read the full document, go to: https://www.ieee.org/about/ieee-europe/europe-energy.html