

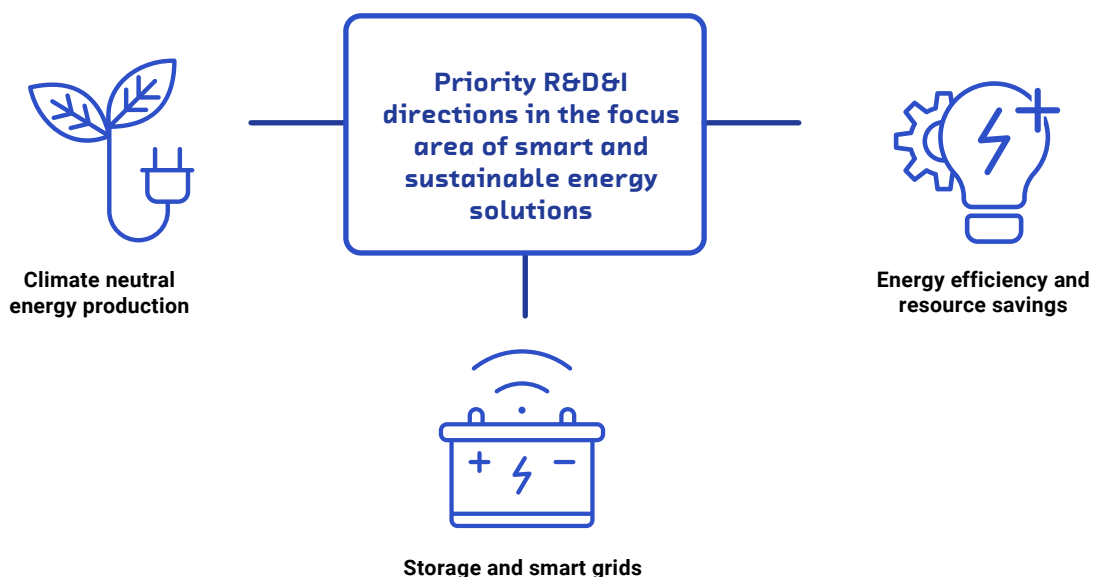


Smart and sustainable energy solutions

One of the starting points of the Estonian Research and Development, Innovation and Entrepreneurship Strategy is the need to make smart choices and to concentrate activities and funding in those areas that can best contribute to **creating solutions to society's challenges, based on research results and cooperation between different actors**. To this end, the Strategy identifies priority areas for development and increased financial support.

Smart and sustainable energy solutions are one of the priority areas for development. In the energy focus area, the aim is to develop, in partnership between research and business community, research-based solutions for the environmentally sound, sustainable, efficient and secure production, storage, and use of energy. In order to best support the energy focus area, a roadmap was drawn up in cooperation with researchers, business communities, government agencies, and other partners. In the roadmap, the parties agreed on the priority needs for the development of the energy focus area in cooperation between research and business community, and what is needed to ensure that the Estonian economy and society benefit most from the development of the focus area.

It was agreed in the roadmap that the most important development areas are research-based **energy production methods** that do not harm our environment. For example, we need to develop wind, solar and other energy solutions, biofuels and more. We also need to develop **solutions for energy storage and load management, and transmission networks** that can easily store and use energy, for example, when energy prices are very high or when energy shortages occur. This concerns, e.g. the development of smart grids, batteries, etc. Equally important are **energy consumption solutions** that improve energy efficiency and sustainability, for example, in the transport and building focus areas.



In order to find appropriate research-based solutions for the needs identified, it was agreed in the roadmap that what requires the greatest support in the energy focus area is **the uptake of research results and the technologies developed**, e.g. through basic and applied research, the development of research directions, joint activities involving business communities and researchers, the mutual sharing of knowledge and experience between researchers and business communities, the provision of R&D services, international cooperation, etc. We also need to develop the **capabilities and environments for assessing and testing** the solutions we create, so that they can be tested outside the lab on a larger (industrial) scale and in a real-life environment. Ensuring the **next generation of researchers and engineers** in the energy focus area is crucial. There is also a need to **foster broader cooperation** between research institutions, business communities and the public focus area and to boost the emergence and growth of **start-ups** in the focus area, **investment and exports**.



The roadmap is approved for a period of 3-4 years, after which it will be updated to take account of changes in the field. The development of the focus area will be regularly monitored and assessed to allow changes to be made to the roadmap and to the focus area's activities and funding. On the basis of the roadmap, **support measures** for the development of energy solutions will be designed by the Ministry of Education and Research and the Ministry of Economic Affairs and Communications, alongside general research and business community funding measures such as research grants, research infrastructure grants, business community grants, etc., for which there are no priority areas.

