

Green ICT

"We have chosen to be front-runners of GreenTech who develop and introduce innovative technologies and services."



Kaja Kallas, Prime Minister of Estonia

By 2050, Estonia will be a competitive, climate-neutral country with a knowledge-based society and economy and a high-quality, species-rich living environment, willing and able to reduce the adverse effects of climate change while making the best use of its positive aspects.

Furthermore, the Estonian government has set a goal that by 2030 all electricity consumed in Estonia will come from renewable energy sources.

Estonia has ambition and measures in place to make our economy greener. Manufacturing companies receive support for compiling a company's green road maps and digitising production processes. The €100 million Green Fund will boost the development of products and services of innovative green technology companies. And last but not least, Estonia, as a startup country, won't forget cleantech.

Although the link between digital and green transitions is very strong, it is important to highlight two sides – on the one hand, digital solutions enable us to use resources more efficiently, thereby save the environment. On the other hand, we should not underestimate the impact of the use of digital solutions on the environment and look for ways to reduce them.

Evaluation of the digital government's environmental footprint

The Estonian public sector is a global pathfinder of digitalisation, but it comes with a cost – digitalisation has an environmental impact we cannot ignore. To understand the scale of it, the Estonian Ministry of Economic Affairs and Communications cooperation with Ernst&Young carried out a one-of-a-kind survey. As a result, the methodology provided an instrument for measuring and reducing environmental impacts, and increasing the climate and environment friendliness of the Estonian digital state.

For more information: [Analysis of the current status of and possibilities regarding green digital government](#)

Cleantech

Cleantech is comprised of sustainable solutions in energy, water, transportation, agriculture and manufacturing, including green technologies, smart city solutions, advanced material, smart grids, water treatment, efficient energy storage and distributed energy systems. Estonian cleantech startups' turnover accounted for 3% of the total turnover generated by the startup sector in the I quarter of 2022. Compared to the last quarter of 2021, there is an increase in turnover (44%) and in employment taxes paid (28%) as well as a slight increase in the number of employees in the sector (8%).

For more information: [cleantechforest.ee](#)

X-Road's carbon footprint

Nordic Institute for Interoperability Solutions (NIIS) has set a long-term goal to make X-Road the most sustainable data exchange solution. NIIS commissioned research to assess the current emissions profile across X-Road@ operations and services to better understand the direct and tangible environmental impacts of using the X-Road software. In Estonia, public organisations have their information systems to process information relevant to the state and its citizens to provide public services. These often run on different systems that suit the function of the organisation. X-Road is a distributed information exchange platform that allows for these different systems to communicate across the governmental sector.

For more information: [niis.org](#)

Green Tiger

Green Tiger is a multidisciplinary cooperation platform aiming to create a balanced economic model for Estonia and the world. Green Tiger has partners across four strands: entrepreneurs, individuals, the public sector, and the civic sector.

For more information: [rohetiiger.ee/en](#)

Facts and figures

- Land Register. The paper-free system has reduced the processing time for land transactions from up to 3 months to as little as 8 days.
- E-education solutions. Full access to education in all living areas. 95% smaller environmental footprint due to paper-free management of schools.
- Border queue management system. Drops average border waiting time from 60h to 1.5h. Reduces CO2 by 16 tons per 10 000 trucks.
- E-court system. Shortest backlog of ongoing court cases. Zero paper printed to run a court case.
- Autonomous passenger transportation decreases the dependency on personal vehicles and human fallibility.
- 62% of Estonian enterprises have a medium/high intensity of green action through ICT compared to 66% EU average.