

SMRs in Estonia: key questions & perspectives

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Global SMR Watch

- Regular **monthly calls** since June 2023
- ~**30 people** (not all attend)
- ~**15 countries** (not all have nuclear)
- Key questions:
 - Will there be a **western FOAK SMR**?
 - Canada pushing ahead despite opposition.
 - What projects are getting **cancelled**?
 - NuScale, NUWARD, Newcleo (UK)...
 - **Common strategies**:
 - “harmonization”, “derisking”, narrative shift back to large reactors.
- Ask to join! madis@roheline.ee



Estonian perspectives

- Nuclear ideas in 1960s and 2010s, no reactors still, small grid.
 - 2019 - Intense SMR industry campaign starts (Fermi Energy)
 - 2020-2023 - Governmental Nuclear Energy Working Group concludes that the introduction of SMRs in Estonia is feasible
 - 2024 - Parliament adopts a resolution “in principle” supporting **the preparation** of adoption of nuclear energy, establishing a **nuclear law** and a **regulator**
 - 2025 - Special state planning process for siting the first SMR started
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- Still undecided if **actually adopting** nuclear energy in Estonia will be allowed
 - **Very unclear** when and how and if such a decision will be taken
 - **Many unknowns** on the technological aspects (reactors & waste management)

Unknowns

- Reactor designs:
 - BWRX-300? Still not licensed anywhere.
 - Alternative designs are far behind time-wise.
- Waste management:
 - DGR vs deep boreholes
 - How much waste will be generated
 - When to start dealing with the issue
 - Who and how will pay for it
 - Assumption: Operator fees for 60-year-long operation cycle on 90% capacity factor
 - Possibility: the average lifespan is actually 30 years and the capacity factor is only 45%
 - So: who pays for the missing 75% of needed funding?



Unknowns

- Public subsidies

- Past: industry claimed no need, government firmly said no subsidies will be planned
- Recent past: industry asking for subsidies, government still opposing
- Present: industry saying nothing can be built without subsidies, government now considering it (loan guarantees, but also possibly taking stakes in companies and issuing bailouts).
- No public participation

Civil Society participation

- ENGOs participating in the national working group sub-group on siting
 - Good interactions, but final decision was decided by majority voting
- Regular public opinion polls as “participation” 😞
- ENGOs participating in the special state planning process
- Aarhus convention compliance - are all options still on the table?

Questions? Madis@roheline.ee

