

The VTT logo consists of the letters 'VTT' in a bold, white, sans-serif font, centered within an orange square. The background of the slide features a repeating pattern of stylized, interlocking shapes in orange, blue, white, and black, creating a sense of movement and depth.

VTT

Societal acceptability of SMRs

**Summaries of the city officials'
interviews**

**EcoSMR seminar 23.11.2022
Merja Airola & Nadezhda Gotcheva**

29/11/2022 VTT – beyond the obvious

Societal acceptability study as part of SMRSiMa-project

- **Espoo, Vantaa, Tampere, Jyväskylä, Vaasa and Pyhäjoki.**
 - Selection is based on interest in SMRs, size, location and use of coal/wood/peat in energy production
- **Six interviews** (8 interviewees) 09-11/2022 with managers and experts in sustainable development, built environment, environmental and master planning/zoning
- **Interview themes:** city's energy strategy, approach to SMRs and perceived societal acceptability factors, experiences in social acceptability and resident engagement in energy and climate change related projects
- Interviews were **very open and reflective**, and the topic was seen as interesting

Cities' energy strategies and approach to SMRs: Reaching carbon neutrality by 2030



ESPOO
ESBO



Promoting renewable energy, energy citizenship and energy communities in cooperation across sectors with different actors. Political decision made to clarify the usage of SMRs (2022).



Resource Wisdom Roadmap promotes carbon neutral energy production and reducing emissions. Collaboration with Vantaan Energia for developing new solutions and following development potential of nuclear in energy production. Counsellors proposed a SMR study in 2021 which was not approved for execution in 2022.

TAMPERE



Carbon Neutral Tampere 2030 Roadmap includes centralized and decentralized renewable energy, smart energy services and abandoning oil heating. Collaboration with Tampereen Sähkö for developing new solutions. City council initiative for investigating suitable locations for SMRs was approved for execution. The officials aim to clarify this by the end of 2024.

JYVÄSKYLÄ



Resource Wise Jyväskylä 2040 includes low carbon energy production and efficient use of energy and water. Collaboration with Alva-yhtiöt. No public discussions about SMRs.

V A A S A



Carbon Neutral Vaasa 202X focus areas include electricity and heating. Emphasis on energy procurement focusing energy sources in Nordic countries, new investments in renewables in primary production. Collaboration with Vaasan Sähkö. No public discussions about SMRs.

Lessons learned in other projects about societal acceptability

- 1) **Transparency and openness in information sharing** – in advance, multiple channels and proactively
 - Inform if something cannot be revealed (business secrets) or officials do not know
 - Residents tend to oppose if there are indicators or assumptions that issues have been already decided beforehand
 - Role of social media and non-fact-based circulation of information needs to be noted and addressed -> can even lead to failing projects
- 2) **Early phase collaboration with stakeholders** (energy companies, NGOs, residents' associations, emerging activist groups, affected ..)
 - Means to enhance participation: TEAMS, joint events with stakeholders, streaming
 - How to reach non-Finnish speaking residents?
 - Situations can change in the events too - anticipation and alternative ways to proceed needed
- 3) **Emphasis on active yet neutral position** between different stakeholders to maintain trust and credibility.

Interviewees' insights of residents and SMRs

- **Information** need to be clear, understandable, accessible, updated and in early phase and repeated
 - What are SMRs about, what are the benefits, impacts, risks and options, timelines.
 - Surveys or resident events about SMRs not yet held
 - Not yet a lot of feedback or questions from the residents. Some discussions online noted
 - Meaningfulness in the residents' everyday life!
- **Fears and concerns** needs to be heard and addressed
 - SMR plants are unknown– easier to address when there are real-life operating examples
 - Even if the hindrances seem less (no noise or pollution) use of nuclear causes concerns and fears despite the size of a plant
 - Energy crisis and climate change possibly increased the acceptability
 - Voices of opponents cannot be suppressed (maintaining trust and respectful interaction)
 - If residents have negative perceptions, it is difficult to change with facts
- **Differences** possibly affecting acceptability:
 - Located near workplace/far from home vs. near home (NIMBY)
 - Existing vs. new location for the SMR
 - Something wanted (attractive) vs. something forced to have (in a negative way)

A way forward from cities' perspective?

- Need for **political decision** to investigate the topic (except Espoo and Tampere)
 - The planning and zoning processes may take a long time with the complaints (~80 months)
- Need for **objective knowledge and competence building**
 - Requirements, criteria and boundary conditions related to location, safety and security, waste.. for master planning and communication
 - STUK is a new actor for many cities
 - Training, collaboration with research organisations and regulators, using change agents within the cities, recruitments (consultants for impact assessment)
- Need for **internal, regional co-ordination and communication** and collaboration with other cities
 - Who is taking a lead of facilitating the resident engagement within the city/region?
 - Who will be the first and face the risks?
- Need for **efficient early phase inclusive information sharing and engagement methods**
 - EIA and master planning/zoning process interaction are not considered to be enough
 - Creating genuine possibility for changes based on residents' feedback and development ideas "*How you ask affects the answers you get*"
 - How to anticipate and address the social media downsides: polarised discussion and mis- and disinformation?
 - How to reach and engage resident groups in novel ways?