

FinEst Centre
for Smart Cities

How can research based innovation be an asset for your smart city transition?

Külle Tärnov, Head of Innovation



Co-funded by
the European Union



Investing
in your future



REPUBLIC OF ESTONIA
MINISTRY OF EDUCATION
AND RESEARCH

The setup of the FinEst Centre for Smart Cities is funded by the European Union's Horizon 2020 Research and Innovation Programme, under the grant agreement No. 856602, by the European Regional Development Fund and the Estonian Ministry of Education and Research.

FinEst Centre for Smart Cities

Who we are?

FinEst Centre for Smart Cities is an international research and development centre driven by the passion to enhance the quality of life in urban areas.



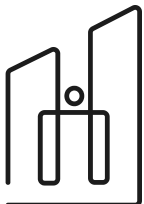
Our **ambition** is that our 10 smart solutions will be developed and implemented in at least 30 European cities by 2030.



Our **mission** is to ensure that as cities grow and evolve, they remain centred on the needs and well-being of their residents.

**TAL
TECH**

A!
Aalto University



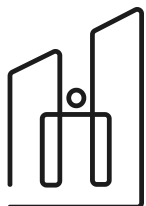
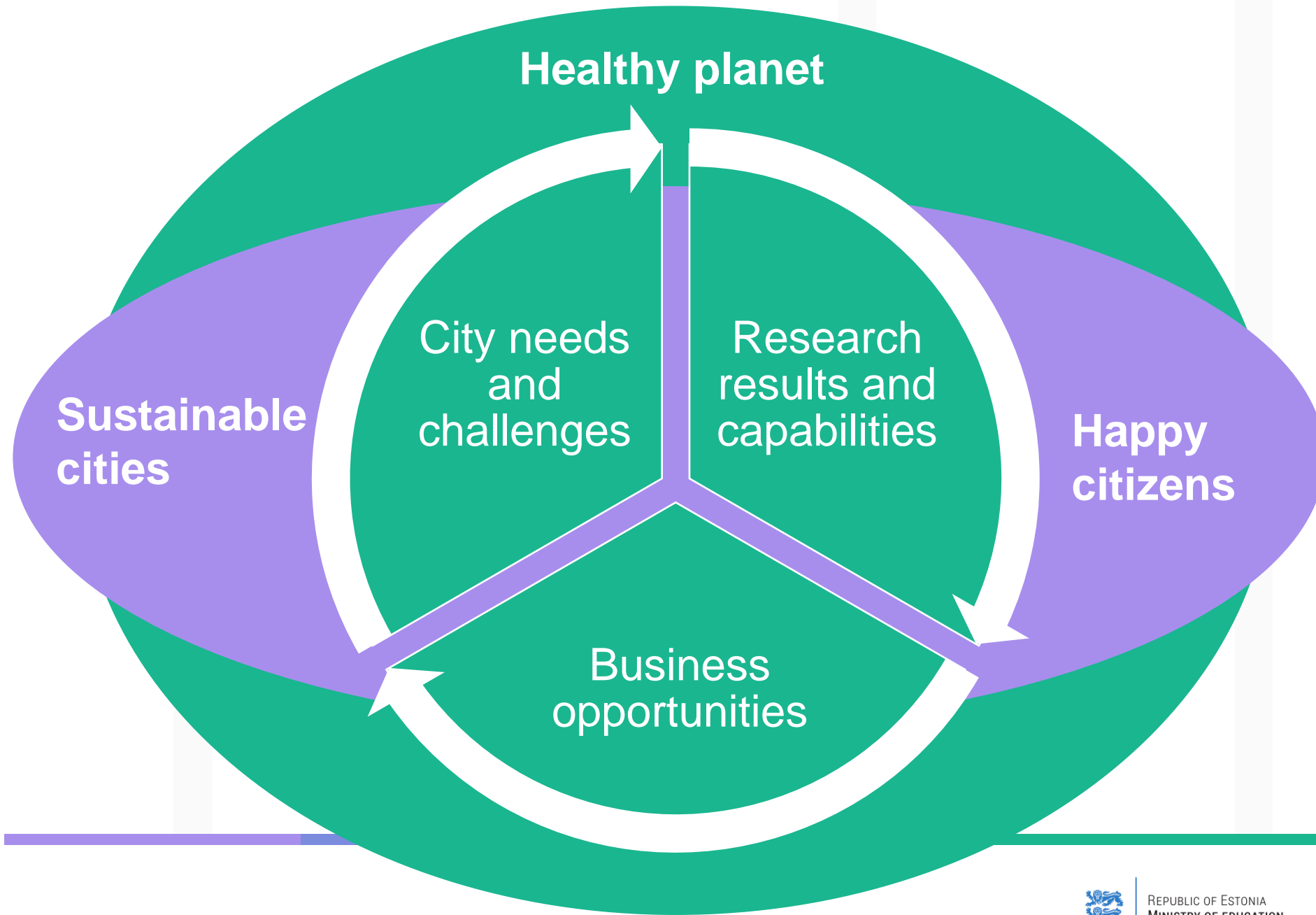


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SMART CITY PILOTING PROGRAMME

2020 - 2028





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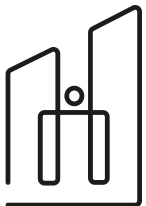
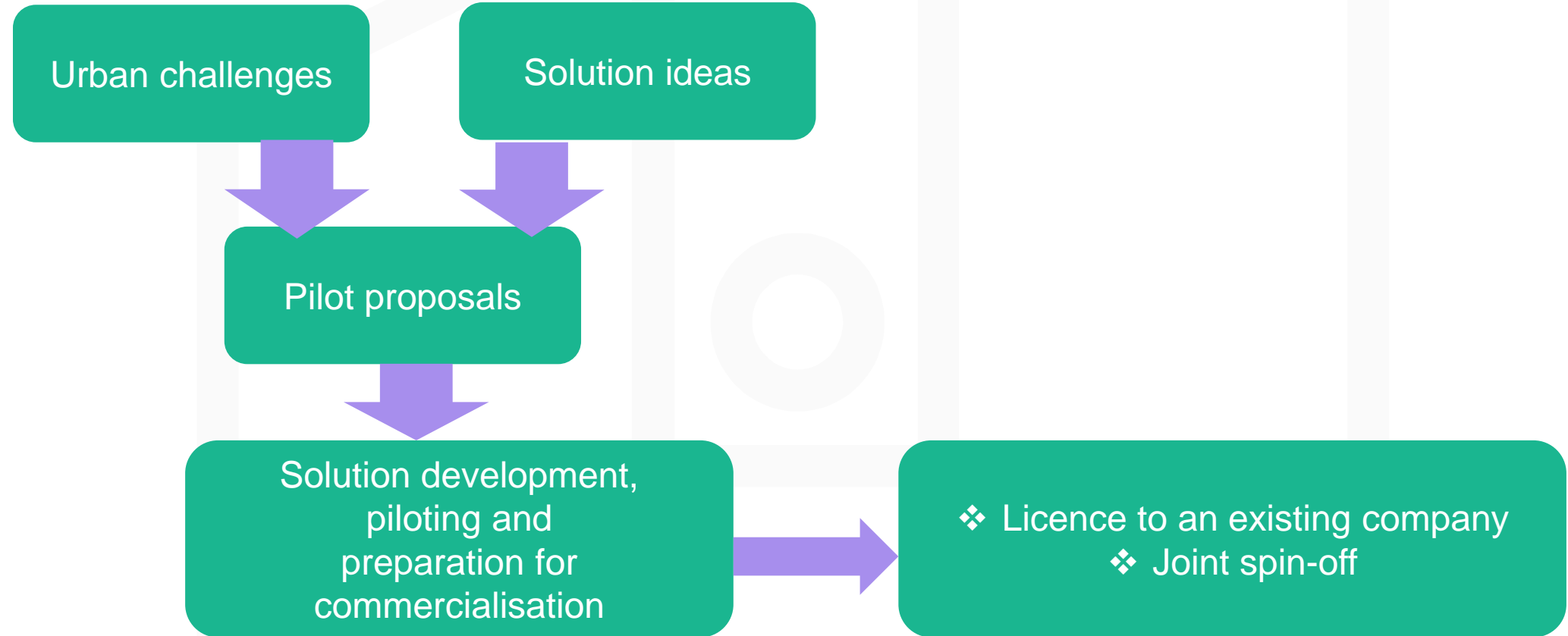


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Smart City Challenge



Pilot project setup

Phase 1

Development of the solution

incl. the methodology, technology, and needed research

Mid-sized pilots – 6 months

Large pilots – 12 months



Phase 2

Pilot in cities and pilot analysis

Mid-sized pilots – 12 months

Large pilots – 12 months



Phase 3

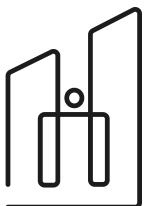
Further development of the solution

to prepare it for scaling and commercialization, preparing follow-up projects

Mid-sized pilots – 6 months

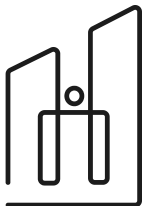
Large pilots – 12 months

Go / No-go



Pilot projects size

- ❖ Large pilot project - 3 years:
 - ❖ budget of 1.2M€
- ❖ Mid-sized pilot project – 2 years:
 - ❖ budget of 800k€





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SIX PILOTED SOLUTIONS

Jan 2021 – Aug 2023



6 pilot projects done → 6 new solutions created

<https://finestcentre.eu/smart-services-to-cities/advisory-and-tools/>



DIGIAUDIT

Pilots in Tartu and Tallinn



RENOVATION STRATEGY TOOL

Pilot in Võru



MICROGRIDS & ENERGY STORAGE PLATFORM

Pilots in Tartu and Paldiski



GREENTWINS

Pilot in Tallinn



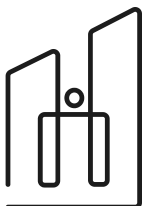
AUTONOMOUS VEHICLE SAFETY TOOLKIT

Pilots in Tallinn and Rae county



URBAN WELL-BEING DIAGNOSTICS

Pilot in Narva





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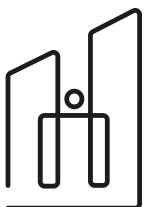
SMART CITY CHALLENGE

Rounds 3 - 5: 2024 - 2028



Rounds 3 & 4

- ❖ 77 cities from 26 countries proposed and/or voted for the urban challenges
- ❖ Researchers and companies proposed 65 initial ideas
- ❖ 6 + 6 pilot project proposals selected to the finals
- ❖ 3 launched in 2025



Pilots Running in Rounds 3 & 4



URBANSPLASH

Pilots in Tartu and Fingal, Dun Laoghaire in Ireland

2

XXX

Pilots in ... and ...

3

XXX

Pilots in ... and ...

4

XXX

Pilots in ... and ...

5

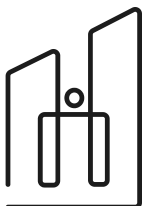
XXX

Pilots in ... and ...

6

XXX

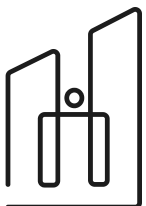
Pilots in ... and ...



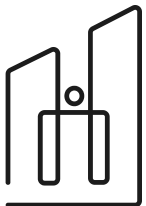
6 ideas in the finals of the Round 4

- ❖ Lighting Nanogrids
- ❖ Smart Water Traffic System
- ❖ Natural Hazard Resilience Toolkit for Cities
- ❖ Reusing old buildings
- ❖ Tree City
- ❖ AI-Powered Roads Monitoring Solution

<https://finestcentre.eu/media-and-events/news/meet-the-six-finalists-of-smart-city-challenge-2024//>



Smart City Challenge Round 5





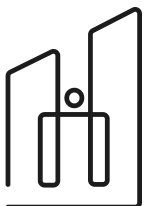
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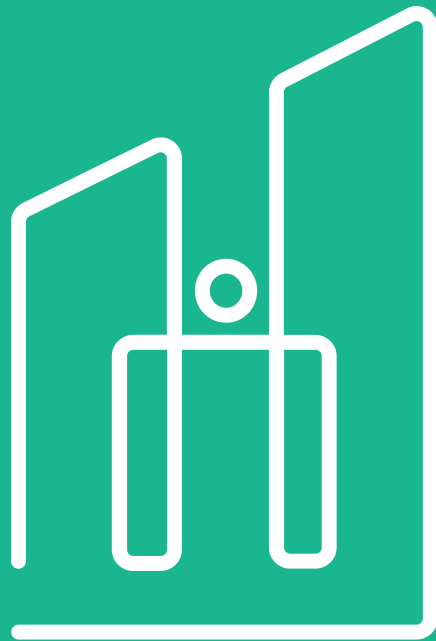
Lessons learned



LESSONS LEARNED

- ❖ The main focus on business potential
- ❖ Engage cities from different countries
- ❖ Clear rules & setup, less flexibility
- ❖ Decrease budget, increase time
- ❖ Evaluation by category: business, research, wider impact by respective experts





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THANK YOU!

Külle Tärnov

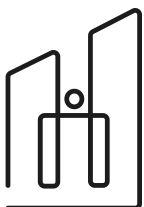
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FORUM
VIRIUM
HELSINKI



TAL
TECH



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