

# Major challenges create major opportunities

Erja Turunen, Executive Vice President,

06/06/2019 VTT – beyond the obvious

## FINANCIAL TIMES

Opinion **EU tech regulation**

## There is a 'third way' for Europe to navigate the digital world

Silicon Valley's libertarianism and China's authoritarianism are not the only paths

JOHN THORNHILL

[+ Add to myFT](#)

...many of the most interesting areas for the use of tech are in heavily regulated sectors, such as healthcare, education, energy and transport. **If Europe can develop a mutually beneficial relationship between public sector innovators, entrepreneurs and regulators, that fosters innovation while protecting citizens**, it may be in with a shout...

An abstract geometric pattern on the left side of the slide, featuring a repeating grid of interlocking shapes in shades of grey and blue, with some shapes highlighted in a vibrant green. The pattern is set against a dark background.

# Ecosystems



**Research topic: The benefits of innovation ecosystem participation for firms**

**Key findings: Most of the Finnish innovative firms (a sample of 473 Business Finland applicants and their CEO's) report to belong to multiple innovation ecosystems and the firm level impact of innovation ecosystems is positive in general**

Reference: Mirjam Knockaert, Matthias Deschryvere & Laura Lecluyse et al. (2019). *Science and Public Policy*, doi: 10.1093/scipol/scz002

**Note: 8% of the firms experienced growth barriers related to the ecosystem, such as:**

**Competition between ecosystem members**

**Use of resources (money, people, time)**

**Ecosystem dynamics are (too) slow**

**Limits with whom you can work**

**Scattered or concentrated ownership of ecosystem**

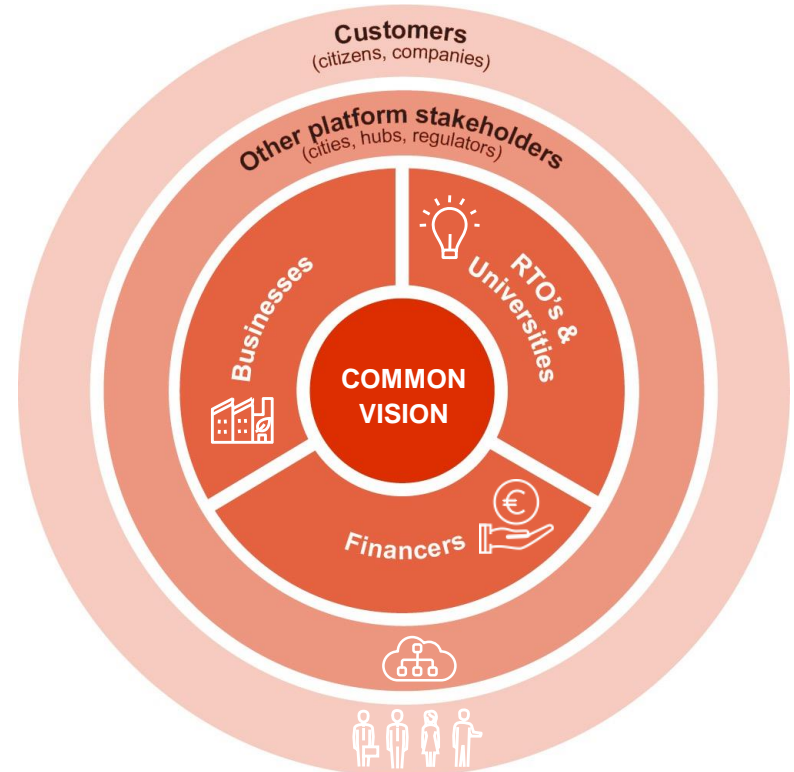
**Ecosystems can narrow the scope**

**Different expectations of the members from different industries**

# An Innovation Ecosystem is...

**A partnership of complementary players who share the same vision and are willing to contribute to joint actions in order to achieve the individual and joint goals.**

Innovation ecosystems are necessary, because challenges and solutions are so **complex and systemic** that no actor has the capacity nor the capability to create successful business applications alone in the needed time frame.



The industrial sector  
creates roughly

$\frac{1}{4}$

of global emissions

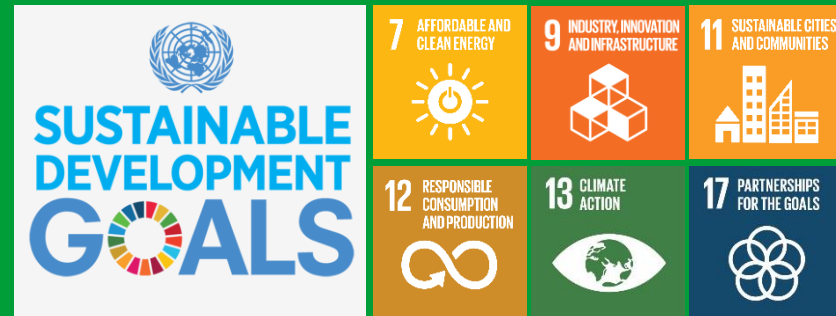
15 Gt

annual GHG emissions





# Smart Otaniemi - Let's re-discover energy together.





# Current pilot members in Smart Otaniemi



Pilot integration

VTT, Softability, Arisense, Agiler, Elenia, Vincit



ABB, Caruna, Nokia, Eneron, Fourdeg, Green Energy Finland, Seneqo, Tieto, Gravito, VTT, Aalto University, Wirepass, UPM Energy, Process Genius, Fidelix

VTT, Motiomax, NTM, HSY



Aalto University, VTT, Geological Survey of Finland (GTK), ACRE, Assemblin, Equa Simulation Finland, Fortum, Halton, Granlund, Salusfin, Qheat, Tom Allen Senera, Elcogen, Basso Building Technologies, Muovitech, Kesko, Bonava



VTT, Aalto University, Nokia, Streamr



ACRE, Geological Survey of Finland (GTK), Aalto University



Empower, Fingrid, Caruna, e2m, Green Energy Finland, Aalto University, VTT



Ensto, Energy Storage Futures, Parking Energy, e2m, Aalto University, VTT, Moveko, Green Energy Finland



e2m, Väre Energia, Granlund, Ensto, Parking Energy, Merus Power, Green Energy Finland, Fingrid, VTT



Your pilot?



VTT, Aalto University, Väre Energia, ACRE, Eneron, Fourdeg, Green Energy Finland

# The industrial sector creates roughly

$\frac{1}{4}$

of global employment

$\frac{1}{4}$

of global GDP

In Finland  
1,1 million  
jobs

46%  
of our GDP  
value

## Did you know that

**2015**

**50%**

of B2B purchase  
decision by  
millennials

**90%**

of millennials  
want to use their  
skills for good

Currently, 50  
percent of the  
globe population  
is under 30

**Millennials will change the B2B and  
the industry of the future will be different**

# bey<sup>0</sup>nd

## the obvious

Erja Turunen  
erja.turunen@vtt.fi  
+358 50 3809671

@VTTFinland  
@turunen\_erja

[www.vtt.fi](http://www.vtt.fi)