

Sustainable Futures Thinking As A Strategic Competence

Prof Sirkka Heinonen

Finland Futures Research Centre (FFRC), University of Turku

*A stakeholder seminar on 100% renewable energy supply
„How can a clean energy future for Myanmar look like
and how can the transition be financed?“*

***Organized by Yangon Technological University (YTU)
& University of Yangon (YU)
Yangon, Myanmar, 6 September 2019***



Structure of Presentation

The background image shows a modern wooden deck with a glass railing, overlooking a body of water under a clear sky. The deck is made of light-colored wood and has several lounge chairs and tables. In the distance, there are some buildings and a small island. The text is overlaid on a semi-transparent white box in the center of the image.

**1. Critical Importance of Futures Thinking
– Insights from Finland**

**2. How to Create Strategic Futures
Competence**

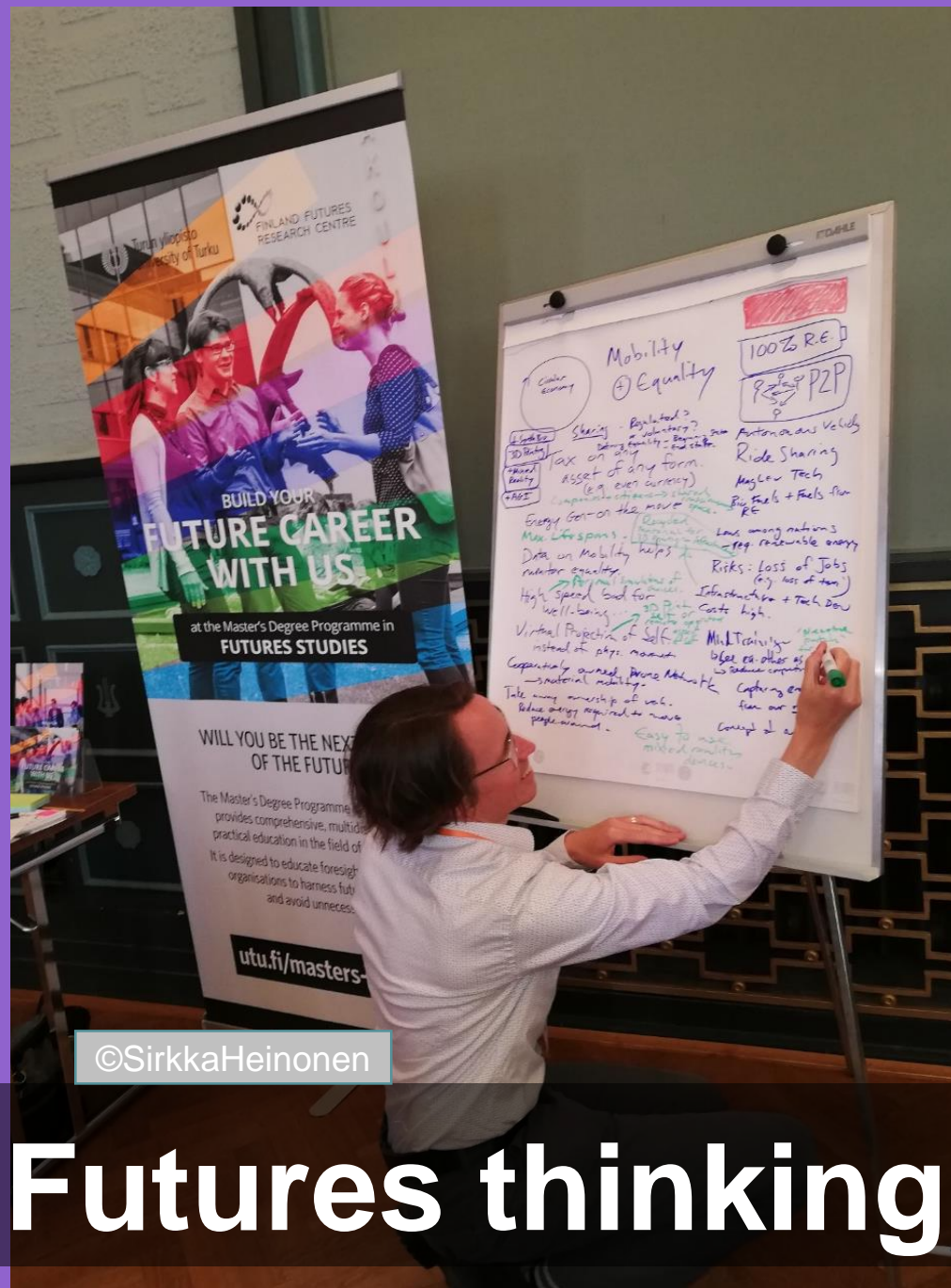
FINLAND AS A LAND OF FUTURES-ORIENTATION

- Population 5.5 million
- Between two dominant countries – will to survive & struggle for our own future
(independence 1917)
- Democracy - low corruption – press freedom
- Education system
- **Futures Research as Academic Discipline**
- **National Foresight System**



FUTURES STUDIES BASED ON SYSTEMATIC FUTURES THINKING

- A strategic competence
- A prerequisite for survival



Futures thinking -> Futures literacy

Futures Literacy → Futures Strategy

Provides competitive edge and empowerment to:

- Cities
- Regions
- Nations
- Companies
- Citizens

Futures processes integrated to:

- Strategy work
- R&D
- Planning process
- Innovation process
- Communication
- Employee training
- Futures workshops **etc.**



FUTURES STRATEGY!

FUTURES RESEARCH

Intl Master's Programme and
Doctoral Programme at
Finland Futures Research Centre (FFRC)

Future of Cities? Future of Energy?
Future of Myanmar? Future of South East Asia? 2030? 2050?

Futures Research

Foresight

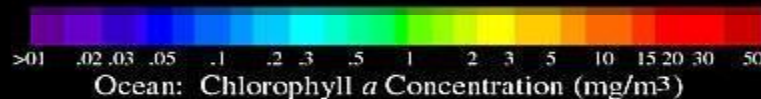
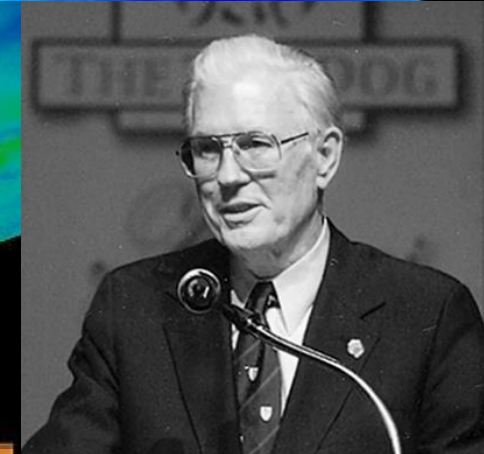
Futures research = systematic, holistic,
multidisciplinary and critical long-term analysis of
futures topics and alternative developments

Foresight = structured participatory debate about
the future of complex issues

GENERAL PURPOSE OF FUTURES STUDIES

According to Wendell Bell

“To maintain or improve the freedom and welfare of humankind and of all living beings, plants and the earth’s biosphere
-> making the world a better place”



Explorative approach

A person is seen from behind, standing on a rocky outcrop. Their arms are spread wide to the sides, embracing the view. They are wearing a patterned short-sleeved shirt and light blue shorts. The landscape is a vast, green valley with rolling hills and distant mountains under a bright blue sky with scattered white clouds.

General futures thinking

= all imagining and
visioning futures for any
stakeholder by any actor



Normative approach

Sustainable futures thinking

**= systematic and serious imagining
and visioning futures for making an
organisation or country on pathways
towards sustainability**

Sustainable futures thinking

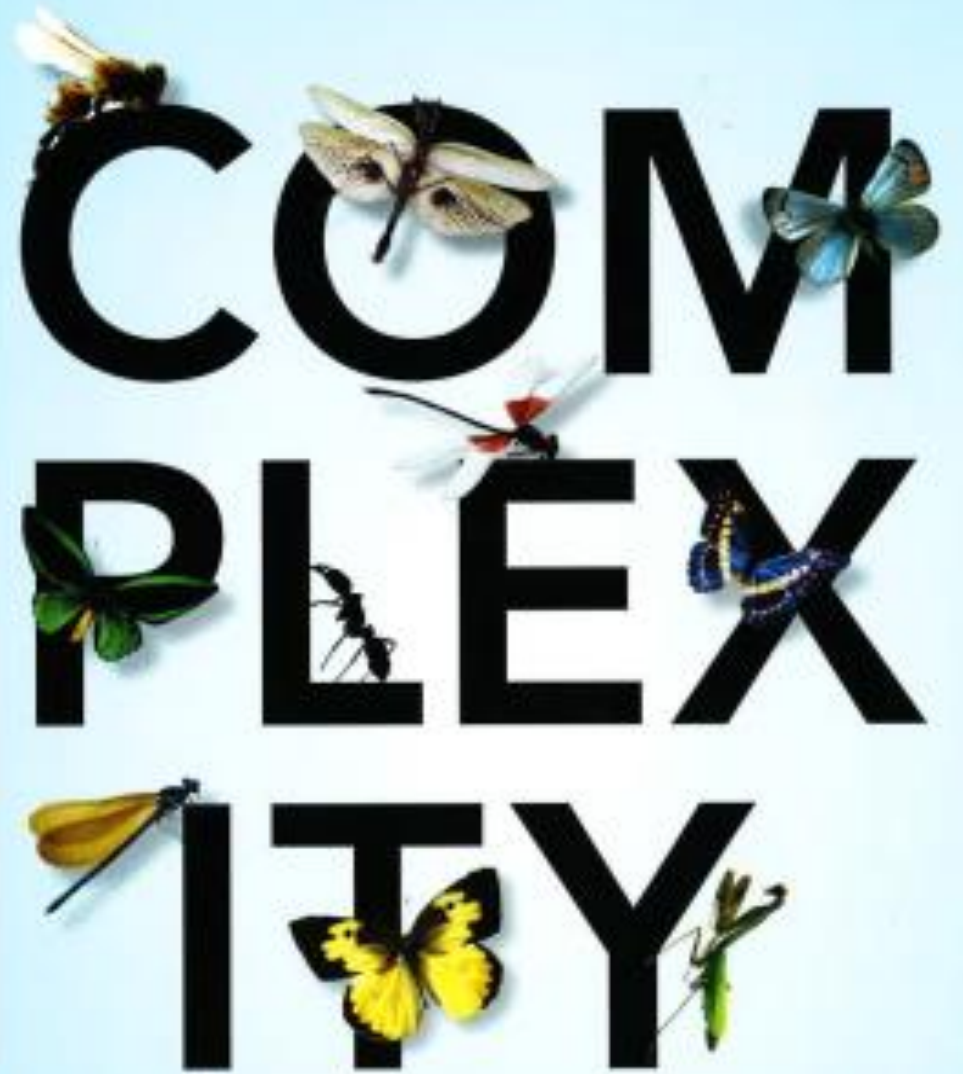
- Long-term -> 2050 >
- Systemic and holistic -> Big Picture
- Critical -> Questioning
- Actor-orientation -> Who makes the future?
Who are the pioneers?
- Open -> Innovative ideas
- Radical change -> Transformation

THE RAPID CHANGE EMPHASIZES THE STRATEGIC IMPORTANCE OF FORESIGHT

- **Change is not only rapid but also continuous,** increasingly difficult to foresee in our complex world
- **We are living the age of** global warming, globalization, urbanization, digitalization and resource scarcity
- **These megatrends** are making a significant impact on nations and on people's lives + emerging new issues

FUTURES THINKING AS STRATEGIC COMPETENCE

- Provides strategic insights on complex future issues
 - e.g. on natural resources and energy
- Supports decision-making
- VISION + STRATEGY



*The Evolution of Earth's Biodiversity
and the Future of Humanity*

WILLIAM C. BURGER

THREE MAIN PRINCIPLES OF FUTURES THINKING

1. The future cannot be predicted

2. The future is not pre-determined

3. The future can be affected

Roy Amara (1981)

A person is walking away from the camera in a hallway. The hallway has a polished floor that reflects light from a window in the background. The walls are made of large, light-colored tiles. A semi-transparent dark grey box is overlaid on the right side of the image, containing a list of three items. The third item, 'Preferred', is circled in red. The word 'FUTURES' is written in large, white, bold letters to the right of the list.

- Possible

- Probable

- Preferred

FUTURES

Energy and “Big Picture” – Whole Society

- Without natural resources/energy -> **no life**
- Population growth, urbanization and rising standards of living -> **increased need for energy and natural resources**
- What type of energy we produce and consume – and how -> **are increasingly important issues**
- Changes in people's lifestyles - **as important as techno-economic and geopolitic factors**

Natural resources and renewable energy as an opportunity for emerging countries

Myanmar?

What is the preferred future?

- Political will needed!
- Consensus?
- Futures Dialogue – in academia and government



Long Tradition in Finland to Create Futures Literacy

- Finnish Society for Futures Studies 1980
- Finland Futures Research Centre (FFRC),
University of Turku 1992
- Committee for the Future in Parliament 1993
- Prime Minister's Office, Foresight Team



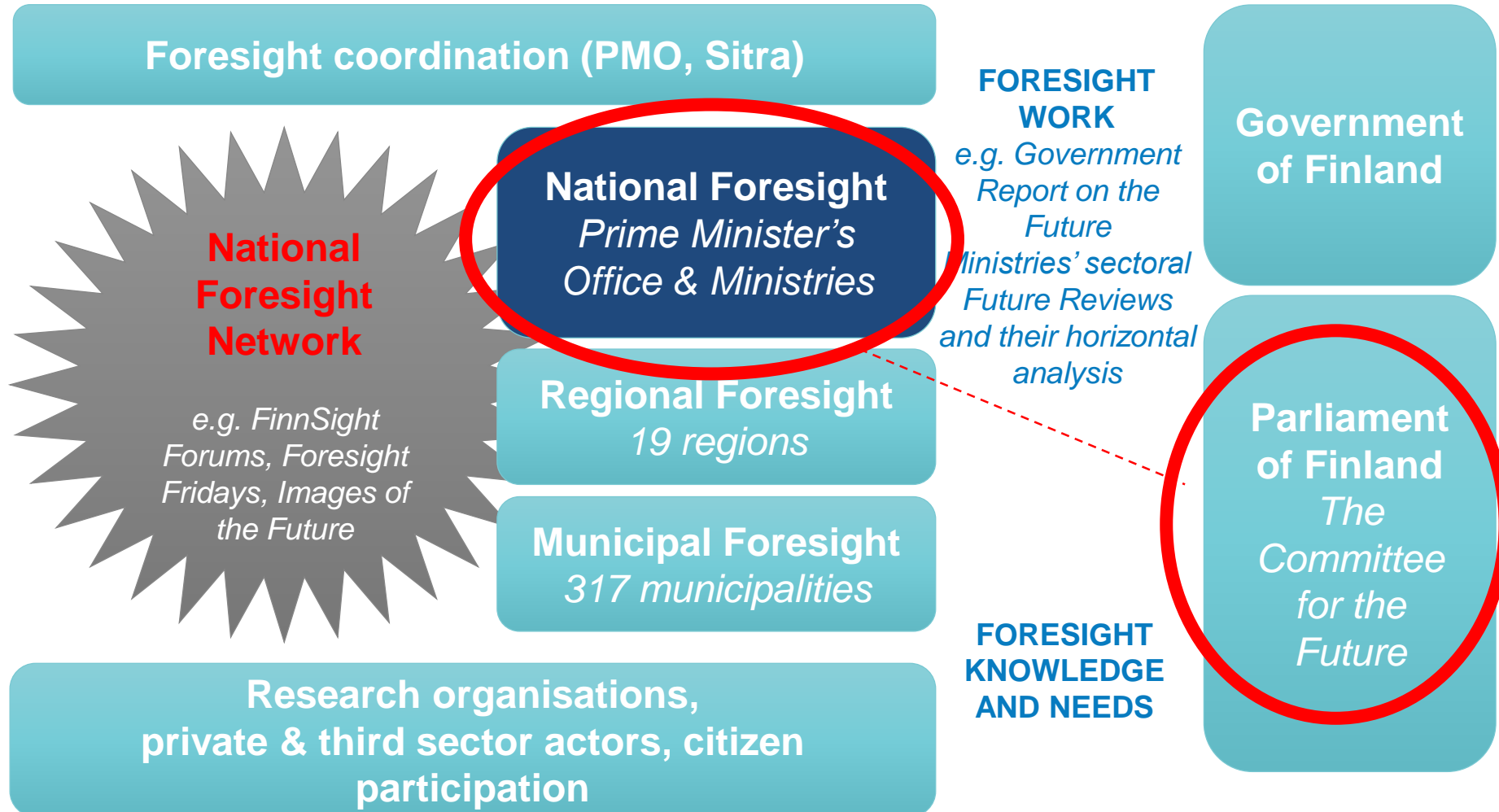
Prof Pentti Malaska
Pioneers needed



Prime Minister's office



NATIONAL FORESIGHT SYSTEM/NETWORK



FUTURES THINKING AS STRATEGIC COMPETENCE

- Academic discipline
- Government/public level
- > Critical area of knowledge/value creation in whole society

Futures thinking

- Can be learned and taught
- Critical skill – incl. methods

----> Futures Resilience

= A capacity to survive in the face of emerging challenges and obstacles

- > Myanmar can excel in pursuit of 100% renewable energy as a sustainable future!

Thank You!

Professor Sirkka Heinonen

Finland Futures Research Centre (FFRC), University of Turku

sirkka.heinonen@utu.fi



FINLAND FUTURES
RESEARCH CENTRE

References and further reading

- Amara, Roy (1981). The Futures Field. Searching for Definitions and Boundaries. *The Futurist*, Feb. 1981, 25–29.
- Bell, Wendell (1996). *Foundations of Futures Studies: Human Science for a New Era: History, Purposes, Knowledge. 3rd Printing edition.* New Brunswick, NJ: Transaction Publishers.
- Dator, Jim (2009). Alternative Futures at the Manoa School. *Journal of Futures Studies* 14 (2), 1-18.
- Glenn, Jerome – Florescu, Elizabeth & the Millennium Project Team (2018) State of the Future 19.1. Millennium Project. Washington D.C. <http://www.millennium-project.org/state-of-the-future-version-19-1/>
- Heinonen, Sirkka & Karjalainen, Joni (2018). *Electrification in Peer-to-Peer Society.* TUTU-Publications 1/2018, Finland Futures Research Centre, Turku. 2. edition. In Finnish (forthcoming in English) https://www.utu.fi/fi/yksikot/ffrc/julkaisut/tutu-julkaisut/Documents/Tutu_1-2018.pdf

- Heinson. S. & Karjalainen, J. (2019) Pioneer Analysis as a Futures Research Method for Analysing Transformations. In Poli, R. & Valerio, M. (eds.) *Anticipation, Agency and Complexity*. *Anticipation Science* 4, Springer Books, p. 61-77. DOI: 10.1007/978-3-030-03623-2
- Heinson, Sirkka, Ruotsalainen, Juho & Karjalainen, Joni (2017a) Transformational Energy Futures 2050. Neo-Carbon Energy Societal Scenarios. FFRC eBOOK 10/2017. Finland Futures Research Centre, University of Turku. 69 s. ISBN 978-952-249-495-5, ISSN 1797-1322. http://www.utu.fi/fi/yksikot/ffrc/julkaisut/e-tutu/Documents/eBook_10-2017.pdf
- Heinson, S., Karjalainen, J., Ruotsalainen, J. & Steinmüller, K. (2017c). Surprise as the New Normal – Implications for Energy Security. *European Journal of Futures Research* 5: 12. <https://doi.org/10.1007/s40309-017-0117-5>
- Lang, Merja, Karjalainen, Joni & Heinson, Sirkka (2016) Glocal Insights to Neo-Carbon Energy and Its Forerunners. NEO-CARBON ENERGY WP1 Working Paper 4/2016. Finland Futures Research Centre, ISBN 978-952-249-429-0. www.utu.fi/fi/yksikot/ffrc/tutkimus/hankkeet/Documents/NeoCarbon-WP1-4-2016.pdf
- Pouri, Laura, Wilenius, Markku, Holstius, Karin & Heinson, Sirkka (eds.) (2018). Pentti Malaska. A Visionary and Forerunner. Futures Series 9. Finnish Society for Futures Studies, Helsinki, 243 p. <http://www.tutuseura.fi/julkaisut/julkaisusarjat/tulevaisuussarja/9-malaska-biography/>
- Ruotsalainen, Juho – Karjalainen, Joni – Child, Michael & Heinson, Sirkka (2017) Culture, values, lifestyles, and power in energy futures: A critical peer-to-peer vision for renewable energy. *Energy Research & Social Science* 34: 231–239. <https://doi.org/10.1016/j.erss.2017.08.001>

How To Explore Our Futures?

Information about the methods book:

- **Editorial Board:** Prof. Sirkka Heinonen, Adj. Prof. Osmo Kuusi & MSc Hazel Salminen
- **Publisher:** The Finnish Society for Futures Studies (www.futuressociety.fi) **Series:** Acta Futura Fennica 10

HERE

INQUIRIES & ORDERS

- **Printed book: EUR 45 + postage** (discounted price EUR 40 for members of the FSFS)
E-book: EUR 25 (member price EUR 20)
- **For orders, visit our online shop:** <https://holvi.com/shop/Tutuseura/section/julkaisut-publications> OR contact Hazel Salminen at the Finnish Society for Futures Studies, Finland: toimisto@futurasociety.fi