



# Good Practice Finland – Climate Change Adaptation Plan and Sustainable Healthcare

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Finnish Institute for Health and Welfare

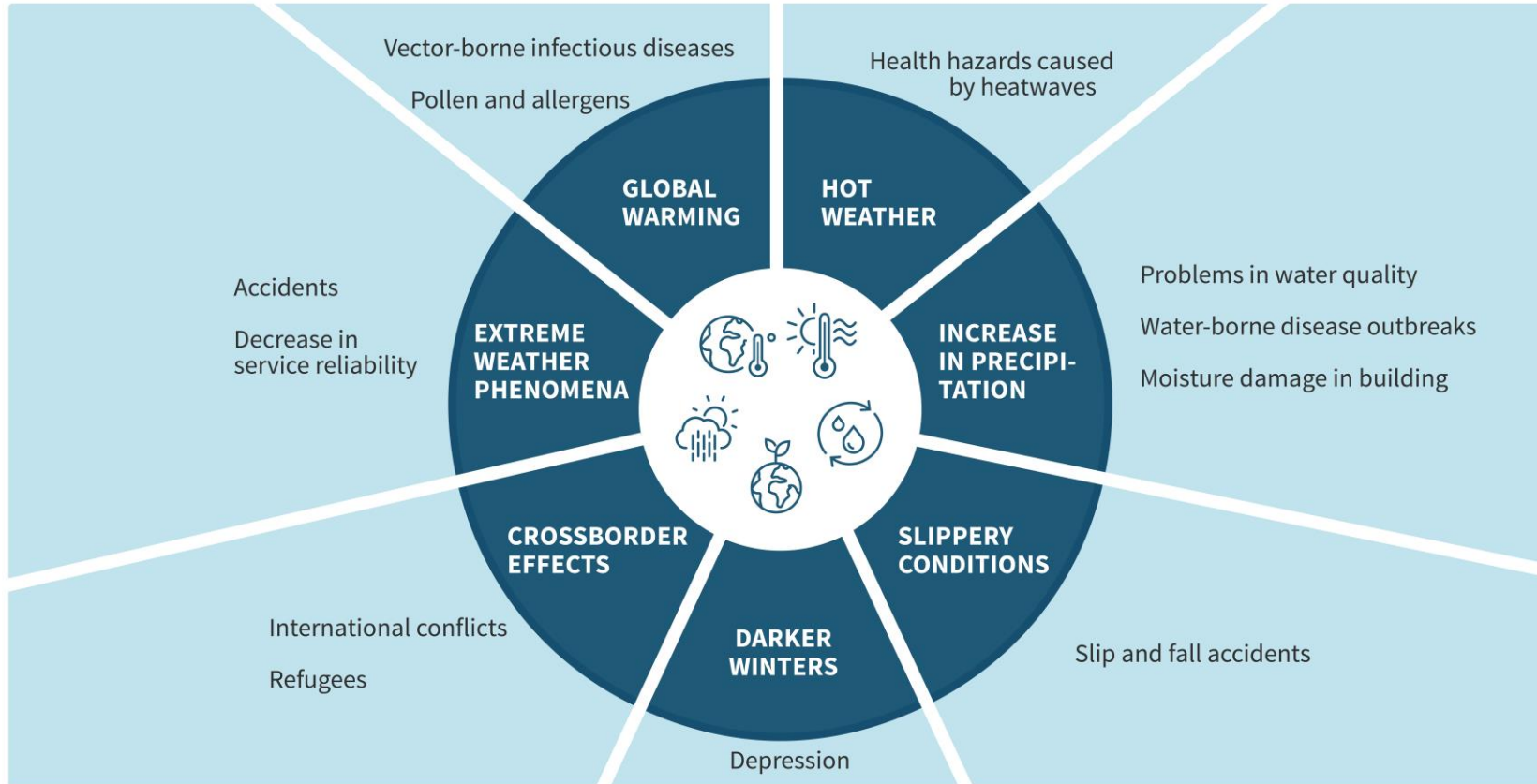


# Good Practice Finland – Climate Change Adaptation Plan and Sustainable Healthcare

- Climate change and health
- Climate change adaptation
- Climate Change Adaptation Plan in Finland
- Planetary Health
- Sustainable Healthcare in Finland



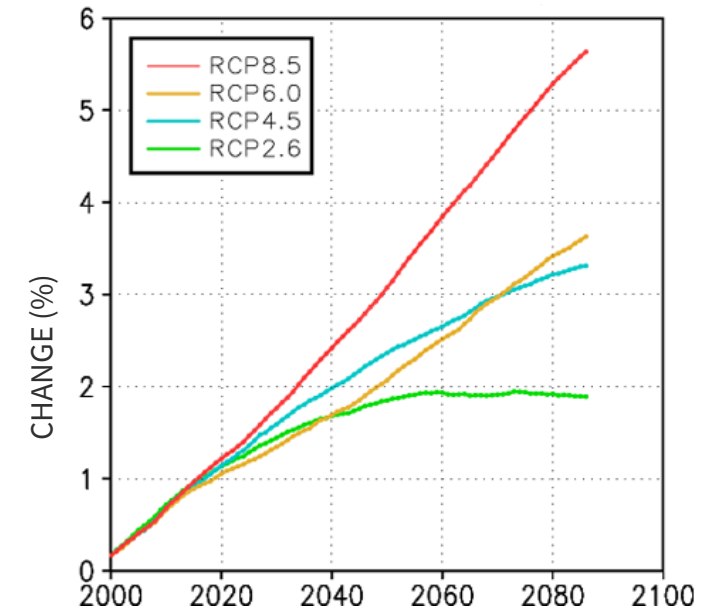
# Climate change and health



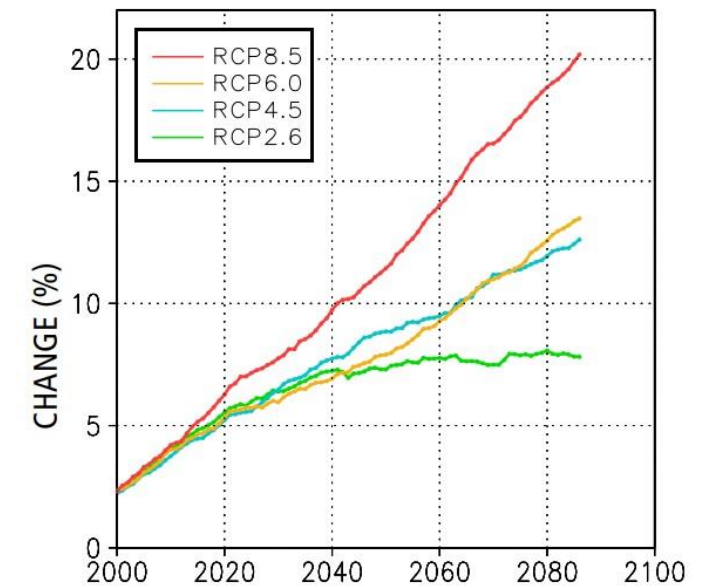
Source: THL 2023



ANNUAL MEAN TEMPERATURE, FINLAND



ANNUAL MEAN PRECIPITATION, FINLAND





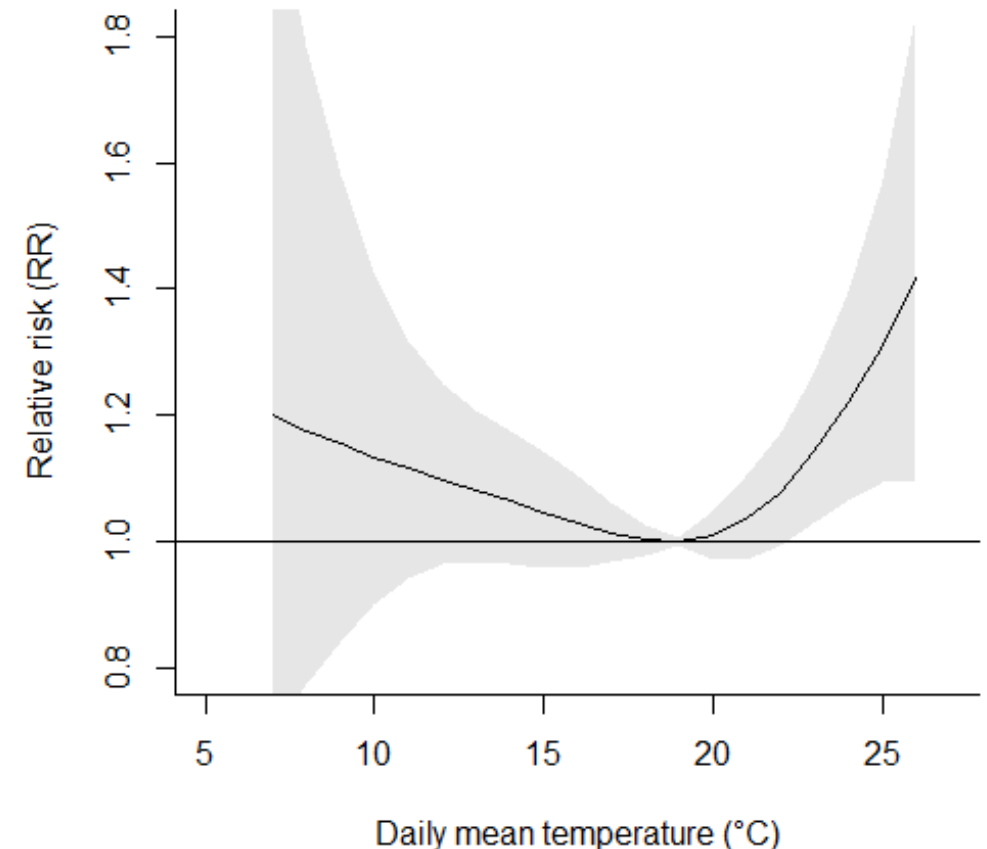
# Impacts on the health care services

- Possible changes in the operating environment or sudden shocks
  - Electricity and digital infrastructure, water safety, safe (patient) transportation
  - Emergency supply – medications and other supply – knock-on effects related to international circumstances
- Gradually increasing impacts
  - Need for up-to-date knowledge on new/emerging diseases
  - Increasing disease burden, e.g., from hot weather due to aging population



# Mortality effect of heatwaves in Finland

- During heatwave days, mortality increases in average by 10 %
  - Effects mainly in the elderly ( $\geq 65$  years)
  - Mortality increases in homes and in health and social care facilities
- Cumulative mortality estimates over a 3-week lag period even higher
  - 14 % in the whole population
  - 21 % in the elderly ( $\geq 65$  years)
- A prolonged (3–4 week) nationwide heatwave may cause several hundred deaths



Daily mean temperature and mortality in age group  $\geq 65$  in June–August 2001–2018

# Slip and fall accidents when temperature increases

- The temperature varies on both sides of zero degrees increases "skulls weather" → increases the risk of slipping
- Tens of thousands of accidents every winter
- Accidents among working-age people incur significant financial costs
- In the elderly, accidents are more often serious
- Slip accidents occasionally lead to overcrowding in the healthcare emergency room

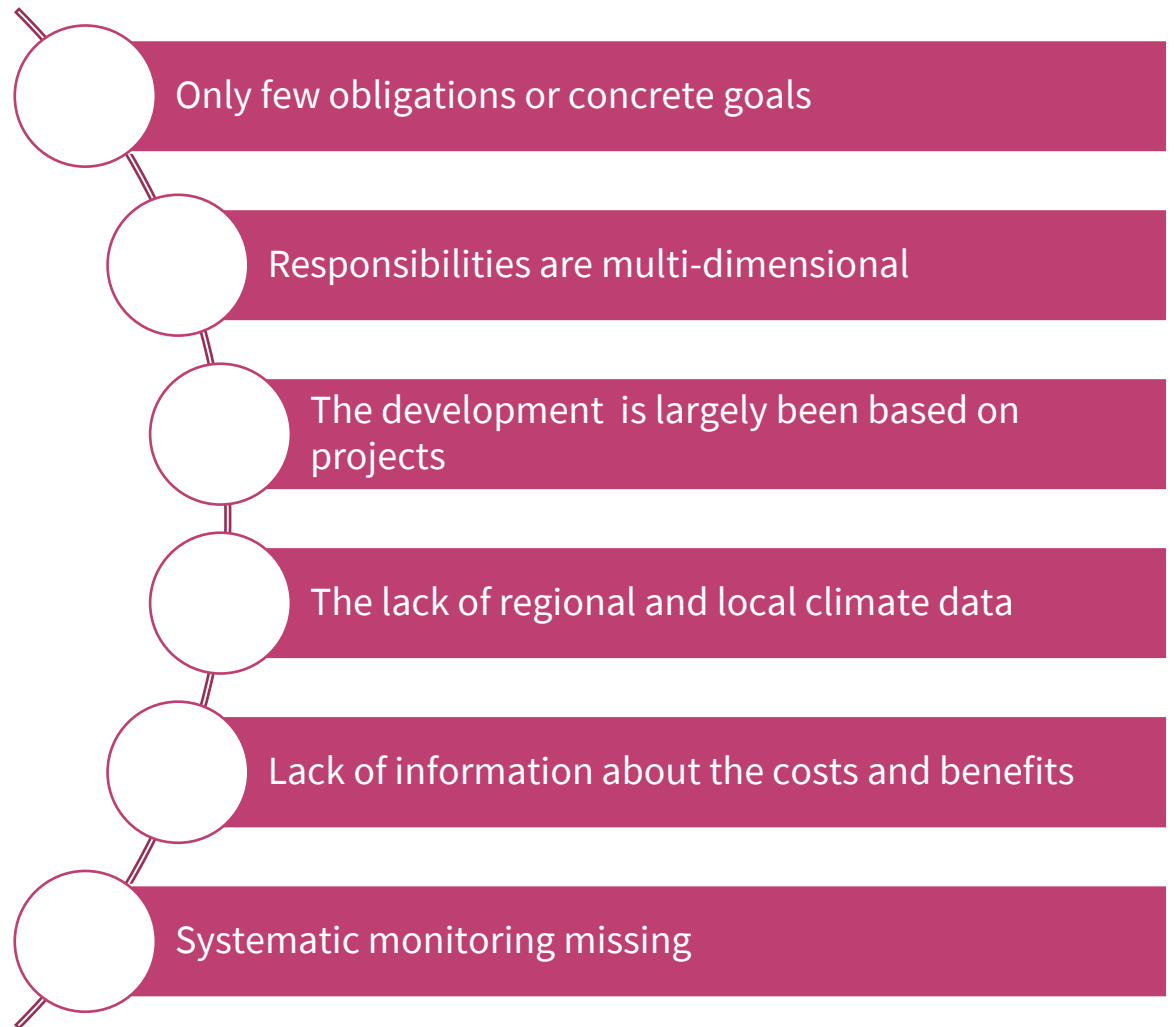
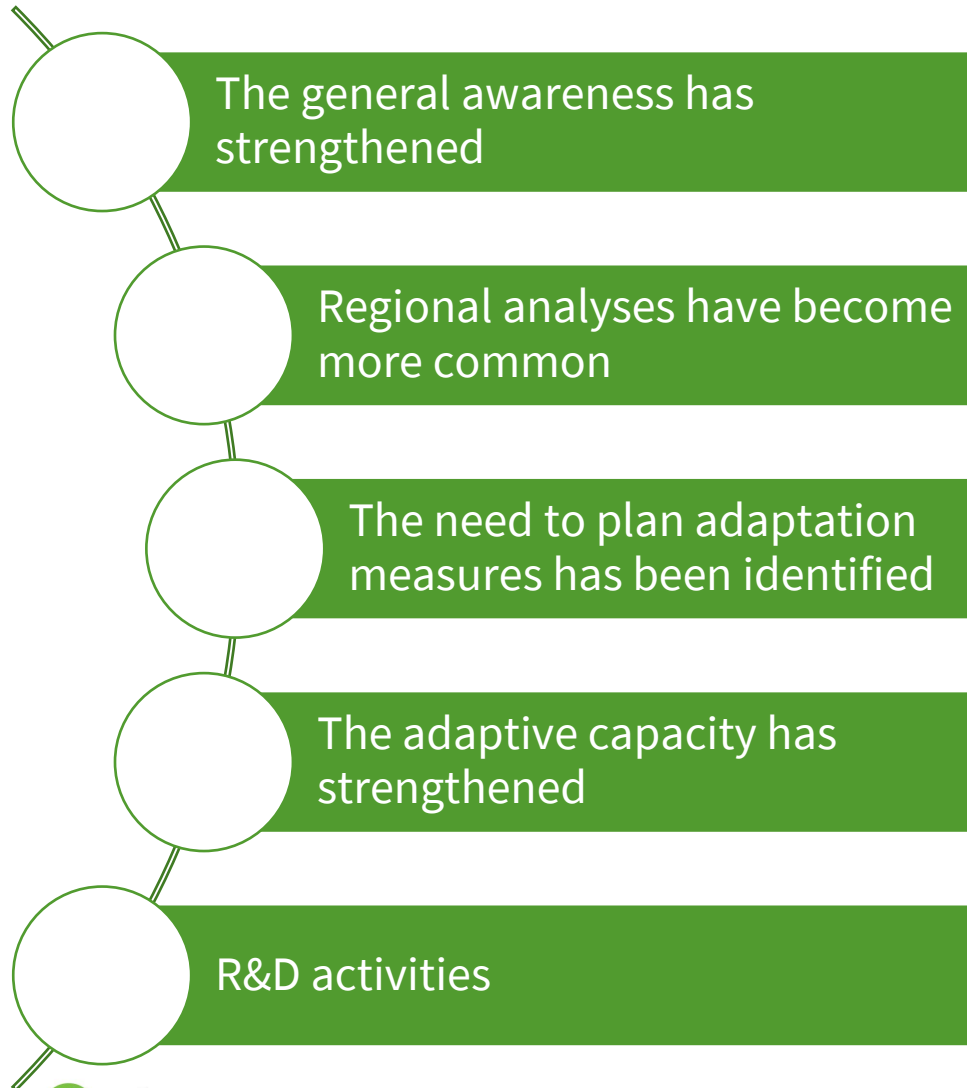


# The national climate change adaptation plan KISS2030

- The national climate change adaptation plan is part of the climate political planning system according to the Climate Act
- The plan was given to the parliament as a report from the Government
  - Current state: Plan has been presented to the Finnish Government and the draft is available: <https://mmm.fi/paatokset/paatos?decisionId=0900908f807fc600>
- Includes risk and vulnerability review, administrative adaptation action programs and cross-border and regional reviews
- Up-to-dateness and the need for possible additional measures should be assessed in the future by terms of government (climate act 423/2022)

# Strengths and challenges in adaptation

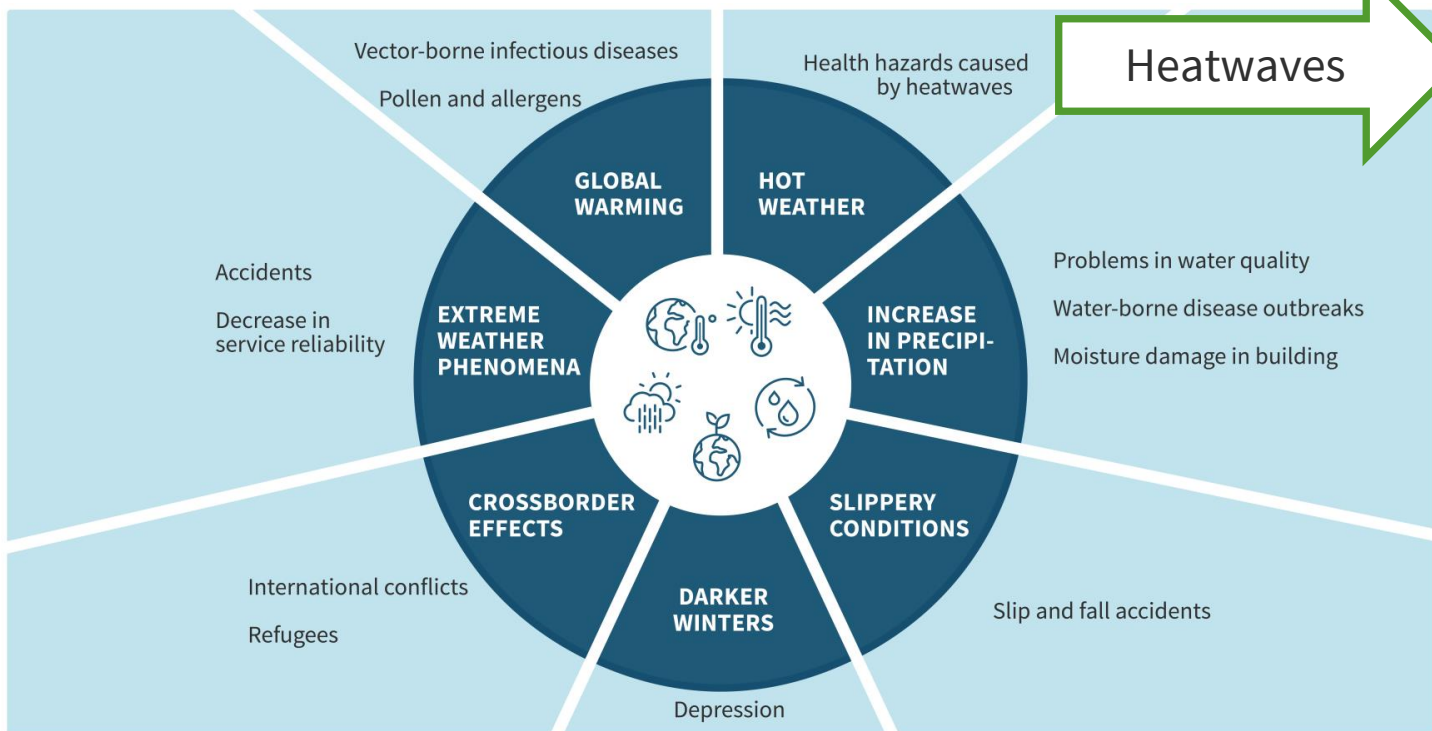
<https://tietokayttoon.fi/-/kokonaisarviointi-kansallisen-ilmastonmuutokseen-sopeutumispolitiikan-toimeenpanosta-kokosopu>





# The national climate change adaptation plan in Finland

## Health effects of climate change in Finland



Heatwaves

### Example of Aims (Aim 14: Health protection)

The health hazards of heat have been identified and adaptation to them at different levels of government and monitoring will be developed by 2030

- A national action plan for preventing health hazards of heat waves
- A heat mortality monitoring system will be established, which can be used to monitor deaths caused by heat weekly during the summer
- The action limits related to the thermal conditions of the housing health regulation will be revised

# Ministry of social affairs and health climate change adaption plan

Find out the current state of adaptation and the structures that support it in Finland

Identify current and new adaptation measures in the domain of health and well-being

Concreting and clarifying the measures presented in the national adaptation strategy in STM's administrative area of responsibilities

Implementation of the adaptation plan for social and healthcare providers

Mainstreaming adaptation to climate change by increasing risk awareness

<https://julkaisut.valtioneuvos.to.fi/handle/10024/163643>



## Ilmastonmuutos sosiaali- ja terveyssektorilla

Sosiaali- ja terveysministeriön  
ilmastonmuutokseen sopeutumisen  
suunnitelma (2021–2031)

# Examples of adaptation measures – Health care

Map the **changing service needs** due to climate change

Map the **information needs** of healthcare workers related to the health effects of climate change

**Training** of healthcare workers to health effects of climate change

To investigate the healthcare systems' **preparedness to extreme weather events**

Map the **sensitivity of vulnerable population groups**

**Promote adaptation measures** for vulnerable population groups

**Map impact scenarios** related to healthcare and health based on climate scenarios

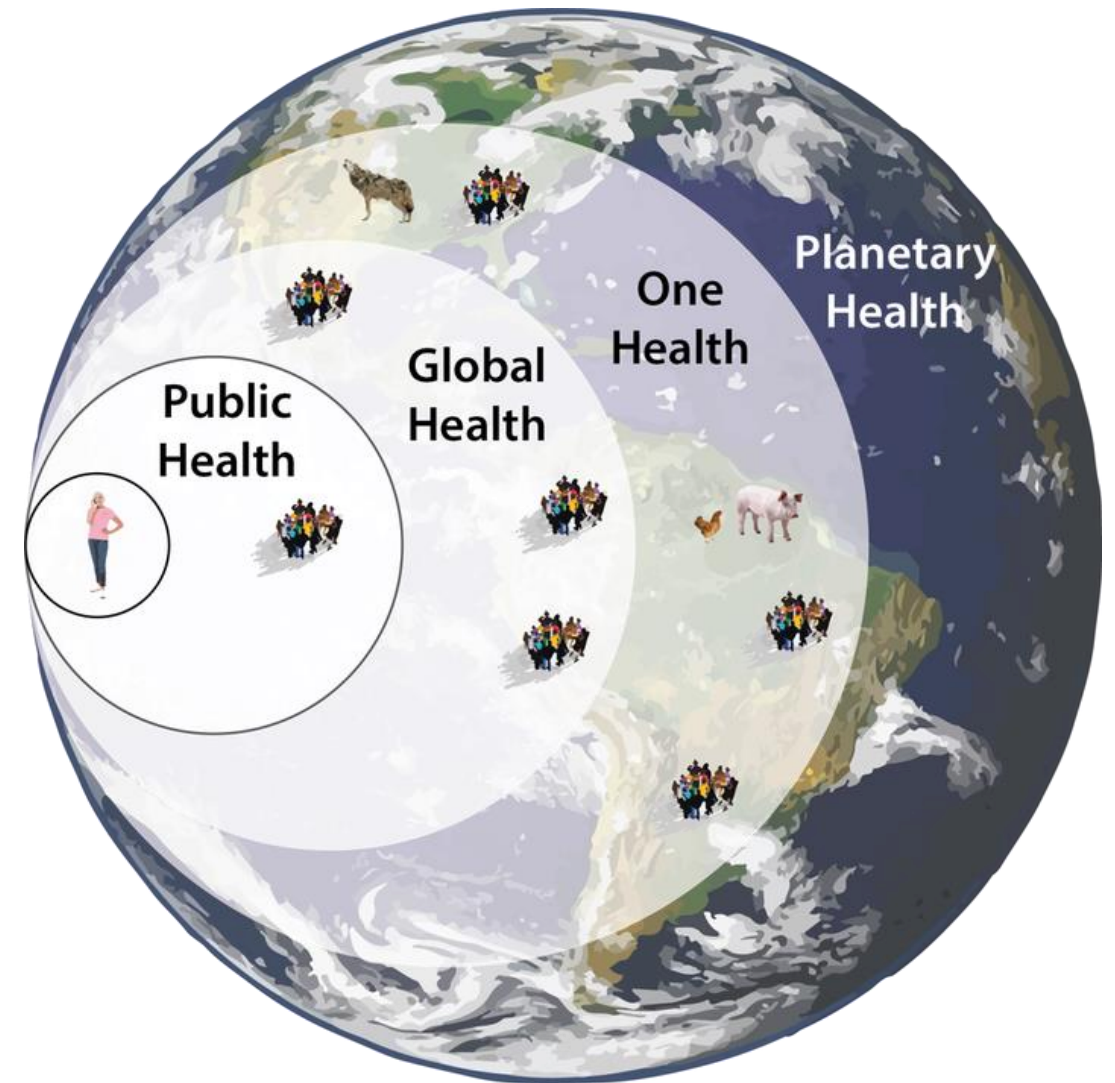
**Cost-effectiveness assessment** of healthcare adaptation measures

**Creating good practises and plans** for social and health care units on adapting to and mitigating climate change



# Planetary Health

- Planetary health explores the connections between human health and the well-being of Earth's living and non-living ecosystems with which human life is intertwined
  - The term “planetary health” is relatively new, as it was first introduced in a 2014 commentary in the Lancet



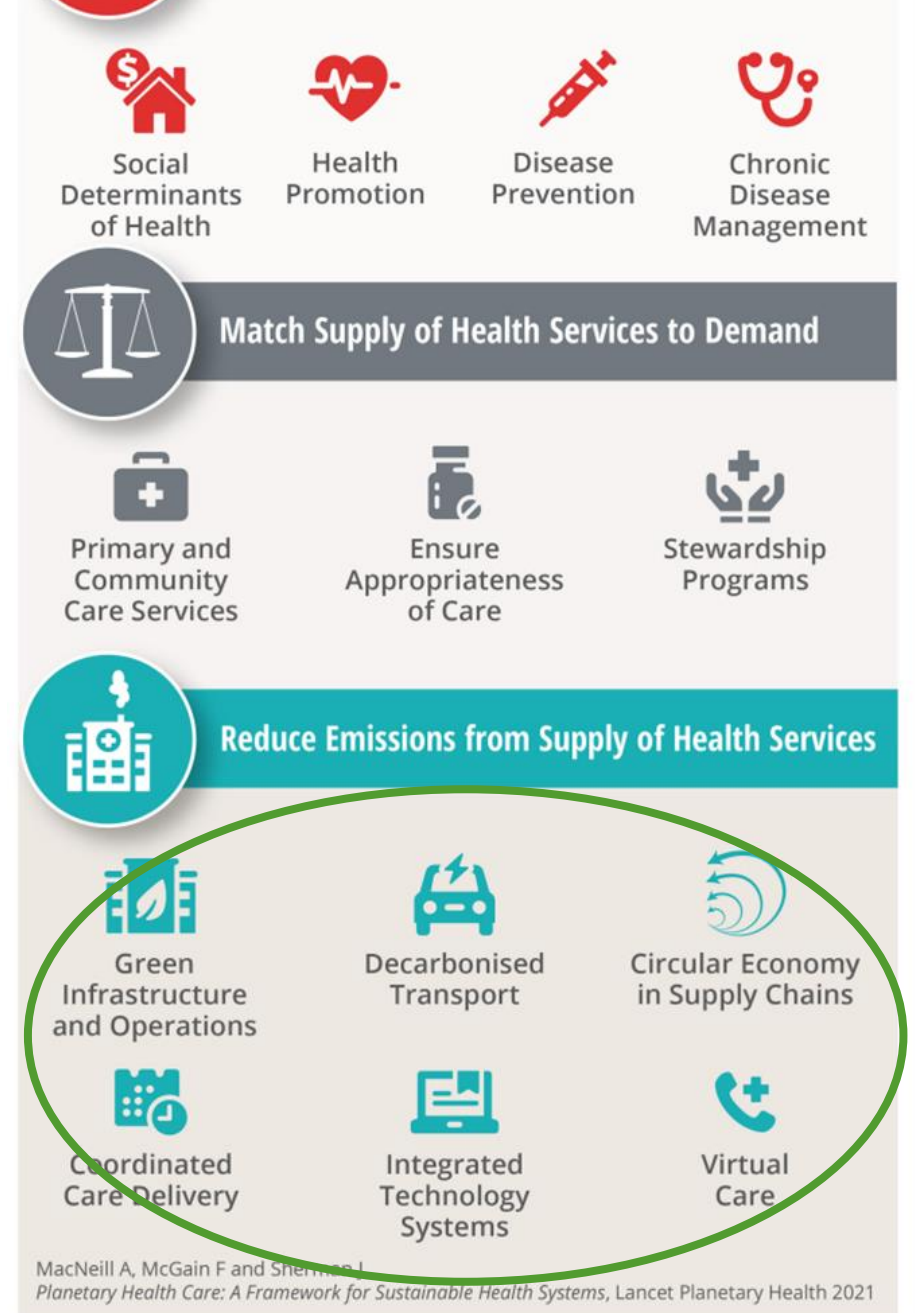
<https://www.forbes.com/sites/johndrake/2021/04/22/what-is-planetary-health/>

# Planetary health care: a framework for sustainable health systems

- Estimations of the **carbon dioxide emissions** of social and health care
- Determine the **goals and measures** of ecologically sustainable social and health care in Finland in order to clarify the starting point.
- Investigating **steering mechanisms** for ecologically sustainable social and health care and their functionality

→ defining the monitoring and steering mechanisms at the national level to **guide ecologically sustainable social and health care in Finland**

- Examples of **indicators** for welfare areas in Finland
  - **Carbon footprint** by emission source
  - **CO2 emissions** of used electricity and other energy/year
  - Additional **training** on ecological and sustainable work practices is available for personnel
  - **Low emissions** of purchased vehicles and transport contracts
  - **Waste recycling** rate By Saija Iivonen et al. 2023 THL

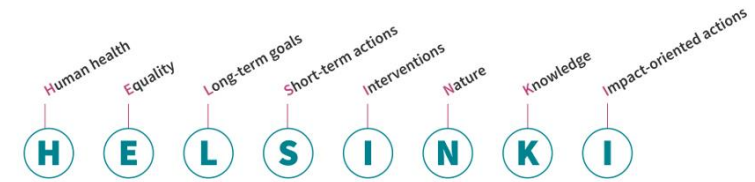


Ref: MacNeill et al. 2021: Planetary health care: a framework for sustainable health systems. Lancet 5: E66-E68.

# Planetary health practises in Finland –

- Helsinki Declaration on Planetary Health
- Nature Step to Health  
Lahti Regional Health and Environment Programme 2022–2032
  - Promoting healthier and more sustainable nutrition
  - Promoting active mobility and physical activity
  - Creating more healthy and sustainable living environments
  - Promoting exposure to nature and improving the connection with nature
- Education, e.g:
  - Planetary Wellbeing courses at the University of Jyväskylä
  - A planetary health course for medical faculty (and other) in the University of Helsinki
  - A summer school on planetary health University of Helsinki and LUT University

**Helsinki declaration** to protect human and planetary health for 2020's



## MOOC 1: Introduction to planetary well-being

Available for study now on [onlinecourses.jyu.fi](https://onlinecourses.jyu.fi)  
Note: This course is a prerequisite for courses 2–4!

[Sign up for the course >>](#)



## MOOC 3: Good life and planetary well-being

Available for study now on [online](#)

[Sign up for the course >>](#)



## MOOC 2: System well-being

Available for study now on [online](#)



Planetary health doctor Hanna Haveri in Finland:

” As a Planetary Health doctor, my task is, for example, to promote exercise, healthy nutrition and contact with nature.”



# References

- Policy brief: How to strengthen Finland's capacity to adapt to climate change? <https://tietokayttoon.fi/julkaisu?pubid=42102>
- Adaptation to climate change in Finland : Current state and future prospects <https://julkaisut.valtioneuvosto.fi/handle/10024/164414>
- Climate change in the healthcare and social welfare sector : Climate change adaptation plan of Ministry of Social Affairs and Health (2021–2031) <https://julkaisut.valtioneuvosto.fi/handle/10024/163643>
- Helsinki Declaration to protect human and planetary health for 2020's <https://urn.fi/URN:NBN:fi-fe202001283715>

# Thank you!

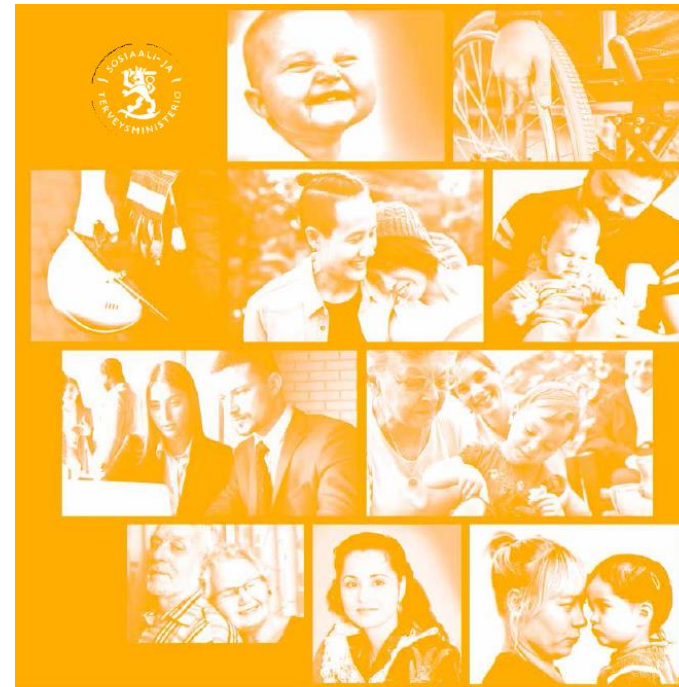
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More information about climate change and health:  
[thl.fi/en/web/environmental-health/climate-change](https://thl.fi/en/web/environmental-health/climate-change)  
[thl.fi/helle](https://thl.fi/helle)

<https://julkaisut.valtioneuvosto.fi/handle/10024/163643>



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SOSIAALI- JA TERVEYSMINISTERIÖN JULKAISUJA 2021:20

