

Providing climate knowledge for decision-makers – Insights from Finland

22/10/2018 | GCOS Science Day, Helsinki

Dr. Antti Pelkonen, Science Specialist
Prime Minister's Office

@AnttiPelkonen

Providing climate knowledge for decision-makers – Insights from Finland

- Focus on two research funding instruments
- What kind of climate-related knowledge has been delivered to policy-makers?
 - What have been the government's knowledge needs in climate-related questions?
 - What *types* of climate-related knowledge decision-makers look after?

Since 2014, two dedicated research funding instruments to enhance evidence-informed decision-making...

GOVERNMENT'S ANALYSIS,
ASSESSMENT AND RESEARCH ACTIVITIES



... intended to create **a novel mode of operation** emphasizing continuous interaction between producers and users of knowledge across administrative, disciplinary and organisational boundaries.

Government's analysis, assessment and research activity

- Co-ordinated at the Prime Minister's Office
- Short-term project funding (often 6-12 months), intended to serve direct needs of governmental decision-making
- Steered by government's annual analysis, assessment and research plan
- Annual budget of ca. 10 million €
- Very broad scope of topics covered
- Strong emphasis on active interaction and utilisation



Government's analysis, assessment and research plan 2019

Council of State Decision

« Valtioneuvoston yleisistunto 20.9.2018 13.00

Valtioneuvoston kanslia

Valtioneuvoston selvitys- ja tutkimussuunnitelma 2019

Ministeri

Anu Vehviläinen

Esittelijä

Timo Lankinen, Alivaltiosihteeri p.+35 8295160300

Asia

Valtioneuvoston päätöksentekoa tukeva selvitys- ja tutkimussuunnitelma sisältää momentilta 23.01.22 (valtioneuvoston tutkimus- ja selvitystoiminta, 10,5 milj. euroa, siirtomääräraha 3 vuotta) kustannettavat selvitys- ja tutkimusteemat, valmistelu- ja ohjausvastuut, sekä kustannusarviot. Valtioneuvoston päätöksentekoa tukevan selvitys- ja tutkimussuunnitelman tavoitteena on varmistaa vahva ja horisontaalinen tietopohja yhteiskunnallisen päätöksenteon tueksi ja luoda perusta selvitys- ja tutkimustiedon systemaattiselle ja laaja-alaiselle käytölle valtioneuvoston ja sen ministeriöiden päätöksenteossa. Selvitys- ja tutkimussuunnitelma koostuu seuraavista painopistealueista: 1) hyvinvointi, yhdenvertaisuus ja osallisuus, 2) ympäristö, luonnonvarat ja puhtaat ratkaisut, 3) kestävästi kilpailukykyinen Suomi, 4) kansallinen ja globaali turvallisuus 5) kestävä alue- ja kaupunkikehitys, 6)

- 47 research topics, 4 topics that are specified later
- 3 climate-related topics:
 - Adaptation of Sami Culture to Climate Change
 - Cost-benefit Assessment of National Emissions Reduction Actions
 - Impact assessment of the Renewable energy directive (RED II)

Climate-related governmental knowledge needs 2014-2019

- 24 projects that directly relate to climate issues
- Majority of the projects analyse the impacts of different policies, policy options and actions on the level of greenhouse gas emissions



Climate-related governmental knowledge needs 2014-2019 – Focus (1/2)

- 1) Climate policy and climate change (policy-oriented studies) (7)
 - Risks and risk management related to climate change, adaptation to climate change, Paris agreement and its impact on Finland, international comparison of national impact assessments on EU 2030 energy and climate framework
- 2) National emission reductions (totality) (3)
 - National energy and climate strategy, cost-effectiveness of policy actions
- 3) Emissions in the transport sector (3)
 - Emission reductions: public transport and other modes of transportation, urban planning, biofuels, electric and gas-fuelled vehicles etc.

Climate-related governmental knowledge needs 2014-2019 – Focus (2/2)

- 4) Land use, land use change and forestry (LULUCF) (3)
 - Emissions, carbon sinks, mostly impact assessments
- 5) Energy production (7)
 - Electricity and heat production sector, renewables, distributed energy production, bioenergy, wind energy
- 6) Food and eating – Climate impacts of food wastage and eating (1)

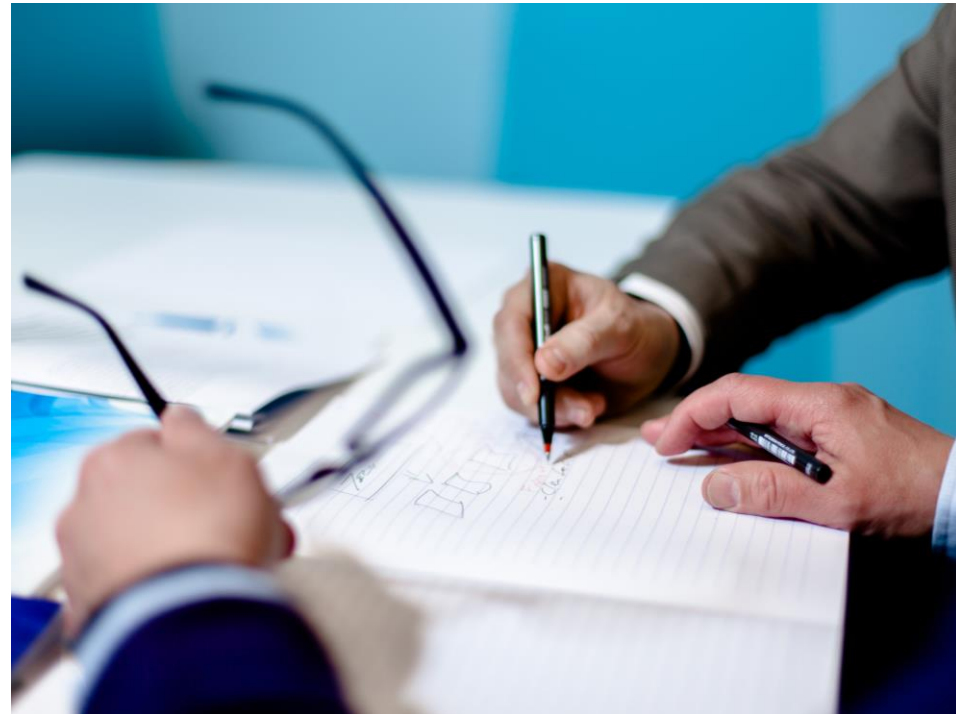
In addition, a number of projects (~15) related to bioeconomy, circular economy and sustainable development with a connection to climate issues

Types of knowledge production in climate-related projects

- 1) Impact assessments (14)
 - Ex ante impact assessment of national policy (7)
 - Ex ante impact assessment of EU's policy's impact on Finland (3)
 - Ex post impact assessment (1)
 - Broader or longer term forward-looking scenario-based impact assessment (3)
- 2) "State of play" analysis (6)
- 3) Policy analysis & international comparison (2)
- 4) Cost benefit analysis (1)
- 5) Indicator development (1)

Utilisation in policy-making

- In general terms, projects' results are largely utilised in decision-making: preparation of new policies and legislation, design of new steering mechanisms, background material to negotiations etc.
- Climate-related knowledge used e.g. in:
 - The preparation of National Energy and Climate Strategy 2030
 - Design of Medium-term Climate Change Plan for 2030
 - Preparation of EU standpoints in international climate negotiations
 - Preparation of national standpoints in EU negotiations



Strategic Research

- Solution-driven, long-term, programme-based academic research
- Seeks to provide solutions to fundamental social challenges.
- Long-term project funding (5-6 years)
- Annual funding appropriation 55 M eur
- Strategic Research Programmes with ca 250 research groups involved
- Current portfolio ca 200 M eur



Strategic Research Programmes with focus on climate

- **A Climate-Neutral and Resource-Scarce Finland (2015-2021), e.g.:**
 - Transition to a Resource Efficient and Climate Neutral Electricity System (EL-TRAN)
 - Sustainable, Climate-Neutral and Resource-Efficient Forest-Based Bioeconomy (FORBIO)
 - Novel Protein Sources for Food Security and Climate (ScenoProt)
- **Adaptation and Resilience for Sustainable Growth (2018-2023), e.g.:**
 - Novel Soil Management Practices – Key for Sustainable Bioeconomy and Climate Change Mitigation (SOMPA)
 - Integrated Biodiversity Conservation and Carbon Sequestration in the Changing Environment (IBC-CARBON)
 - Creative Adaptation to Wicked Socio-Environmental Disruptions (WISE)
- Individual projects in other programmes, such as **Smart Energy Transition (SET)** project

Thank you!

Antti.Pelkonen@vnk.fi

@AnttiPelkonen



Government's analysis, assessment and research activity: Types of knowledge production

	Nature of the knowledge produced	Typical research methods and data
1	Evaluations and impact assessments (ex ante, ex post, monitoring)	Most often quantitative data, but often also qualitative
2	State-of-play analyses	Multitple types of data. Two main types: analyses that a) require the collection of new empirical data b) rely on existing research material (meta-analyses)
3	Broader analyses aiming to increase understanding of the phenomenon	Multitple types of data.
4	Cost and cost-benefit analyses (cost effectiveness)	Primarily quantitative data Modelling
5	International comparisons	Qualitative, often based on previous research.
6	Foresight and forward-looking studies	Primarily qualitative, but can also be quantitative
7	Identification and analysis of good practices	Qualitative

Use of Scientific Evidence in Decision-Making – Finnish Landscape

Other "players": interest organisations, academies of science, science organisations, science communication consultancies, NGOs, media etc.

Producers of knowledge (domestic)

Research institutes

- Relat. large state insitute sector; main task to provide research to support policy
- Cuts in government funding for the institute sector

Universities

- University reform (2010): more autonomy, but more interaction with the society

Firms and other

- Consultancies, think thanks, etc.
- Increasing number of various types of think thanks (party-linked and other)

Dedicated funding instruments

Sector specific scientific advisory mechanisms

Intermediary organisations and fora

Committees, working groups, etc.

"Brokers"

- Government's analysis, assessment and research activity
- Strategic Research

- Finnish Climate Change Panel
- Economic Policy Council
- Scientific Advisory Board for Defence
- Council of Regulatory Impact Analysis

- The Society of Scientists and Parliament Members TUTKAS
- Forum for Environmental Information

- Committees (up until 2002)
- Working groups
- Individual rapporteurs

Users of knowledge at different levels of decision-making

Parliament, Government, city and municipal councils, officials, etc, etc.

- No governmental chief scientific advisor
- The role of academies of science less important than in certain other countries
- Status and organisation of reseach issues differs across ministries