



Forskningsrådet Formas

ENVIROMIS 2006, Tomsk, Russia, 1-8 July 2006
Formas and Climate Change Research



Björn Sellberg, 4 July 2006



Background

The Swedish Research Council Formas

- Governmental Mandate to Co-ordinate Climate Change Research with:

- § Swedish Research Council
- § SEPA (Swedish Environmental Protection Agency)
- § VINNOVA (Swedish Governmental Agency for Innovation Systems)
- § Swedish National Space Board
- § MISTRA
- § STEM (Swedish Energy Agency)
- § SMHI (Swedish Meteorological and Hydrological Institute)
- § SIDA (Swedish Agency for International Development)
- § Formas (Secretariat and Co-ordination)



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Background (con't): Governmental Reports 2002, 2003. Summary

§ Additional 10 M€/a for research on Climate Change focusing:

§ Processes for Climate Change

§ Greenhouse gas balance

§ Effects/Impacts on various Ecosystems

§ Impacts on Society's infrasystems and need for adaptation

§ Secretariat for Co-ordination of Swedish Climate research

§ Support to the Centre on Regional Modelling

§ Special Support to developing Countries



Ongoing Projects Overview

§ Three parts – In total 74 projects, 11.2 M€

Bottom up projects 58

Programme: "Climate 2004" 15

Support of a Researcher 2003 – 2007;

in cooperation with the regional

Climate modelling Centre 1



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Ongoing Projects (themes): 74 ; 11.2 M€;
(univ)

Sea, Snow, Ice, Atmosphere (4)	10;	1.9 M€
Greenhouse Gas balances (4)	10;	2.0 M€
Impacts/effects on various ecosystems (8)	14;	1.8 M€
Effects on Community Infrastructure (6)	10;	1.7 M€
Mitigation AND Adaptation (9)	13;	2.2 M€
Systematic Monitoring (5)	7;	1.6 M€



Ongoing - Special Call: Climate 2004

1.1 M€/a for 3 years

§ Green house gas balances – ecosystems	8
§ Impacts of Climate Change on ecosystems and infrastructure	3 + 2
§ Need of adaptation – agriculture and society	2



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Ongoing: Research position: 2003 - 2007

§ CALL: "Climate Change and interactions with the Biosphere"

§ Support for 2 + 2 years from July 1, 2003

§ Total budget: 0.4 M€

§ Assoc. Prof Benjamin Smith, Lund University



Today / Future Common Call 2006

Swedish Government – wishes to strengthen research for the environment and sustainable development – (Governmental proposal 2005);

Development of a National Programme on Climate research

- § Four financers in a Joint Climate Venture: Joint Call launched Spring 2006
- § Budget: Up to 15 M€ for three years
- § Time of the projects: 2007 – 2009
- § Decisions: November and December 2006



Common Call 2006(con't) Basic and Applied Research

§ Basic Conditions and Objectives:

- 1. *Long term Basic research***
- 2. *Interdisciplinary Initiatives*** – social sciences, humanities and educational science – natural sciences and technology
- 3. *International Co-operation***



Common Call 2006(con't)

Participating Financers and their main responsibilities:

- *Formas (82 applications)*

 - Greenhouse gas balances

 - Effects on various ecosystems, society and infrastructure

 - Adaptation; Environment, Agriculture, Forestry, Construction and Urban Planning

- *The Swedish Research Council (120 applications)*

 - Basic research; Climate systems and processes.

 - Paleoclimatology, humanities, social conditions, attitude conditioning and education



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Common Call 2006 (con't)

§ *The Swedish Governmental Agency for Innovation Systems
(closing date 16 August)*

R&D to improve Observation Systems

Reducing emissions of greenhouse gases

Emphasis on Needs-driven R&D

§ *The Swedish National Space Board (19 applications)*

Research Infrastructure – Observation satellites, etc



Information exchange / International Collaboration (Overview)

- § Formas is a Partner in the **ERANET CIRCLE** (separate slide)
- § **Conference** support (Ex): ESF-JSPS Frontier Science Conference series for Young researchers 24-27 June 2006
- § Member and Support to the **IIASA** = International Institute for Applied Systems Analysis, Austria
 - § Active member in **IGFA** = Int'l group on Funding Agencies. Chair 2003 – 2004
- § Member of **IGBP** = International Geosphere-Biosphere Programme
- § **Three-country Collaboration**: USA, Norway, Sweden (Formas) on Climate Change research in Northern Regions.



EU FP 6: ERA NET CIRCLE

- § Budget 2.7 M€
- § Timeframe: 2005 – 2009
- § Coordinator/Project leader: Martin König, Austrian Federal Environment Agency
- § 17 Organisations involved: AT (2), FI (2), SE (2), GE (2), NL, HU, FR (2), BE, PT, NO, IT, IS. Observer: RU
 - § Concentrate on Research activities on adaptation
- § Goal: Common call for European research projects



Information Exchange/International Collaboration (Overview, con't)

§ International Collaboration on Swedish Infrastructure on Climate research in Polar Regions:

- Research Station; Abisko, N. Sweden. Subarctic ecosystems
- Research Ship; Oden (Powerful icebreaker)
- Research Station; Tarfala, N. Sweden. Glaciers
- Esrang, N. Sweden; Research Satellites and Ballons
- Research Infrastructure on Antarctica
- Polar Research Committee preparing collaboration for the International Polar Year with start 2007



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International Collaboration - Mitigation

OECD/IEA International Energy Agency

Formas is active in 4 Implementing Agreements:

- § Energy Conservation in Building and Community Systems
- § Solar Heating and Cooling
- § Heat Pumping Programme
- § Energy Conservation through Energy Storage



References

- § Governmental reports on Climate Change Research Formas, 2002 and 2003. Swedish only
- § Formas input to IPCC's report Swedish National Communication (NC4) (2004, Swedish)
- § The Swedish Government's proposal on future research during the period 2006 – 2008. (2005). Swedish only.
- § Research projects 2006: Climate related research (Formas 2006)
- § Research on sustainable development:
FOCUSING ON CLIMATE (Formas 2006)



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THANK YOU FOR YOUR ATTENTION !

§ Questions and Comments?

§ Further information: www.formas.se