Influence the circularity mission of the next generation Innovation Programs

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Impact Innovation – next generation strategic innovation programs
(SIP 2.0 but not really..)

The Swedish Energy Agency, Formas and Vinnova have been commissioned by the government to design and launch the next generation of strategic innovation programmes.

Within the investment, which goes by the name Impact innovation, up to five actor-driven programs are to be formed and start up in the first quarter of 2024.

The programs must be aimed at one or more overarching societal challenges and require cooperation between a broad constellation of actors.

Impact Innovation – a long term effort

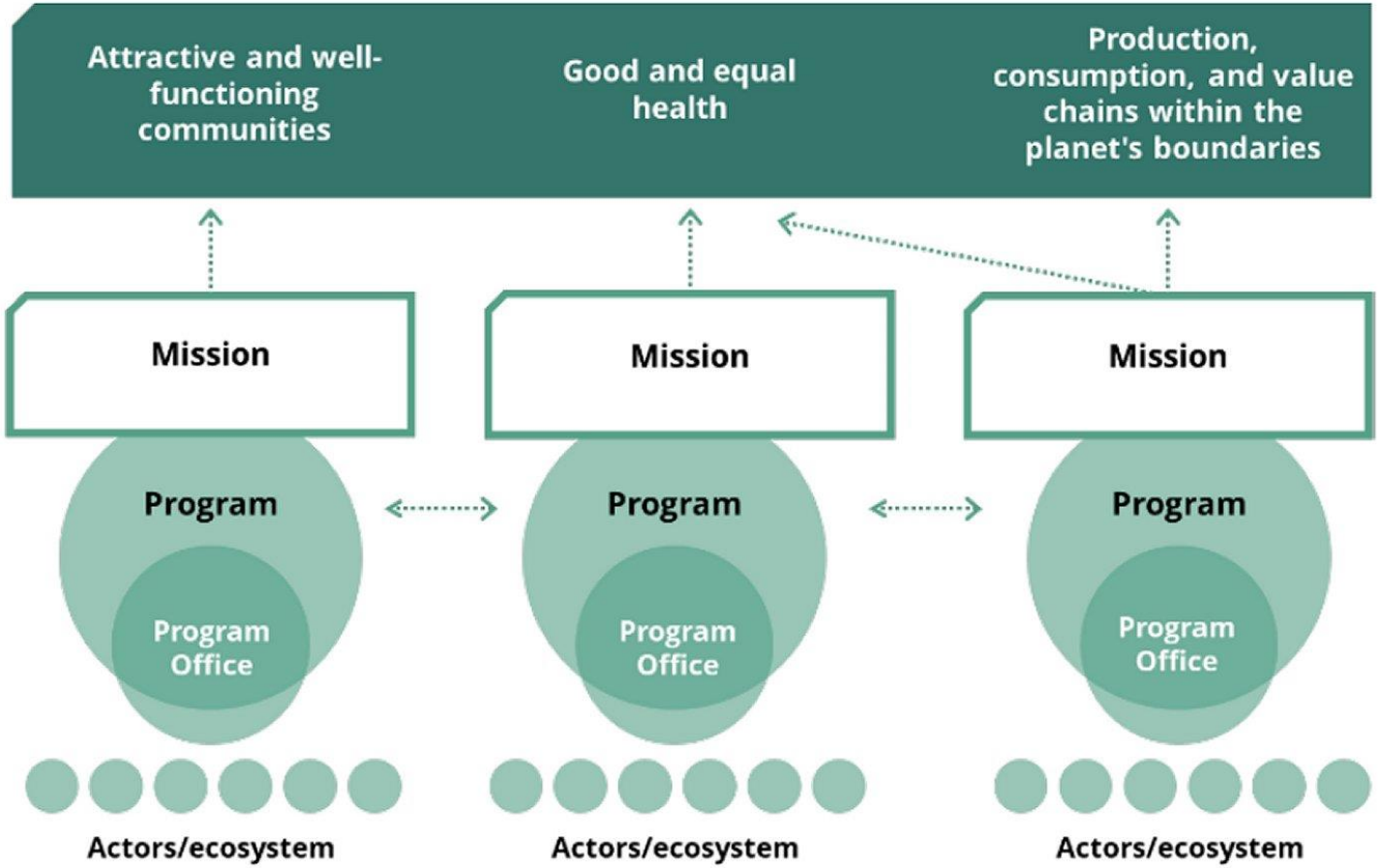
Purpose

Establish programs that relate to three overarching societal challenges:

Attractive and well-functioning communities

Good and equal health

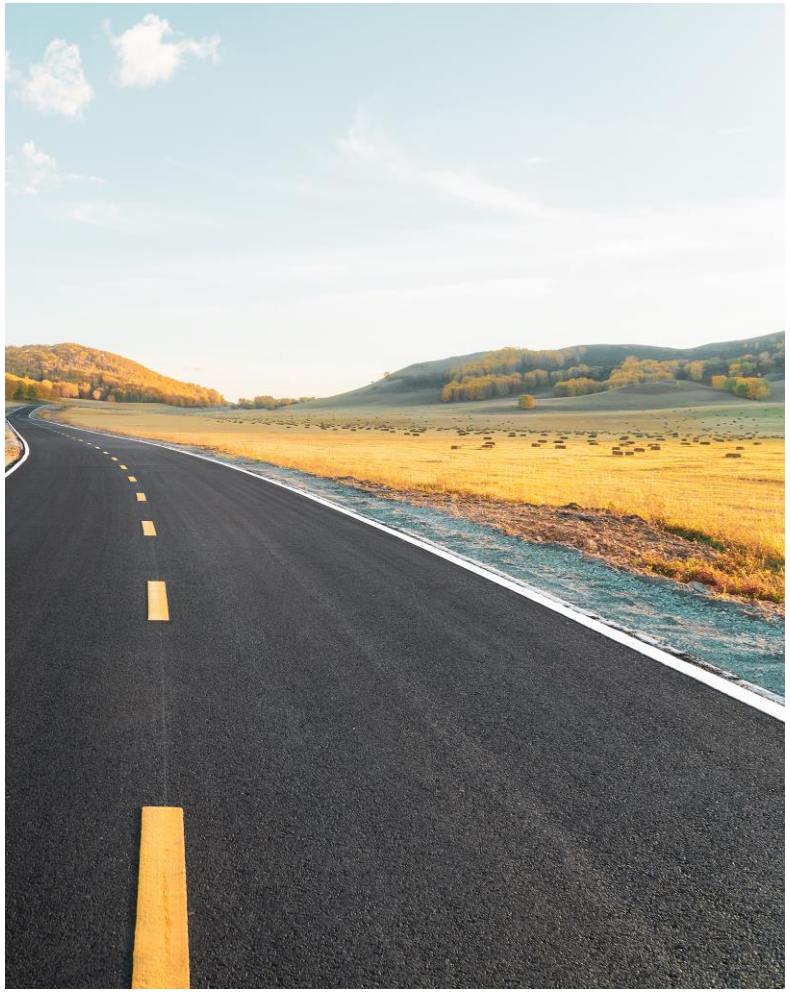
Production, consumption and value chains within the boundaries of the planet



Impact Innovation – system transformation by missions

Mission – Goals that accelerate sustainable transformation for global competitiveness and societal benefit
Mission – Transition goals that are achieved through the cooperation of several sectors
Mission – Bold, ambitious, time bound and measurable

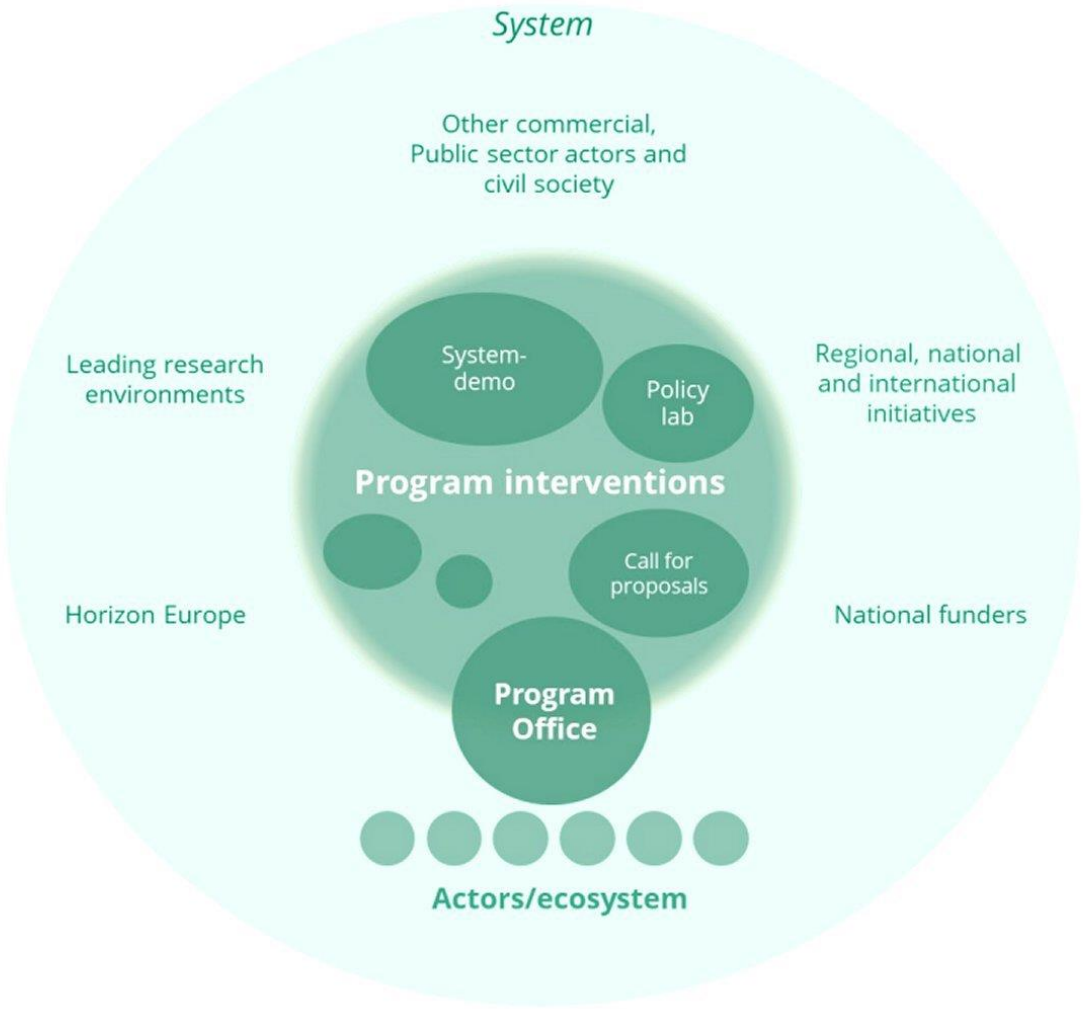
System perspectives for system innovation:
Solutions (methods, techniques, products, processes)
Business models Supporting structures/infrastructure
Enabling policy and regulations
Culture values and norms
International cutting-edge research and competence
Mobilization of cross-border actor networks



Impact Innovation – Program Office

Summary

Office size: SEK 10-20M/year, 50% financing of the coordinator's eligible costs, 10 years.
Program size: Reserves SEK 50-150 million/year per program
Mobilize actors for the change you want to achieve
Create forms for coordinating resources and program efforts
Ensure that learning about what works and what doesn't is developed



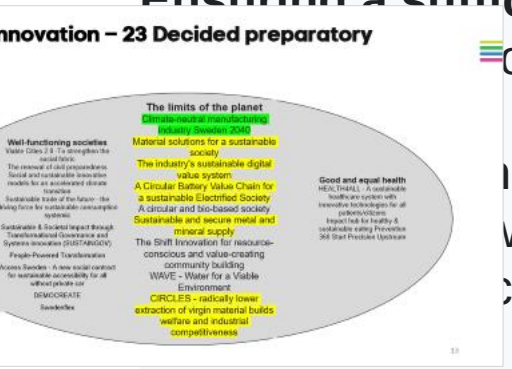
Impact Innovation – preparatory project
Climate-neutral manufacturing industry Sweden 2040

The goal of this study is to produce a proposal for an Impact Innovation program.

The program will lead to a climate-neutral, circular and competitive manufacturing industry that creates attractive jobs and sustainable societies.

The program will use methods that create system changes needed for a competitive industrial system within the climate boundaries.

Impact Innovation – where are we now?



Ensuring a sufficiently broad constellation of actors for the change we, and the ...o bring about

... **"Climate-neutral, circular and competitive manufacturing industry in** ...which includes resources/results from current SIO Production 2030 and ...ctronics System

Workshops are carried out together with well-selected initiatives, to test and evaluate possible collaboration and potential for joint missions:

- **Material solutions for a sustainable society** - focus on metallic materials.
- **The industry's sustainable digital value system** – focuses on the industrial transformation through a connected value system
- **CIRCLES** – an initiative with a focus on materials, fossil-free, circular.

Discussions with important main actors *(as today)*

A possible main mission: **Net Zero Industry**

Fossil free and resource efficient

The most resource efficient and resilient industry by 2040

Towards Net Zero Industry 2050

- **Energy- and resource efficiency;**

Energy- and resource efficiency in the whole eco-system contributing to fossil free energy access when needed.
Data collected and analysed from supply chain to enable continuous improvements.

- **Transparency;**

Transparency of resource usage in all steps of the supply chain.

This requires digital information flow and a significant amount of trust between stakeholders within the value chain.

- **Circularity:**

Business models for circularity that provide value for each stakeholder in the value chain.
The new business models for circularity manages the whole value chain from raw material to end customer and re-supply of materials/components to the producers

Resilient production and products

The most resource efficient and resilient industry by 2040

Towards Net Zero Industry 2050

- **Competence;**

Making technology and production an attractive career-path.
Organisations are diverse and inclusive and offer access to further education – lifelong learning.

- **Cyber-security;**

Smart technology and digital tools to develop innovative products and processes - trusted and robust against threats and malicious behaviour.

- **Flexibility;**

A production system that can transform to diverse needs and also create conditions for products and services to be used from a dual-use perspective, i.e. for use both civilian and in defence.

- **Eco-system;**

Localised eco-systems ensuring capability in the regions as well as built-in redundancy, to ensure responses to new circumstances.

Product parts and raw material used to its maximum life time.

What program activities will lead to impact on circularity?

Networks exist already, such as the Manufacturing R&D Clusters.

How can we together **accelerate the system transfer** to a new, more resource-efficient and circular manufacturing industry system?

Discuss and reflect during your travel home, and send us your input:

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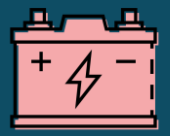

Questions?

SuPr

RI. SE

Project organisation – industry driven

Five work packages:

1. **Development and formulation of Missions**
   Johan Svenningstorp, AB Volvo / Cathrine Helin, ABB
   Coordinator: Heidi Hautajärvi Stenmark,RISE
2. **Development of methods/tools and organisation for a future IIP**
   Stefan Christiernin, Volvo Cars / Monica Ringvik, RISE
   Coordinator: Melinda From, RISE
3. **International outlook and cooperation**
   Anders Caspár, Ericsson / Lena Moestam, AB Volvo
   Coordinator: Johan Stahre, Chalmers
4. **Program application**
   Charlotte Brogren, Alimak /Jannik Henser, Scania
   Coordinator: Boel Wadman, RISE
5. **Project management**
   Mikael Dahlgren, ABB / Pernilla Walkenström, RISE
   Coordinator: Mats Lundin, SuPr-Södertälje Science Park

Project resources, co-ordination and support mainly supplied by RISE and Teknikföretagen

Impact Innovation – 23 Decided preparatory projects