FINANCING INVESTMENTS IN CLEAN TECHNOLOGIES

Project leaders



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PROJECT DESCRIPTION

RESEARCH QUESTIONS

Motivation

 \rightarrow Addressing climate change will require a massive shift of investments towards clean technologies

How can society steer financing towards cleantech investments?

Attracting investments in clean technologies is challenging as cleantech differs from other technologies on two important aspects:

IMPLEMENTATION AND KNOWLEDGE TRANSFER

Activities planned

- \rightarrow Scientific publications in leading economic or interdisciplinary journals
- \rightarrow Presentations at international

SIGNIFICANCE

Scientific significance

- \rightarrow Novel indices of environmental and climate policy uncertainty
- \rightarrow Costs of policy uncertainty on cleantech \rightarrow Advancing knowledge on new financing tools for cleantech



Green materials Clean energy and energy storage



Sustainable transport

and air quality

Water, land

Energy and

resource

efficiency

Recycling

and waste

1. Due to the large dependence of the sector on public support, policy uncertainty – i.e. frequent changes in environmental and climate regulations — is particularly harmful to cleantech investment.

2. Cleantech investors differ from traditional investors: they are of more dispersed, diverse and small-scale nature and may be driven by different (e.g. altruistic) motives.

From these two specific features, we articulate our main research questions:

1. How does climate and environmental policy uncertainty impacts cleantech investments?

2. How can we attract new types of investors into cleantech? What is the effectiveness of new financing instruments (such as VCs and crowdfunding)?

conferences and at policy and professional workshops

- \rightarrow Website, press releases, blog posts and policy briefs
- \rightarrow Final academic workshop and policy forum
- \rightarrow Chapters in the "Startup Panorama" of CleantechAlps
- \rightarrow Regular meetings with implementation partners

Implementation partners

- → Cleantech business sector CleanTech Capital Cleantech Alps Carbon Delta Venture Kick Switzerland global entreprise
- → Financial institutions Emerald Technology Ventures Jadeberg Partners

→ Policy organisations

Practical significance

- \rightarrow Collaboration with partners from the praxis
- \rightarrow Platform to initiate discussion on new funding instruments
- \rightarrow Practical recommendations for better policies

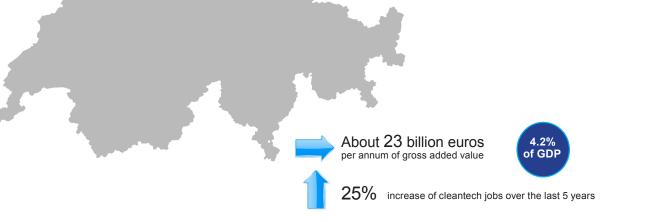
Contribution to NRP73 goals

 \rightarrow To the extent that we find that uncertainty is particularly harmful to cleantech investments, the findings will have implications for **"Module 2**: **Opportunities and Risks**" of the NRP73 by examining how a stable environmental policy regime can help Switzerland attract investors, expand its expertise and develop new export markets in cleantech

 \rightarrow Cleantech investments also offer opportunities for increased growth and competitiveness

AN IMPORTANT AND GROWING PILLAR OF THE ECONOMY

In Switzerland the cleantech sector currently employs... 5,5% of the total workforce



Goals

- \rightarrow Understand how uncertainty about the policy environment impacts cleantech investment
- \rightarrow Understand how new financing models can help attracting investors into cleantech

Work Package 1 Work Package 2 Building novel indicators of Impacts of policy policy uncertainty using: uncertainty on cleantech a) Newspaper-based investments using: a) econometric techniques b) Revision/expiration of combining policy uncertainty index and environmental policy instruments clean investment data (deals, patents, etc) discrete policy experiment on Swiss angel investors

Methodology

index

Work Package 3

capital funding:

analysis

Effectiveness of Venture

a) database of Venture

b) regression discontinuity

Kick startups

Work Package 4 Crowdfunding and warmglow effect in microlending a) cleantech investors on Experiment.com b) analysis of profile of investors

OECD Grenn Growth Knowledge Platform

 \rightarrow By investigating how financing instruments can help to channel investments towards cleantech companies, the results of the project will have implications for **"Module 3**: **Measures and instruments**" of the NPR73. In Switzerland, venture capital investments in cleantech represent less than 4% of the total volume (against 72%) for life science technologies)



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