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Federal Department of the Environment, Transport,
Energy and Communications DETEC
Federal Office for the Environment FOEN
Economics and Innovation Division

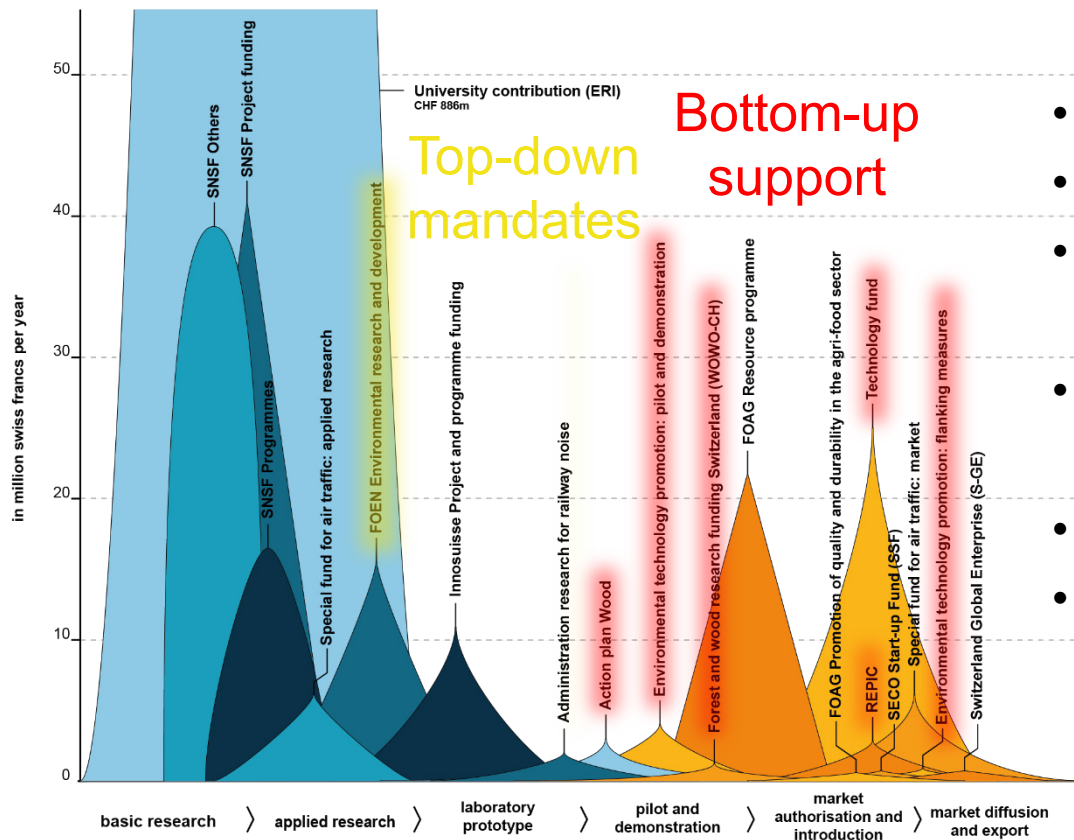
Addressing policy needs in research and the support of environmental and climate innovations

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Swiss innovation landscape in environment



- R&D at FOEN
- Action Plan Wood
- Forest and wood research funding
- Environmental technology promotion
- REPIC
- Technology fund



Research activities tailored for the FOEN's needs...

- Federal **policy research** (RIPA, Art. 16)
 - Serves for the fulfilment of the **fed. administration's tasks**
- *[The Confederation] may commission or support research studies and technology assessments* (EPA, Art. 49 para. 2)
- Covers the entire policy cycle
- **Top-down** approach (Research Master Plan ENVIRONMENT)
- Annual budget: ca. **CHF 13m for mandates**





... spanning a wide range of fields

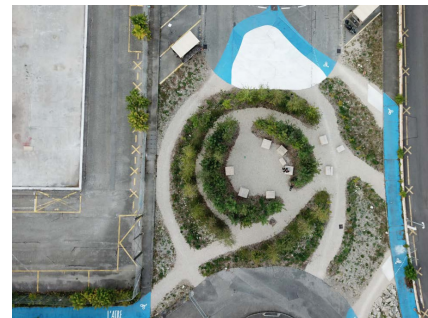
Axe prioritaire I « Actions pour la préservation et l'aménagement d'un environnement intact »		
Préservation des ressources et économie circulaire (1)		
Observation, éducation et communication environnementales (2)		
Droit de l'environnement (3)		
Politique environnementale internationale (4)		
Axe prioritaire II « Protection contre les immissions »	Axe prioritaire III « Protection et utilisation durable des ressources et des écosystèmes »	Axe prioritaire IV « Maîtrise des changements climatiques et prévention des dangers »
Lutte contre le bruit et préservation d'un environnement calme (5)	Sol (9)	Produits chimiques (15)
Protection contre les rayonnements non ionisants (6)	Eau (10)	Biosécurité (16)
Sites contaminés (7)	Biodiversité (11)	Changements climatiques : atténuation et adaptation (17)
Air (8)	Paysage (12)	Gestion des dangers naturels et des risques techniques (18)
	Forêt et bois (13)	
	Gestion des déchets et des matières premières (14)	
Thèmes de recherche plurisectoriels		
Économie circulaire (A)		
Environnement et santé (B)		
Changements climatiques, dangers naturels et perception des risques (C)		

Cross-sectoral
research

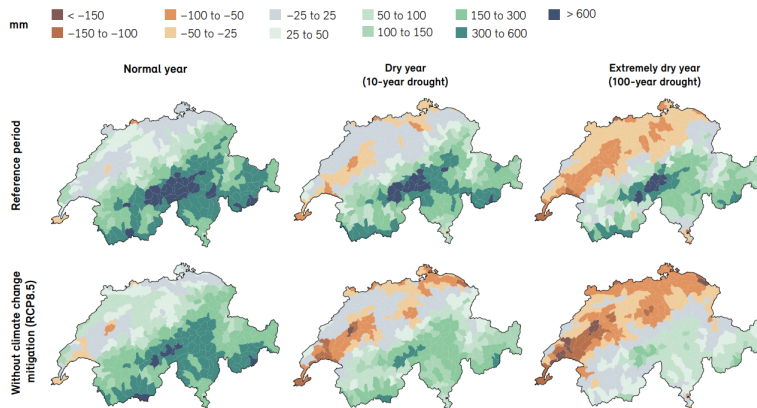


Project examples

Pilot programme 'Adaptation to climate change'
here *Reduction measure of heat island effect in Boissonnas, GE*



Effects of climate change on Swiss water bodies (HydroCH-2018)



Source: Brunner et al. (2019a)

Process-oriented modeling of direct N₂O emissions from agricultural soils (LACHSIM)

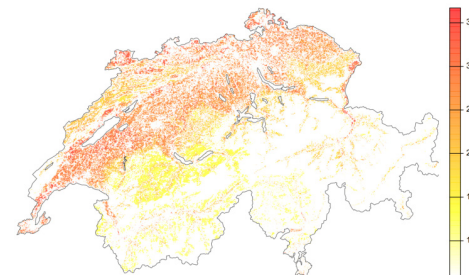


Figure 33: Map showing preliminary results for modeled N₂O emissions, in kg N ha⁻¹, from agricultural soils in Switzerland (year 2021). Strongly simplified management information was used for these simulations.



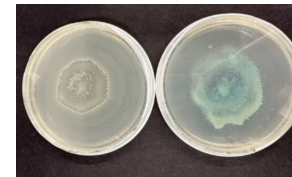
Action plan Wood: a policy implementation instrument for the wood sector

- Main instrument for the implementation of the Wood Resource Policy (Forest Act, Art. 34a)
- Priority foci
 - Swiss wood value chain
 - Climate-compatible buildings
- Annual budget ca. CHF 3m
- Financial aid of max. 50%



sia

schweizerischer ingenieur- und architektenverein
société suisse des ingénieurs et des architectes
società svizzera degli ingegneri e degli architetti
swiss society of engineers and architects





Leveraging innovative products, technologies and processes for environmental protection

- 25-yr portfolio of environmental innovations (EPA, Art. 49 para. 3 since 1997)
- Track-record with successful technology providers
- Financial aid of 50% of the project cost (max. CHF 1m per project phase)
- Annual budget: CHF 4m
- Obligation to repay in case of successful commercial exploitation
- Reporting to Parliament every 5 years

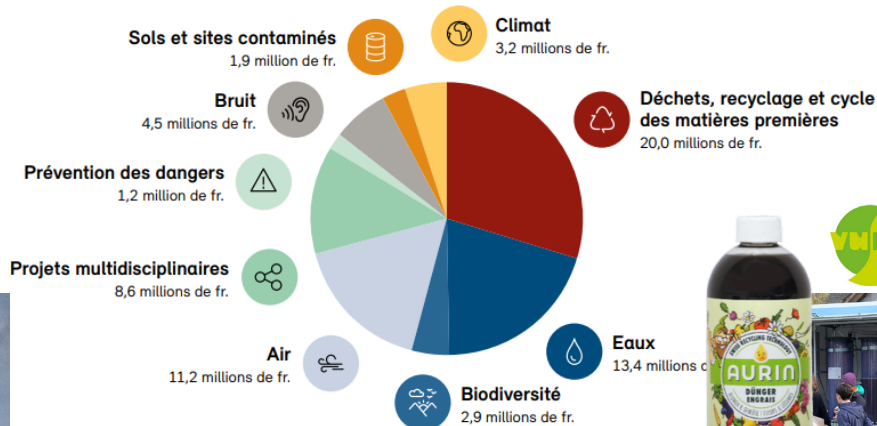




Environmental technology promotion programme



Montant total des subventions pour les projets P + D





Swiss know-how and technologies in international cooperation

REPIC

- Interdepartmental Platform SECO, SDC, SFOE and FOEN
- Promotion of **renewable energies**, **energy efficiency** and **resource efficiency** in **developing and transition countries**
- Innovative, practice- and market-oriented projects including know-how transfer
- Support for **pilot** projects and projects in early commercial phase (**Rollout**)
- Grant covers up to 50% total costs

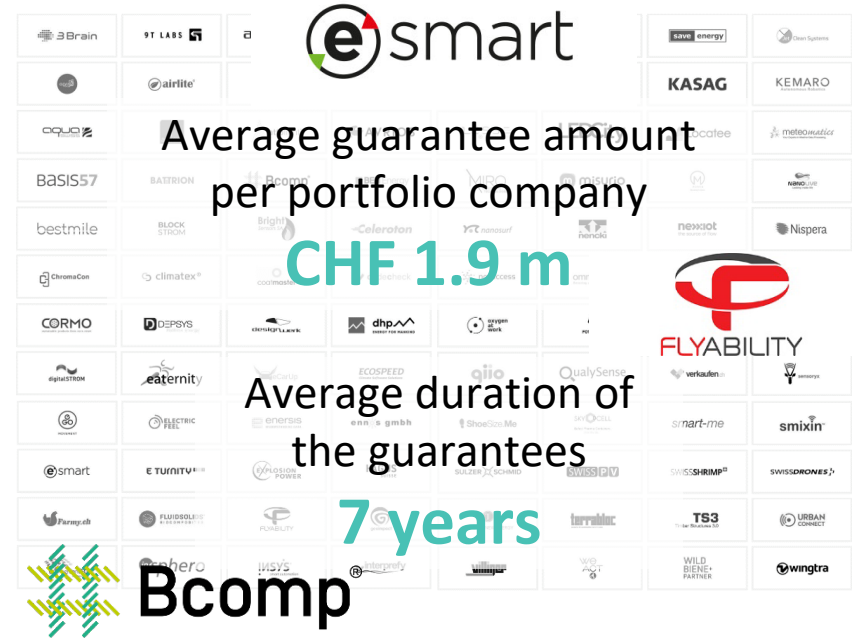




Mitigate climate change with innovative technologies



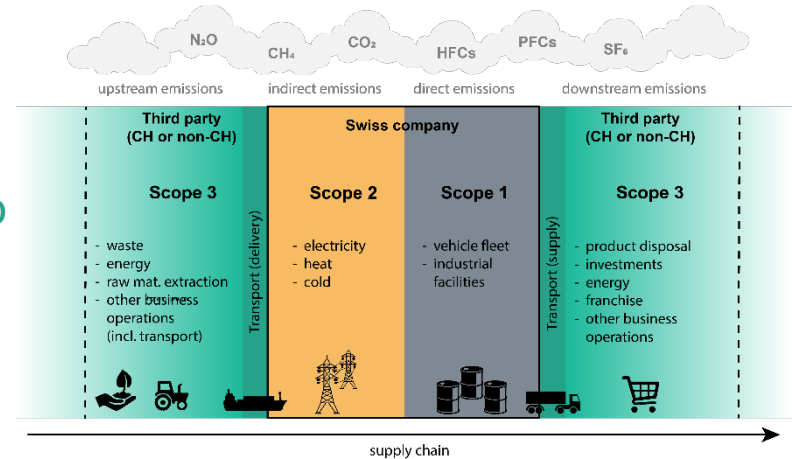
- Loan **guarantees**
- Innovative small and medium entities (in CH)
- Financed by the CO2 levy on fossil fuels
- Innovative and climate positive product
- Support **scale-up** for **market-ready** solutions





Towards a NET-Zero economy: the new Climate and Innovation Act

- Financial aids for implementing novel technologies/processes 200m CHF /year, during 6 years
- Companies with a net-zero roadmap
- Emission reduction or achievement of negative emissions
- Later development stages: from industrial pilot and demonstration plant to market diffusion and export









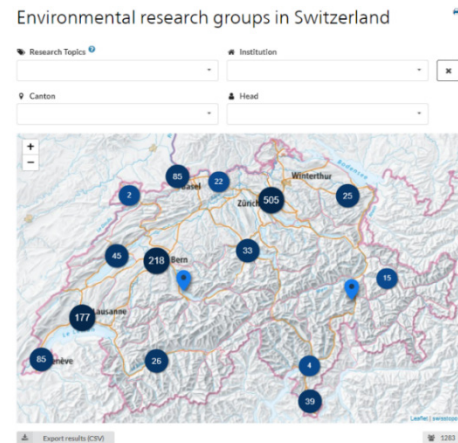
Thank you very much for your attention!

And to go deeper:

- [Research of the FOEN](#) and [Research Master Plan Environment](#)
- [Promotion of forest and wood research in Switzerland \(FR/DE/IT\)](#)
- [Action plan Wood](#)
- [Environmental technology promotion](#)
- [REPIC](#)
- [Technology fund](#)

Useful tools and resources:

-  [Environmental research groups in Switzerland](#)
-  [Funding by Swiss foundations](#)
-  [Innovation landscape in environment and energy](#)
-  [ARAMIS: Research database of the federal administration](#)



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