



Schweizerische Eidgenossenschaft
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Swiss Federal Office of Energy

sweet swiss energy research
for the energy transition

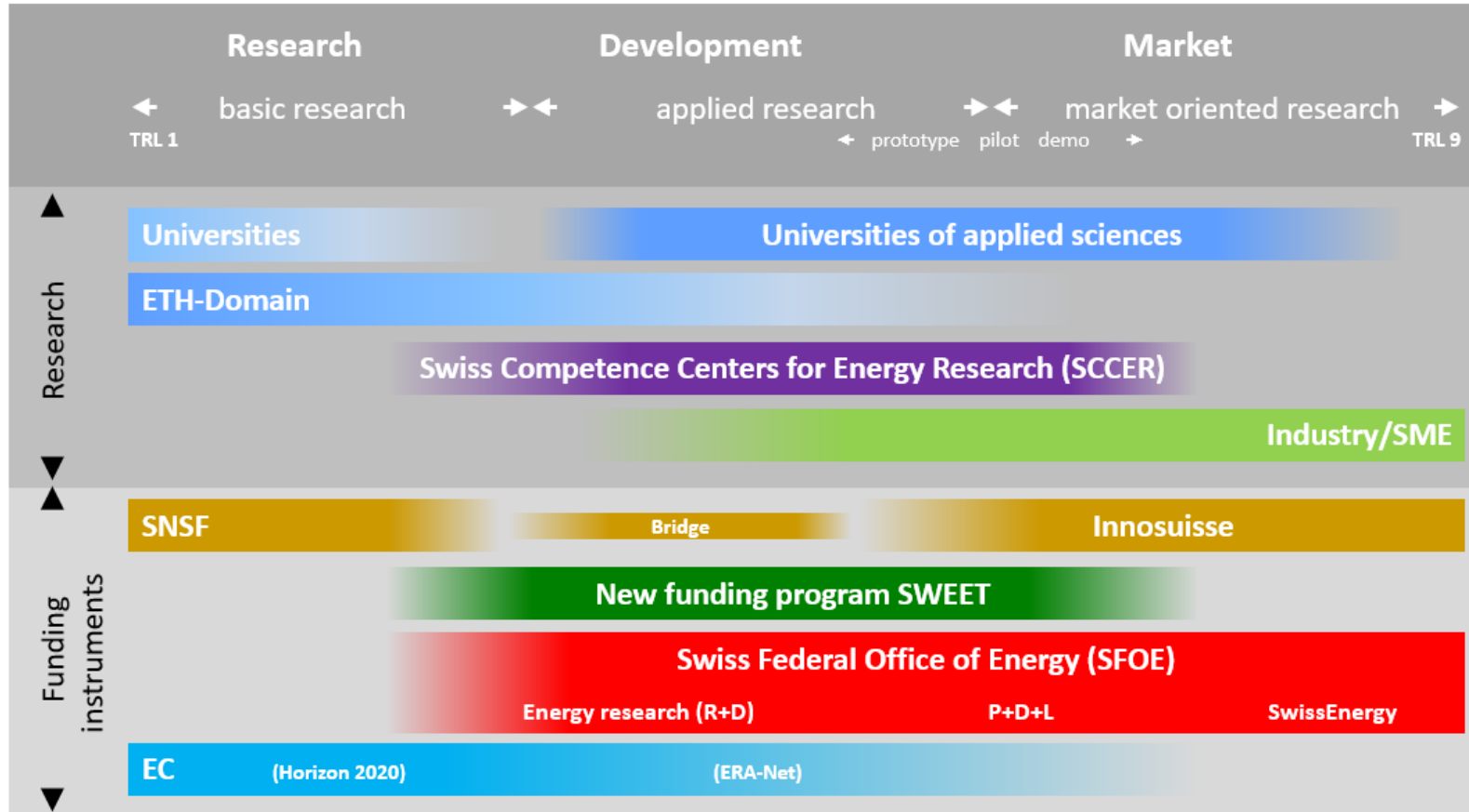


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SWISS ENERGY RESEARCH FOR THE ENERGY TRANSITION CURRENT STATE & FUTURE TOPICS

9TH SWISS SYMPOSIUM THERMAL ENERGY STORAGE • ANDREAS HASELBACHER • 28.1.2022

POSITIONING



SCCER: 2013-2020
193.8 Mio.
(incl. Joint Activities)

SWEET: 2021-2032
136.4 Mio.
(excl. P+D programme)

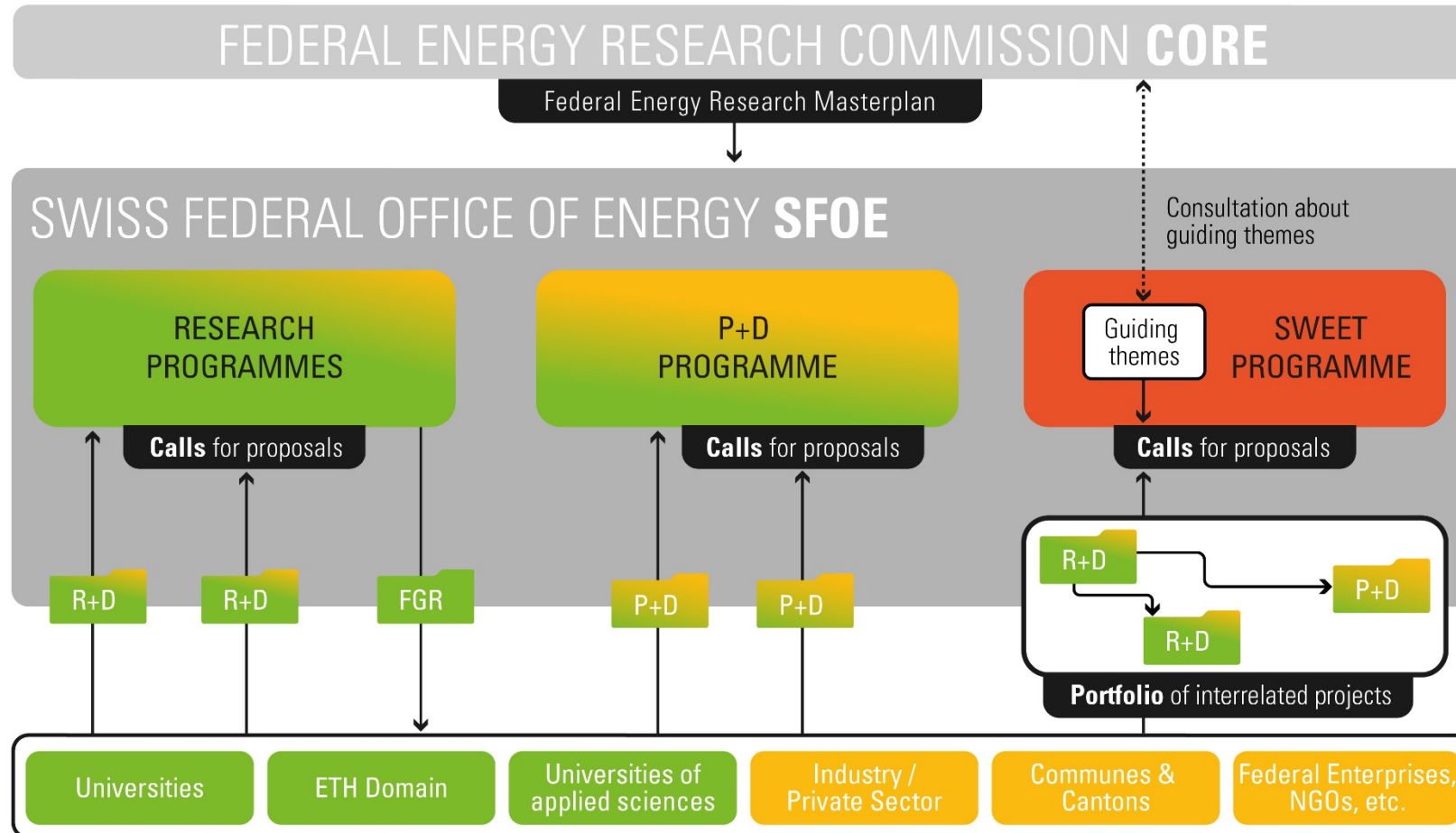
SNSF: Swiss National Science Foundation
CTI: Commission for Technology and Innovation
TRL: Technology Readiness Levels

SME: Small and medium-sized enterprises
R+D: Research and development

ERA-Net CFA: European Research Area Network
P+D+L: Pilot, demonstration and light house projects

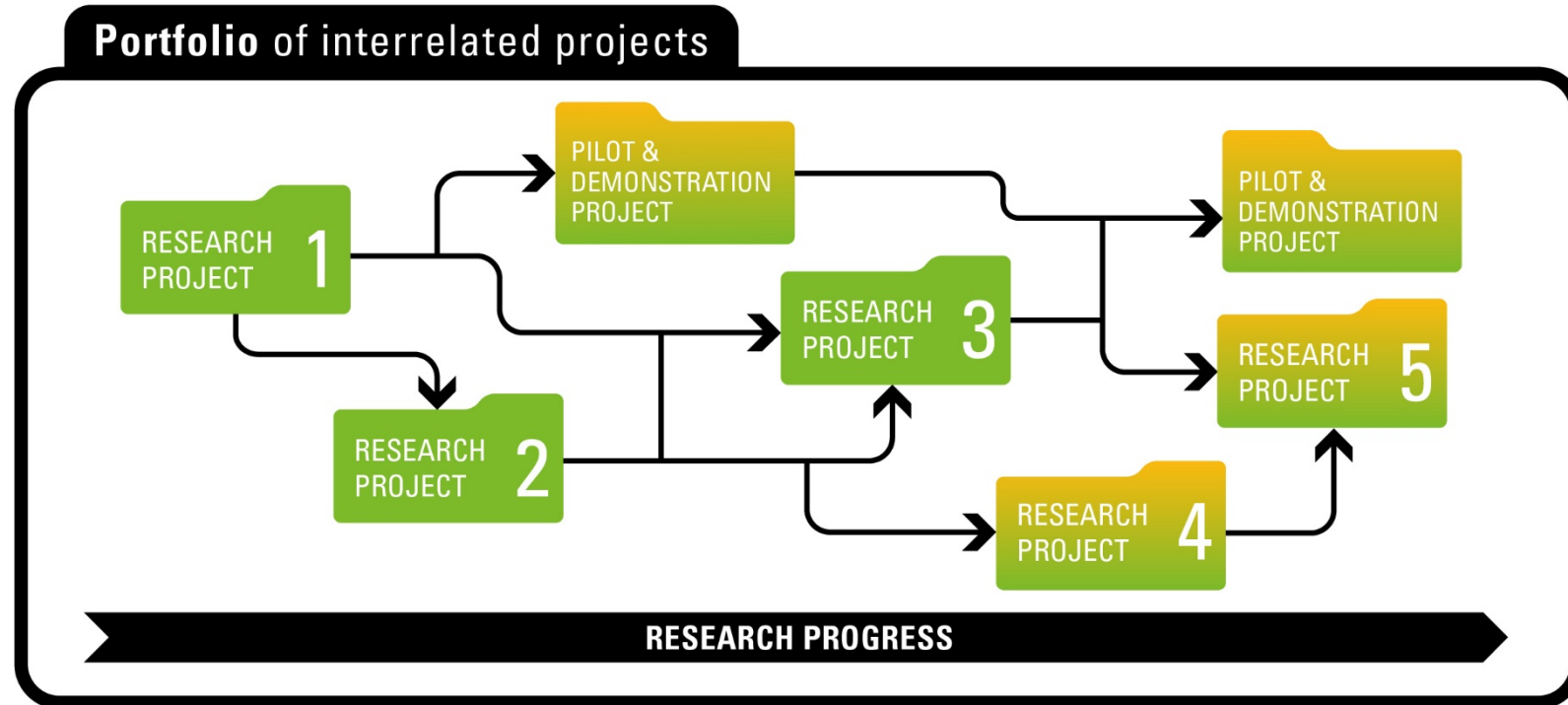


OVERVIEW



FGR: Federal Government Research, «Ressortforschung»

PROJECT PORTFOLIOS

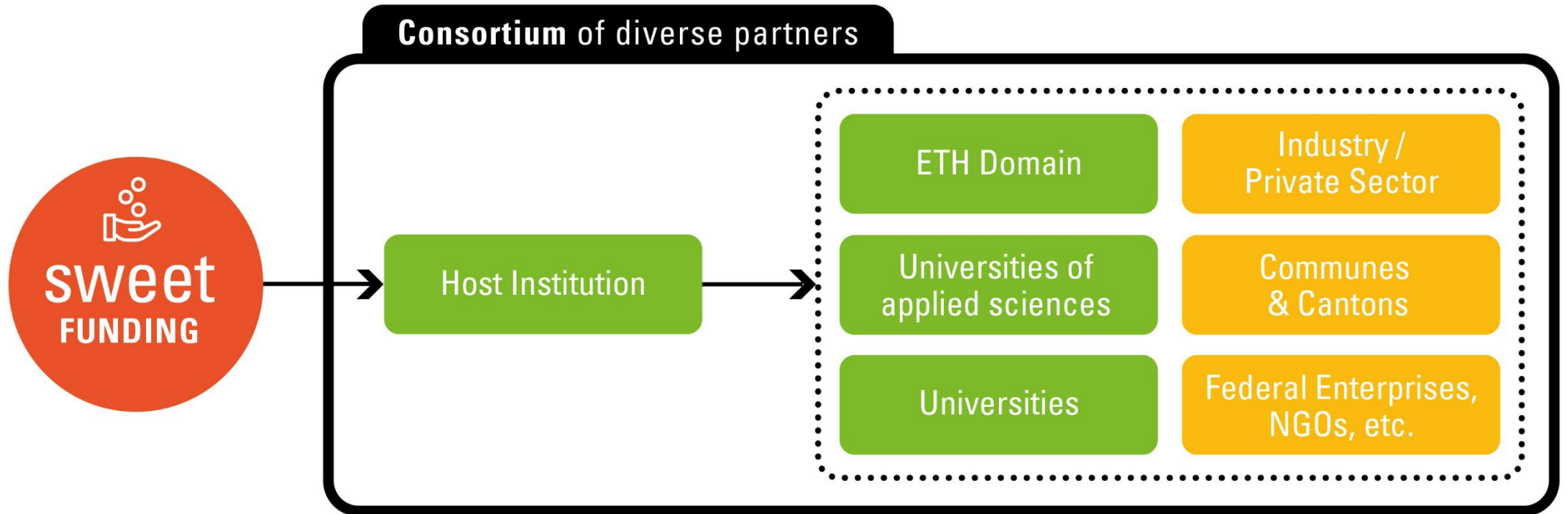


Research Partners:

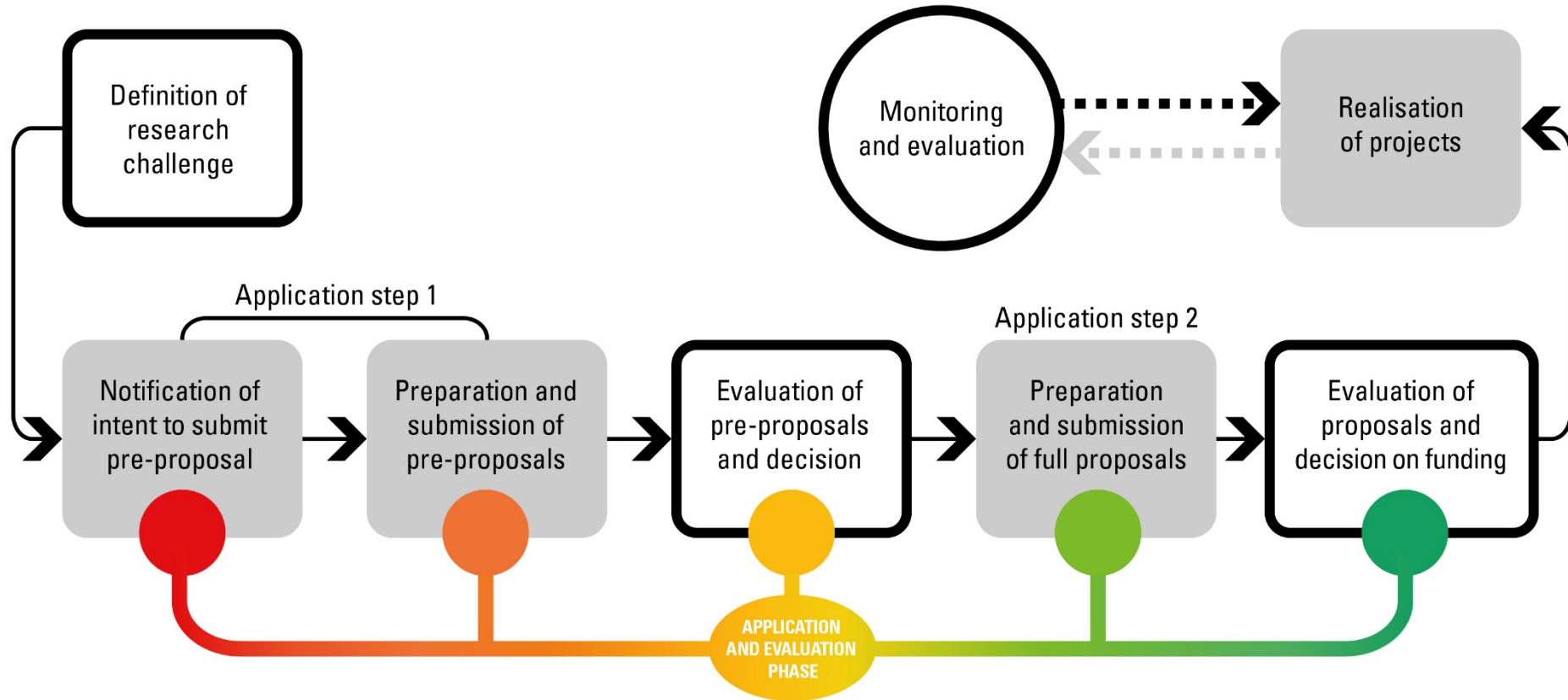
- Universities
- ETH Domain
- Universities of applied sciences

Implementation Partners:

- Industry / Private Sector
- Communes & Cantons
- Federal Enterprises, NGOs, etc.



APPLICATION AND EVALUATION





SWEET: SOME KEY CHARACTERISTICS

Competitive program

Regular calls for proposals

Inter- and transdisciplinary research

Inclusion of social sciences & humanities and stakeholders

Supplementary funding

Funding to investigate questions that arise from working on project portfolio (year 3+)

Matching funds

Encouraged, but not required

Consultation of and joint calls with other federal organisations

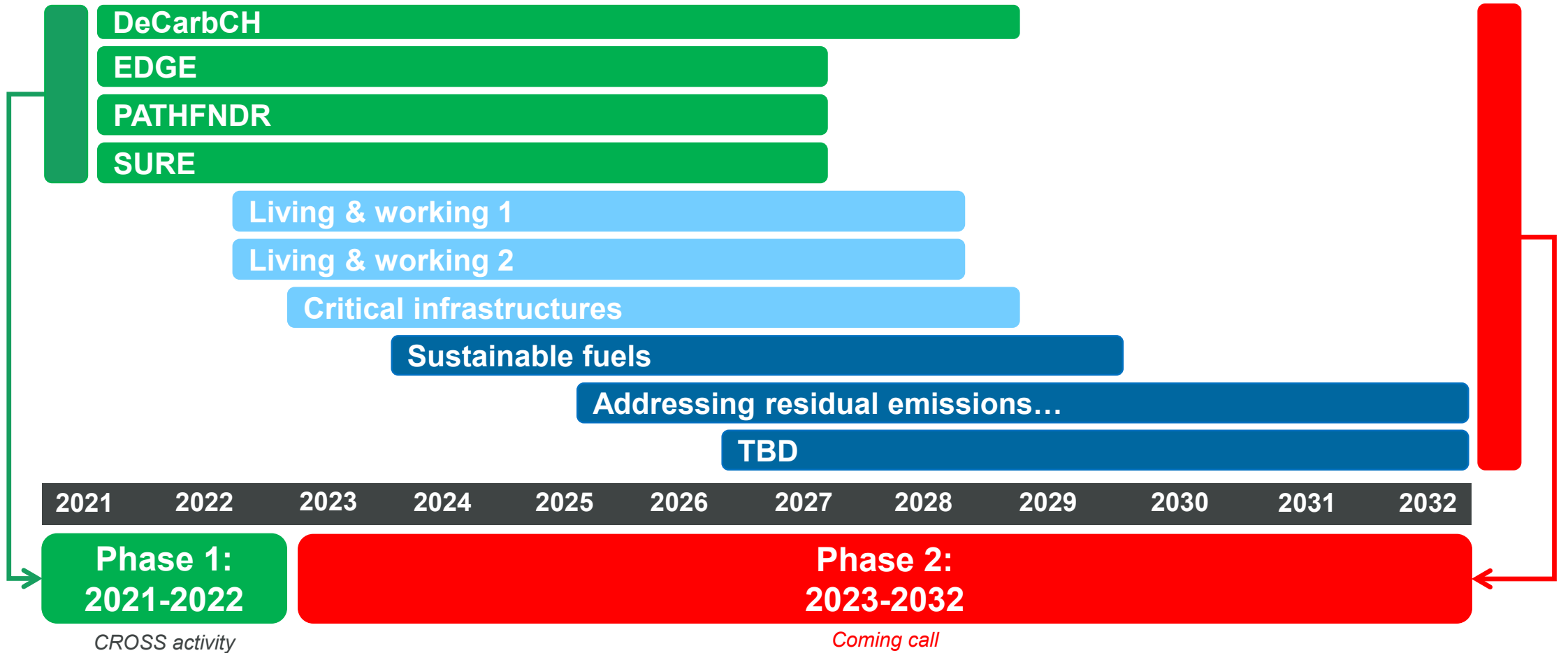
Federal Office for Spatial Development
Federal Roads Office
Federal Office of Transport

National Centre for Climate Services
Federal Office for Civil Protection
Swiss Federal Nuclear Safety Inspectorate

Federal Office of Civil Aviation
Federal Office for Defence Procurement

Federal Office for the Environment

CONSORTIA AND CALL OVERVIEW





CALL «SUSTAINABLE FUELS»

- Joint call with FOCA, close involvement of Armasuisse
- Focus on fuels for transport, industry and buildings
- Seasonal-storage aspects likely included
- Call for pre-proposals envisaged to be launched in fall 2022
- Anticipated budget of about CHF 15 Mio., supplemented by SFOE P+D and FOCA funds



CALL «ADDRESSING RESIDUAL EMISSIONS TO REACH THE NET-ZERO TARGET»

- Joint call with FOEN
- Call for pre-proposals envisaged to be launched in early 2024
- Focus on emissions that require CCS and NET
- Call formulation to be assisted by:
 - Results from DemoUpCARMA P+D project (ETH, Oct. 2021 – Sept. 2023)
 - Targeted pre-studies (you are invited to submit project sketches)
- Anticipated budget of about CHF 15 Mio.



ENERGY STORAGE & THERMAL STORAGE

- Energy storage might be topic of future call
- Decision about and content of possible call influenced by:
 - Results from DeCarbCH, EDGE, PATHFINDER, and SURE consortia
 - Results from studies about technology potentials in Switzerland
- Thermal storage potential in Switzerland somewhat unclear
- Seasonal thermal storage potentially highly relevant – if it can significantly lower electricity demand in winter



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SWEET AUSSCHREIBUNGEN

SWEET Call 1-2020 *(Vier Konsortien werden mit 6 bis 8 Mio. unterstützt)*

Integration of renewables into a sustainable and resilient Swiss energy system

Verbesserung der Energiesystemeffizienz durch Flexibilität und Sektorkopplung. Integration von dezentralen erneuerbaren Energiequellen. Dekarbonisierung von Heizen und Kühlen durch erneuerbare Energiequellen. Nachhaltigkeit im Zentrum eines resilienten Energiesystems.

SWEET Call 1-2021 *(Evaluation der Full Proposals, zwei Konsortien werden mit je CHF 10 Mio. unterstützt werden)*

Living & working

Erforschung neuer nachhaltiger und effizienter Lebens- und Arbeitsweisen unter Berücksichtigung der Digitalisierung, gesellschaftlicher Veränderungen und der Energiewende. Forschung in Living Labs, die als Public-Private-Partnership umgesetzt werden.

SWEET Call 2-2021 *(Evaluation der Pre-Proposals, ein Konsortium wird mit CHF 10 Mio. unterstützt werden)*

Critical infrastructures, climate change, and resilience of the Swiss energy system

Bewertung der Bedrohungen für kritische Infrastrukturen und Risiken für das Energiesystem und Bevölkerung. Bedrohungen durch Klimawandel, das sich wandelnde Energiesystem und soziale Faktoren. Schutz vor Bedrohungen, Reduktion der Risiken und Erhöhung der Resilienz des Energiesystems.