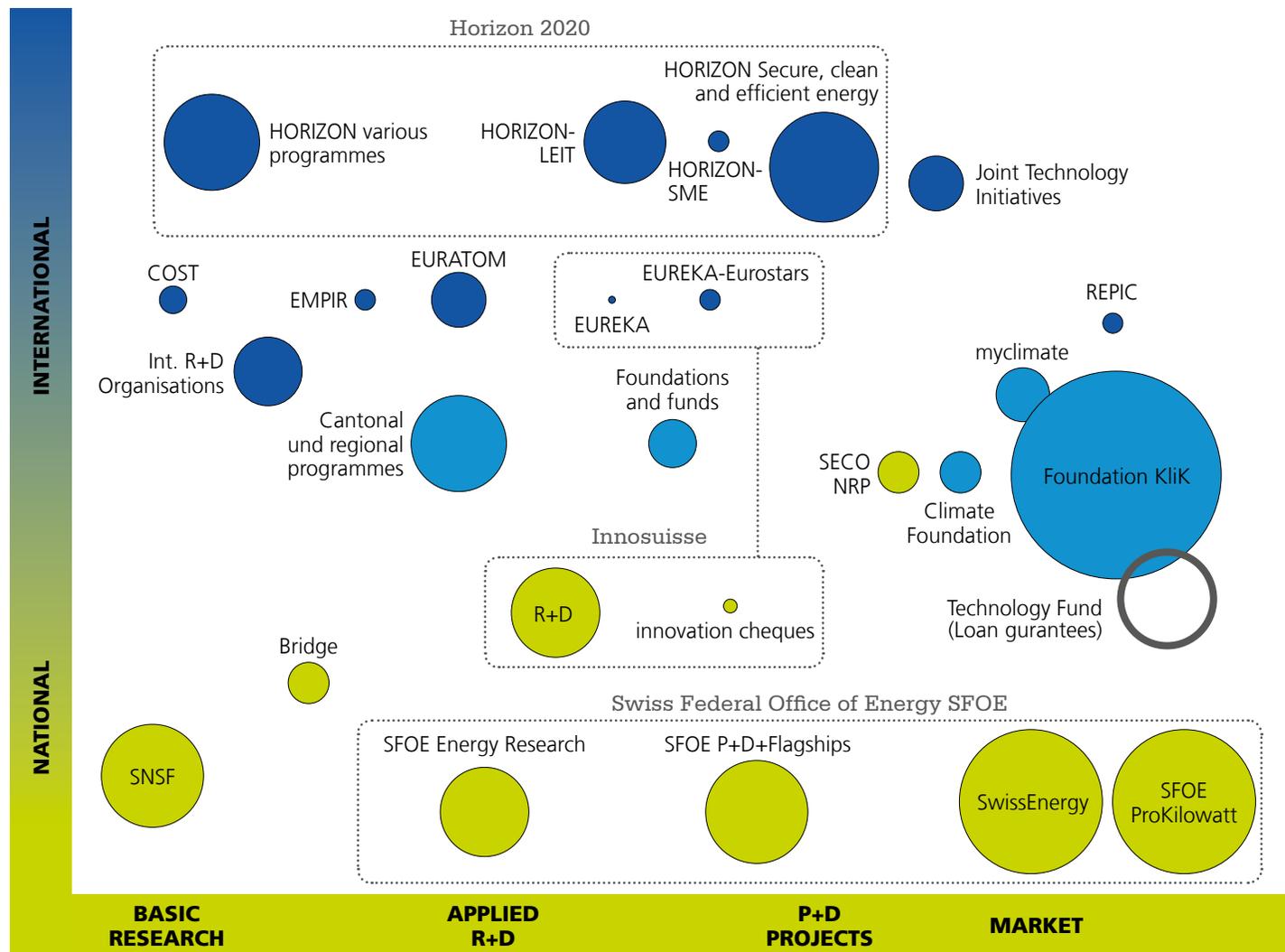


FINANCIAL SUPPORT FOR INNOVATION PROJECTS IN THE ENERGY FIELD



The size of the circles in the graph is about proportional to the annual budgets of the respective programmes in the energy field.

 Links in the figure:
By clicking on the circle, you will be taken to the respective part of the overview table.

Source: Lüdi Consulting R&D (2019):
Opportunities for innovation support in the energy field (executive summary in English, comprehensive report in German only)

Download: www.bfe.admin.ch/innovation

TABULAR OVERVIEW OF THE OPPORTUNITIES FOR INNOVATION SUPPORT IN THE ENERGY FIELD (2019)

The following table shows the different programmes for innovation support in the energy field. Distinguished are national and international support programmes. In this executive summary the hyperlinks lead to the relevant websites, in the comprehensive report (in German) to the detailed description of the relevant programme. The support range is an indication only and is often roughly estimated. The number of new projects per year is also an estimate and not an upper or lower limit of projects to be supported. For comparative purpose, the values for the European and international programmes in the following table are converted into Swiss Francs (Rate 1.15 CHF per Euro).

! The herein listed links lead to the programme websites, in the [comprehensive report \(in German\)](#) to the detailed description of the relevant programme.

Programme	Financial means, thereof energy [million CHF/year]	Support segment				Support range empirical values per project in CHF	Maximum contribution rates [%]	Number of new projects per year [empirical values]	Form of support [Definition of direct project costs: Wages etc., w/o overhead and laboratory infrastructure]	Requirements	Recipient ö: public organisation p: private organisation (Company, NPO, etc.)
		Basic Research	Applied R+D	P+D	Market						
National support programmes											
SFOE – Energy Research	17.5, thereof 17.5					0–several mio	up to 100 %	100	All direct project costs	Topics need to be within the focus of the SFOE energy research concept	ö and p
SFOE – Pilot-, Demonstration and Flagship Projects (P+D+L)	26, thereof 26					50'000–several mio	40 % (exceptionally 60 %)	40	All eligible project costs	Innovative projects in the areas of energy efficiency and renewable energies acc. Art. 49 and 53 EnG	ö and p
SFOE – ProKilowatt-Projects	Up to 50, thereof 50					20'000–2 mio	30 %	41–75	All direct project costs	1–2 calls/year Just for electricity efficiency measures	ö and p
SFOE – ProKilowatt-Programmes						150'000–3 mio	30 %	17–30	All direct project costs	Just projects with payback of 4 years and more	ö and p

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SFOE – SwissEnergy	45, thereof 45 (48 in 2018)					5'000–400'000	40 % (exceptionally up to 60 %)	770–990	Only 'soft' measures are supported	No standardised requirements	ö and p
Regular Innosuisse Projects and specific Projects	152, thereof ca. 18					50'000–990'000	50 %	315–400 (thereof ca. 40–60 projects in the support segment 'Energy')	All direct project costs	Min. 1 public research partner and 1 application partner Private companies contribute 50 % in-kind and pay a cash contribution of 0–10 % in favour of the public research partner	R+D institutes, which cooperate with companies/application partners (financial support exclusively for public research partner)
Innosuisse – Innovation Cheque	1.5, thereof ~0.23					Fixed: 15'000	100 %	175–190 (thereof 10–15 % in energy)	Small pre-studies Cost of wages	Payment exclusively to public partner Just 1 innovation check per company at the same time	R+D institutes, which cooperate with companies
Swiss National Science Foundation SNSF	2019: 1'096, thereof ~41 2020: 1'021, thereof ~41					Project support: 100'000–600'000 Careers support: 50'000–300'000 Others: not specified	100 %	900 projects 1'000 careers 1'000 others (thereof ca. 2 % in energy each)	Wages Costs of infrastructures Publications, seminars, and events	Participation restricted to scientific staff Calls for proposals with strict specifications	ö
Bridge (Innosuisse and SNSF)	2019: 20.6, thereof ca. 2.0 2020: 25.8, thereof ca. 2.0)					Area Discovery: 130'000 Area Proof of Concept: 450'000 – max. 2.55 mio	50–100 %	NA	Wages 50–100 %	Participation restricted to scientific staff of entitled research organisations as defined by Innosuisse and SNSF	ö

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		Basic Research	Applied R+D	P+D	Market						
SECO – New Regional Policy NRP	90, thereof 2.7					Project support Federation: 10'000–1 mio Loans: 300'000–2 mio	<50 % SECO >50 % cantons	ca. 300, thereof ~10 in energy	All relevant project costs	Co-financing by cantons and SECO is requested No individual company support but for groups of companies	ö and p
Federal Offices with Energy Topics	200, thereof 4 (external studies 37, thereof 0.74)					NA	Variable	NA	NA	NA	NA
Cantonal and regional programmes	NA, thereof min. 20 mio					NA	Variable	NA	NA	Variable	Variable
Foundations & Funds (w/o Climate Foundation, myclimate and KliK)	70, thereof 5					Variable	Variable	NA	NA	Variable	ö (mainly for charitable organisations)
Climate Foundation	3-5, thereof 3-5					10'000–200'000	50 %	Ca. 350, thereof ca. 30 in innovation	Reduction of CO ₂ with energy-efficient technologies and measures	Individual grants Project realisation and seat of applicant in CH or LI	ö and p
myclimate	6-9, thereof 6-9					NA	NA	ca. 5	Compensation CO ₂	Individual grants	ö and p
KliK	120, thereof 102					NA	NA	ca. 20	Compensation CO ₂	Individual support	ö and p
Technology Fund (Federal)	25, thereof ~16 (loan guarantees)					50'000–3 mio (mean value 1.6 mio)	60 %	20, thereof ca. 16 in energy	OpEx and CapEx for the commercialisation of innovation	Applicant and lender with seat in Switzerland	p (often start-ups)
Start-up oriented possibilities	Innosuisse Startup/Entrepreneurship: 9, thereof 0.4					NA	100 %	Innosuisse Startup/Entrepreneurship: 160-190 new in core and initial coaching	Prizes, evaluation of business ideas, Innosuisse labels, coaching, financial intermediation, internationalisation	Innosuisse Startup/Entrepreneurship: Financing of coaches and accompanying measures, no direct financial support for start-ups	Start-ups and young entrepreneurs

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European and international programmes ¹

Horizon 2020 ² (w/o separately shown EU programmes and related initiatives)	7'000, thereof ~700 in energy (10 %)/Swiss share: 200, thereof ~20 in energy					600'000–100 mio	100 % R+D 100 % Accompanying measures 70 % P+D	~2'300, thereof 10 % in energy)	All direct project costs + overhead of 25 %	Min. 3 partners from 3 EU or associated countries Applications just on the basis of calls for proposals	ö and p
Horizon – Secure, clean and efficient energy	950, thereof 950 in energy/Swiss share: ca. 30, thereof 30 in energy					3–10 mio	100 % R+D 100 % Accompanying measures 70 % P+D	230-300 (incl. SME projects), thereof 11-14% with CH partners	All direct project costs + overhead of 25 %	Min. 3 partners from 3 EU or associated countries Applications just on the basis of calls for proposals	ö and p
Horizon – Leadership in enabling and industrial technologies (LEIT)	1'830 (2019) und 1'965 (2020), thereof ca. 530 (2019) and 570 (2020) in energy/Swiss share: ca. 55, thereof 18 in energy					3–10 mio	100 % R+D 100 % Accompanying measures 70 % P+D	815-924 (incl. SME projects), thereof 10-12% with CH partners	All direct project costs + overhead of 25 %	Min. 3 partners from 3 EU or associated countries Applications just on the basis of calls for proposals	ö and p
Innovation in SME	635 (2019) and 690 (2020), thereof 63-69 in energy/Estimated Swiss share: 3 %					Phase 1: 57'000 Phase 2: 0.6–2.88 mio	70 %	Phase 1: 640-800 Phase 2: 200-240	Phase 1: Lump sum Phase 2: All direct project costs + overhead of 25 %	Individual grant for SME in Phases 1 and 2 possible Participation just for EU or associated countries Applications just on the basis of calls	p (primarily SME)/limited for other organisations p and ö

¹ For Horizon 2020 (2014-2020) the Swiss parliament approved means in 2013 of 3.71 billion CHF, i.e. about 530 million CHF per year. A part of these means is also used for the co-financing of EUREKA-EUROSTARS, EMPIR, ERA Nets and Joint Technology Initiatives. The allocation of the means is not explicitly specified.

² Horizon 2020 consists of various areas, among them the following separately shown themes: Horizon – Secure, clean and efficient energy, LEIT (incl. the embedded Public Private Partnerships Energy-Efficient Buildings (EeB), Sustainable Process Industries (SPIRE)), and Innovation in SMEs. Other themes with limited energy relevance are just shown in a summarised form and cover: Strategic Energy Technology Plan, Smart, green and integrated transport, Science with and for society, Joint Research Centre of the EU, EIT European Institute of Innovation and Technology (incl. Climate-KIC) and others.

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		Basic Research	Applied R+D	P+D	Market						
EURATOM	288, thereof 288/Swiss share: 5-6					1.25- 470 mio	100 % R+D 70 % P+D 50 % Cofund	10-15, thereof 5-6 with CH partners	All direct project costs + overhead of 25 %	Min. 3 partners from 3 EU or associated countries Applications just on the basis of calls for proposals	ö and p
EUREKA – Network Projects	Support by the member states/CH: ~1 mio CHF/year 10 % in energy					0-1.5 mio	0-50 %	70-100, thereof 3-6 with CH partners (10 % in energy)	All direct project costs Industrial projects	Min. 2 partners from 2 countries/usually 3-5 partners	ö and (p – usually according to Innosuisse model w/o direct financing)
EUREKA – Clusters	Support by the member states – Network Projects					500'000-50 mio	0-50 %	20-50, thereof 0-1 with CH partners (10 % in energy)	All direct project costs Industrial projects	Min. 2 partners from 2 countries/but usually 10-30 partners	ö and (p – usually according to Innosuissemodel w/o direct financing)
EUREKA – EUROSTARS	Support by the member states and the EU/CH: ~11.35 mio, thereof <5 % in energy					500'000-1.65 mio CH support: Max. 575'000 per project	50 % (SMEs and science) 25 % Others	350, thereof ~40-50 with CH partners (<5 % in energy)	All direct project costs	Min. 2 partner from 2 countries SME with high R+D share > 10-20 % of turnover/open for other partners Innosuisse rates to be used	ö and p (SME, limited for other companies)
EMPIR – European Metrology Programme for Innovation and Research	104 (2020)-106 (2019) or 90-95 mio € (50% from the EU), thereof ca. 20 % in energy Swiss share in programme: 3.3 %					600'000-2 mio	50 %	~30, thereof ~8 with CH partners (20 % in energy)	All direct project costs + fixed share for overhead	Usually min. 3 partners from 3 countries	ö and p

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		Basic Research	Applied R+D	P+D	Market						
COST European Cooperation in Science and Technology	Support through the COST countries and the EU/CH: 6 mio CHF/year/EU: ~2 mio €/year 15 % in energy					Just coordination EU: ca. 137'000 €/year (for 20 project partners) CH credit: up to 320'000 CHF	Just for coordination 100 %	35-53 with CH participation, thereof ~15 % in energy	Coordination costs (no support for R+D tasks)	Partners from min. 7 COST member states	ö
ERA Nets (Energy)	NA, primarily means from existing national support programmes					6–16 mio	Depends on national programme Max. 33 % financed by the EU	ca. 20, thereof 2-4 in energy	Depends on national programme	Min. 3 partners from 3 EU or associated countries Applications just on the basis of calls for proposals	ö and p
Joint Technology Initiatives (4 different JTIs)	~475, thereof ~148 in energy Swiss share: <4					3–55 mio	30–100 % depending on project type	80–85 for all 4 JTIs)	All direct project costs	Min. 3 partners from 3 EU or associated countries Applications just on the basis of JTI calls for proposals	ö and p
REPIC – Renewable Energy and Energyand Resource Efficiency Promotion in Intern. Cooperation	1.5, thereof 1.0					80'000–150'000	50 %	10–15	All direct project costs	Min. 1 Swiss partner and 1 partner from a developing or transition country	ö and p
Other International (research) Organisations	Total ca. 80 ³ 10 mio as a return for R+D projects in the energy field					NA	Variable	NA	NA	NA	ö

³ Taken into account are the annual investments of Switzerland. A return takes place through supplier contracts of the Swiss industry for construction and components and, to a smaller extent, through the use of the facilities by Swiss researchers in R+D projects. Only the latter is roughly estimated and taken into account in graphs 1 and 2 as R+D return.