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Research and cleantech

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Opportunities for Innovation Support in the Energy Field 2021–2022

for Swiss enterprises and research institutes

Executive Summary

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Exclusively responsible for the content and the conclusions of the report are the authors of the report. The descriptions of the support programmes are mostly agreed with the responsible programme operators.

PDF download of the publication
https://www.bfe.admin.ch/innovation
The comprehensive report in German as well as the executive summary in French, English and German are available.

Information about new support opportunities as well as proposals for corrections are welcome and should be sent to cleantech@bfe.admin.ch.

Executive Summary

1.1 Content of this report

This report provides guidance about the opportunities for the support of innovation projects [1] in the energy field in Switzerland. It primarily addresses enterprises, public and private research and development institutes, associations, the administration and non-profit organisations interested in relevant support opportunities in the energy field.

The focus is on opportunities for innovation support, currently or in the near future accessible for institutions and enterprises located in Switzerland. Described are the instruments for the support of innovation and new system solutions in all relevant energy fields.

All listed opportunities offer support in a larger or smaller part of the complete innovation chain. None of the described support programmes alone covers the complete innovation chain. Presented are innovation support opportunities along the complete development process starting with basic research, to demonstration projects up to the market.

The comprehensive report is structured as follows:

– *Executive Summary*: The opportunities for innovation support are summarised in *Graph 1* and in a short form described in *Table 4* of Section *1.6*

– *Section 2, Calculations and financing examples*

– *Section 3, National support opportunities in the field of energy*: Descriptions of national public programmes, primarily supported by means of the Swiss Federation.

– *Section 4, European and international support opportunities*: Descriptions of public programmes, which usually provide financial support by states and promote international cooperation.

– *Section 5, Foundations and funds* with financial means for third parties in the field of energy.

Particularly with regard to the European and international funding opportunities in Section 4, 2021/2022 represent transition years. The Swiss participation options in the funding opportunities in this Section 4 are therefore not yet clearly regulated in detail. Not contained in the report are instruments of pure business promotion and/or location promotion as well as many cantonal or regional activities. Financial support for energy technologies already available in the market can be simply located with the help of the Swiss postal code on the website www.energiefranken.ch.

The report makes no claim to be complete. In particular, financial information is to be understood merely as guidance based on estimates, which can be subject to fast changes. For binding information it is necessary to refer to the responsible support institutions and their websites.

[1] Innovation in this report is understood as a process from a project idea to a product or procedure successfully placed in the market.

1.2 Information on the report update version 2

Version 1 of the comprehensive report for the phase 2021-2022 was first published on 30 March 2021. Several subsequent changes in the national and international context required a revision of the old version of the report. The main changes compared to the first version of 30 March 2021 include:

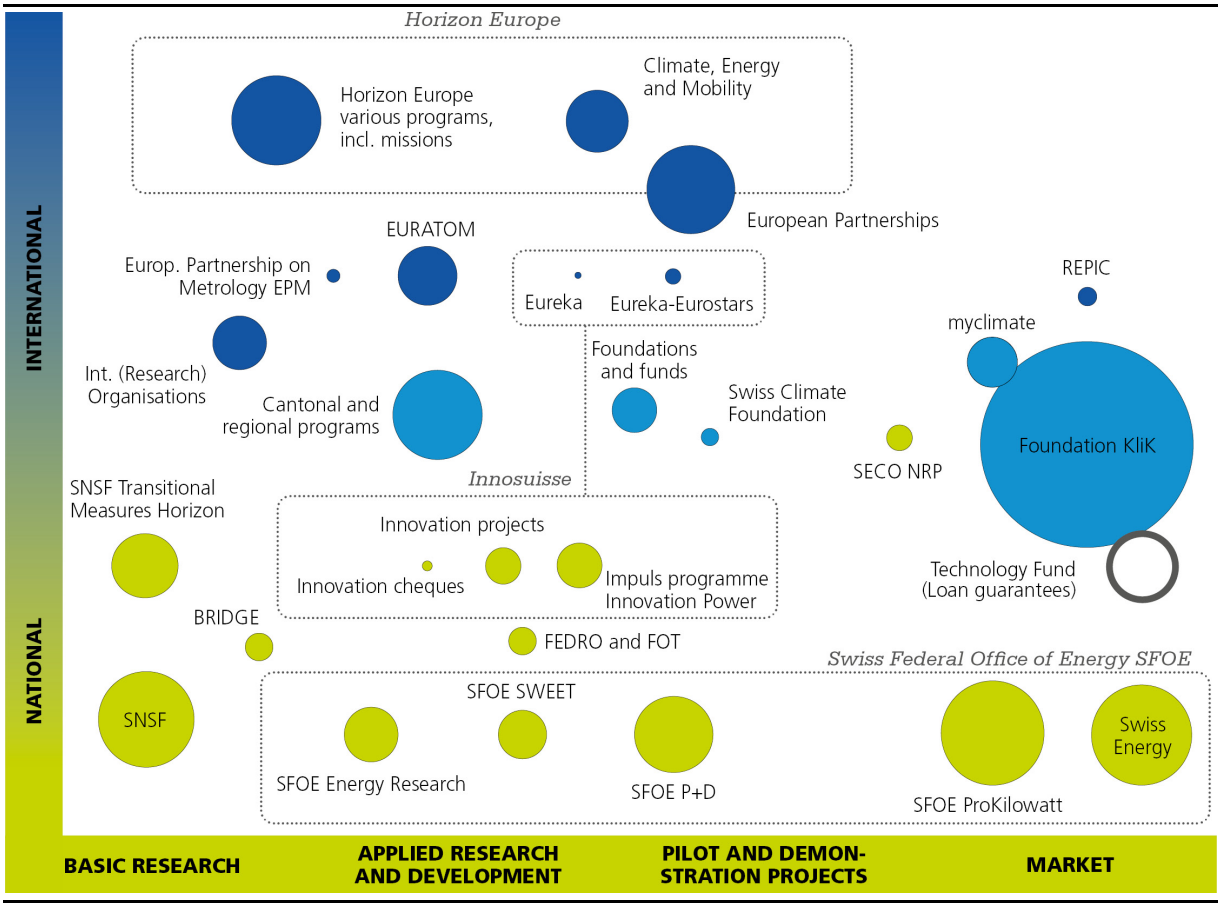
- The classification of Switzerland as a non-privileged third country in Horizon Europe (2021-2027) and thus the exclusion from various areas that are important for Switzerland, including direct funding for projects with a single project partner. About two-thirds of the calls for proposals and most of the collaborative projects remain open to Switzerland. However, funding for Swiss partners in the parts that are open to Switzerland will now be provided directly by the Federal Government. The Federal Council continues to strive for full association in Horizon Europe, the date on which a corresponding agreement can enter into force depends on successful negotiations and the subsequent political ratification of the association.
- Transitional measures by the SNSF for non-access areas in Horizon Europe in the form of separate calls for proposals, which took place in 2021 and are expected to be continued in 2022.
- The rejection of the revised CO_2 Act in the referendum of June 2021, which, if adopted, would have led to a comprehensive expansion of innovation promotion. Instead, the existing CO_2 Act will be extended for the time being from 2022 to a maximum of 2024.

The new version of the complete report includes a comprehensive revision of section 4, European and international funding opportunities, and section 5, Foundations and Funds. In Section 3 changes are limited to the profiles such as *3.1.2 SFOE - SWiss Energy research for the Energy Transition* (SWEET programme), *3.1.4 SFOE - ProKilowatt* and *3.1.5 SFOE – Swiss Energy*, *3.2 Innosuisse*, *3.4 Swiss National Science Foundation* (SNSF) and *3.6 New Regional Policy NRP - SECO*.

In this executive summary the changes are essentially limited to *Table 4* and minor adjustments in the Graphs.

1.3 Overview of the opportunities for innovation support

Graph 1 shows important support programmes, which provide financial means for innovative energy projects in Switzerland. The vertical axis distinguishes between international and national programmes. In between, the regional programmes and the foundations are listed. The horizontal axis shows the development chain and the respective position of the programmes. The size of the circles in the graph is about proportional to the average annual budget 2022 of the respective programmes in the energy field. Taken into account is just the energy share, often as a rough estimate, for the Swiss partners in energy projects.[2] Not included are private R+D means provided by enterprises, which often exceed the public financial support significantly.



Graph 1: Support programmes for innovative projects in the energy field
Table 4 in Section *1.6* contains all hyperlinks to the support programmes shown in this graph

Practically all the programmes shown in *Graph 1* are open for scientific organisations. For enterprises, primarily the innovation programmes of applied research and development, pilot and demonstration projects and certainly the programmes close to the market are of interest.

In the report, additional opportunities for innovation support are described, which not all are shown in *Graph 1*, for reasons of simplicity or lack of empirical values. Among these are:

[2] For the international programmes, an exchange rate of 1.10 CHF/Euro was used.

– Opportunities for innovation support by further Federal Offices not primarily addressing energy aspects.
– Support opportunities by cantons, cities and regions.
– The areas in Horizon Europe that are no longer open to Swiss partners for the time being, in particular the EIC Accelerator for small and medium-sized enterprises and parts of ERC for scientists.

1.4 Recipients of support means and support instruments

Table 1 shows the recipients of the subsidies according to the most important types of organisation. Electricity supply companies are not specifically listed, as they are assigned to different types of organisations, such as companies, government agencies at cantonal, communal or association level. The large cooperatives/large distributors but also the large public transport operators certainly pursue commercial goals and are therefore classified here as large companies. The international (research) organisations are a special case and are therefore not listed in *Table 1*. Occasional recipients are listed in parentheses (X).

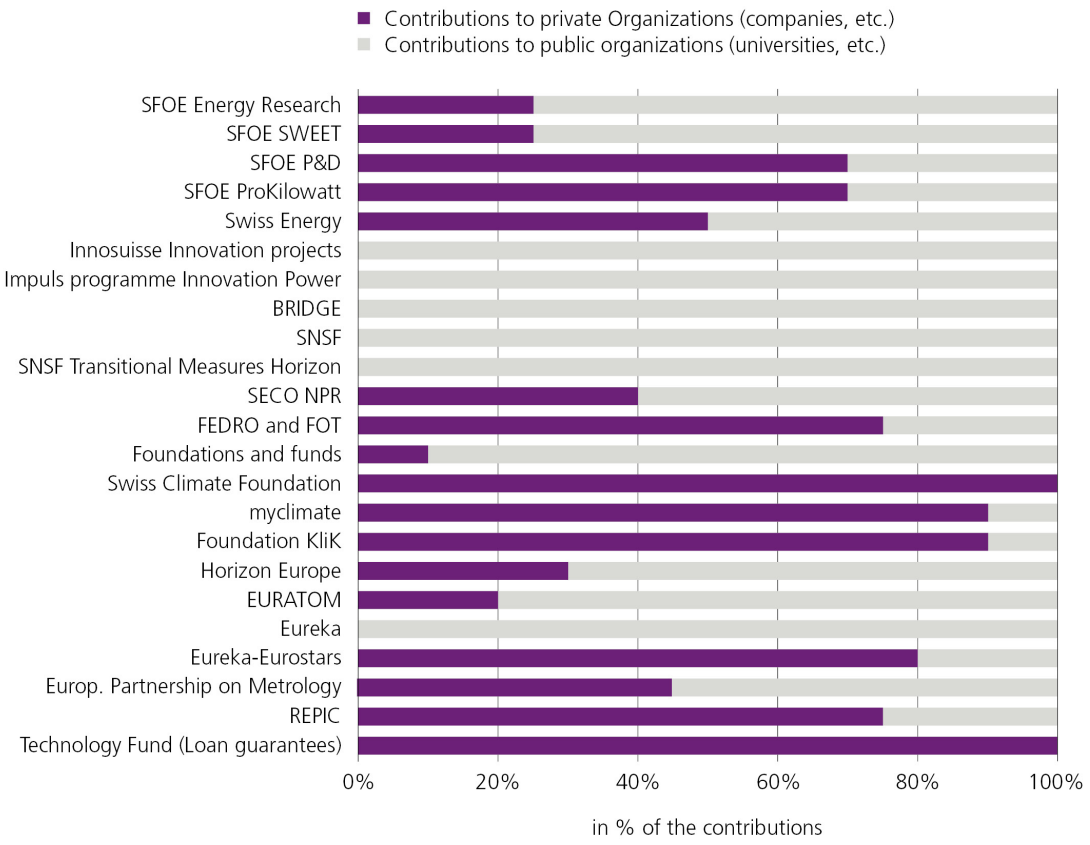
Project Partner	Public R+D Institutes	SMEs, incl. Start-ups	Large companies	NPO	Government agencies	Remarks
SFOE Energy Research	X	X	X	(X)	(X)	
SFOE SWEET	X	X	X	(X)	(X)	
SFOE Pilot- and Demonstration projects	X	X	X	X	X	
SFOE ProKilowatt - Projects	X	X	X		(X)	No R+D support
SFOE ProKilowatt – Programmes		X	X		(X)	No R+D support / Households are also eligible as end users.
Swiss Energy SFOE	X	X		X	(X)	
Innosuisse	X	*X*	*X*	*(X)*	*(X)*	*Indirect support for application partners. i.e.* direct financing just for public R+D institutes
Innosuisse - Impulse programme Innovation Power Switzerland	X	*X*		*(X)*	*(X)*	*Indirect support for application partners. i.e.* direct financing just for public R+D institutes
Swiss National Science Foundation SNSF	X					
SNSF Transitional Measures Horizon Europe	X					National replacement calls for non-access-areas in Horizon as a result of Switzerland's third-country status
BRIDGE	X					Scientifically active consortia or individuals
SECO - New Regional Policy NRP	X	X	(X)	X	X	
FEDRO and FOT – Federal Roads Office and Federal Office of Transport	X	X	X	X	(X)	

Project partner	Public R+D Institutes	SMEs, incl. Start-ups	Large companies	NPO	Government agencies	Remarks
Foundation and Funds	X			X		Partially also non-profit companies eligible for funding
Swiss Climate Foundation		X				No R+D support
myclimate		X	X	X		Neither R+D nor P+D support
Foundation KliK		X	X	X	X	Neither R+D nor P+D support
Horizon Europe[1)]	X	X	X	X	X	Partly dependent on sub-areas
Horizon Europe – Climate, Energy and Mobility[1)]	X	X	X	X	X	
Horizon Europe – European Partnerships[1)]	X	X	X	X	X	
EURATOM[1)]	X	X	X	X	X	
Eureka	X					Switzerland: Indirect support for application partners
Eureka-Eurostars (European Partnership)	X	X				
EPM (European Partnership on Metrology)	X	X	X		X	
REPIC	X	X		X	X	
Technology Fund (loan guarantees)		X				

[1)] Restricted Swiss participation conditions due to the absence of a Switzerland-EU Association Agreement

Table 1: Recipients of the funding contributions

Graph 2 shows the shares of the annually available (energy) means allocated to private and public organisations[3]. The allocation to the two user groups is partly based on rough estimates.



Graph 2: Distribution of funds of support programmes in the energy field.

From a company point of view it can be distinguished between two main support instruments:

– *Direct financing*: Enterprises receive direct financial support; this is usually in the context of a project consortium with other industrial and scientific partners or occasionally as individual funding for a single company. Examples: SFOE Pilot and Demonstration Program, Horizon Europe - individual funding for a single Swiss company not possible for the time being.

– *Indirect financing*: Enterprises are obliged to cooperate with scientific partners, whereby only the latter are entitled to receive public financial means through the support programme. Example: Innosuisse Innovation Projects.

[3] NPOs (foundations, associations, etc.) are mostly considered private organisations, but there are also NPOs that have exclusively public sponsorship.

1.5 Different financing opportunities for innovative projects

Not all support programmes are relevant for companies. So for example, pure basic research programmes are seldom relevant. Before searching for external project support, companies are advised to check the different alternatives. Some of these are summarised in the following *Table 2*:

		Forms of cooperation	Suitable for following situation	Most important advantages and disadvantages
w/o financial support	1	In-house development (entirely in-house)	– Fast solution – All know-how available – Secured own financing – Low R+D risks	No co-operation problems Fast start/abandonment possible *Rather conventional solutions*
	2	Cooperation with specialised company	– Fast solution – External know-how necessary – Secure down financing	Specialists bring in know-how against payment of costs *Amicable co-operation necessary*
	3	Cooperation with scientific partner (purely bilateral)	– New approaches with scientific know-how – Confidentiality secured – Financing of scientific partner(s) by the company	Choice of partner is crucial, but often a matter of luck *Different time management* *Rather suitable for smaller and not time-critical projects*
With financial support	4	Cooperation with scientific partner, which as a minimum is partly publically financed, e.g. by Innosuisse	– New approaches with scientific know-how and for high R+D risks – Medium-term solutions – Reduced in-house contribution	Choice of partner is crucial Public co-financing *Different time management* *Consent for project objectives between partners – contracts* *Some publication obligations*
	5	National cooperation with several partners and public financial support also for companies	– New approaches with scientific know-how and for high R+D risks – Medium- to long-term solutions – Results for several users – Reduced in-house contribution	Choice of partners is crucial Public co-financing *Consent for project objectives between partners – contracts* *Some publication obligations*
	6	International cooperation with several partners and public financial support - partly also with direct funding for a single company)	– Medium- to long-term solutions with high R+D risks – High sharing of costs and risks – Results for several users – Internationally active companies	Choice of partners is crucial Public co-financing, different support instruments *Consent for project objectives between partners – contracts* *Some publication obligations*

Table 2: Suitability as well as advantages and disadvantages of different cooperation forms

80–95 % of all development projects, resp. R+D expenditures of companies are run under cooperation forms 1 or 2 as shown in *Table 2*. Cooperation with scientific partners on a pure bilateral level according to form 3 usually requires project assistance from qualified company staff. For the simplest forms, such as a semester, Bachelor-, Master- or a doctoral thesis limited financial means are necessary.

Just the grey highlighted areas and with regards to the intellectual property rights more risky cooperation forms (4, 5, 6) offer the opportunity for public co-financing of R+D projects. It needs to be mentioned that co-financing does not imply that a company receives direct financial support for an R+D project. For example, Innosuisse in Switzerland uses an indirect financing model, i.e. just the scientific partners are financed by public means. Private partners need to finance their project share themselves, usually in-kind, but are beneficiaries of the jointly achieved research project results. Direct financing for companies in the energy field is available from the SFOE, from various international programmes and to a lesser extent from other Federal Offices, which is also called sector research.

Financial contributions

Public R+D programmes support selected R+D projects with maximum shares of 40–100 % of the total project costs, depending on political priorities and market proximity. The remaining means need to be contributed in-kind by the project partners, usually from industry or other application partners. Public support for basic studies as well as external studies is up to 100 % of the total project costs.

Table 3 shows the current maximum public support levels in percent of the total project costs:

Project type	Maximum public support as share of total project costs	
	National – Switzerland	International
Pilot and demonstration projects	40 % (60 %[1])	50–70 %[2]
Research and development projects	50 % (100 %[1])	50–100 %[2]
Basic research	100 %	100 %
Political fundamentals for decision-making / external studies	100 %	100 %

[1] In exceptional cases.

[2] The maximum support levels of 70 % and 100 % have been used by the EU since 2014 for Horizon 2020, the follow-on programme Horizon Europe and related programmes.

Table 3: Public support levels for different project types

In Switzerland, the largest funding bodies for research, Innosuisse and SNF, in principle are oriented towards the support of public research organisations, i.e. only public research organisations are supported with public means and consequently these are therefore usually in charge of the project leadership.

However, due to an increased level of public interest and due to market failures[4], e.g. in the fields of energy, environment, health and agriculture, there is also direct financing for companies by some Federal Offices, resp. their sector research. For some international programmes with national financing through the Swiss Federation (Eureka-Eurostars, EPM) Switzerland also switched to a direct financing model for companies.

At the EU level the project financing was harmonised since Horizon 2020 (2014–2020), i.e. all organisations, enterprises, universities, NPOs, etc. are now supported and financed based on the same rules.

Public contributions are usually paid as non-reimbursable subsidies. Only in single cases of abuse or project abandonment public contributions need to be refunded. In very few programmes close to the market public contributions are provided as loans, which in case of a successful project need to be paid back. The most important examples are the Technology Fund and the loans in the frame of the New Regional Policy NRP by the Swiss State Secretariat for Economic Affairs SECO.

[4] An example of market failure is the lack of internalisation of the external costs, which for example is caused by the combustion of fossil fuels and the related emissions. A significant share of the costs caused by such emissions in the areas of health and climate change are not covered by the actual emitters but by the public sector.

1.6 Tabular overview of the opportunities for innovation support in the energy field

Table 4 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. However, for various international programmes the hyperlinks do not yet exist, as the corresponding programmes have not yet been adopted. 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 *Table 4* are converted into Swiss Francs (Rate 1.10 CHF per Euro).

Table 4: Tabular overview of the opportunities for innovation support in the energy field

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

Programme	Financial means, thereof energy [million CHF / year]	Support segment: Basic Research	Applied R+D	P+D	Market	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
National support programmes										
SFOE – Energy Research	18, thereof 18		■			0–several millions	Up to 100 %	100	- All direct project costs	- Topics need to be within the focus of the SFOE energy research concept
SFOE – SWEET-Programme	11, thereof 11		■			50'000 – several millions	ca. between 50 –80 %	1–4 consortia	- All direct project costs	- 1–2 thematic calls per year
SFOE – Pilot- and Demonstration Programme (P+D)	28, thereof 28			■		50'000–several millions	40 % (exceptionally 60 %)	40	- All eligible project costs	- Development and testing of innovative energy technologies and solutions acc. Art. 49 und 53 EnG.
SFOE – ProKilowatt-Projects	Up to 50, thereof 50 (20 for projects, 30 for programmes)				■	20'000–2 millions	30 %	39–100	- All direct project costs	- Propositions possible all year long (Projects) - 1 call/year (Programme) - Just for electricity efficiency measures - Just projects with pay-back of 4 years and more
SFOE – ProKilowatt-Programmes						150'000–3 millions.	30 %	10–30	- All direct project costs	
SFOE – EnergieSchweiz	44, thereof 44				■	10'000–500'000	40 % (exceptionally up to 60 %)	ca. 200	- Only 'soft' measures are supported	- No standardised requirements
Regular Innosuisse Projects	145, thereof ca. 20 (about 80 million will be spent on the impulse programme listed below.).		■			100'000–1 million (upper limit open, especially also for flagship initiative with 2–4 million)	50 %	400–500 (thereof ca. 30 projects in the segment „Energy and environment" und and ca. 30 in other segments	- All direct project costs	- Min. 1 public research partner and 1 application partner / Flagship-Initiative 3 public research and 2 application partners - Private companies contribute 50 % in-kind and pay a cash contribution of 0–10 % in favour of the public research partner

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
		Basic Research	Applied R+D	P+D	Market					
Innosuisse - Impulse Programme Innovation Power Switzerland	113, thereof ca. 10 (means mostly from the regular Innosuisse budget)					100'000–1 million (Upper limit open)	- Max 70 % for measure 1 - Max 80 % for measure 2	Not yet available	- All direct project costs	- Measure1: Min. 1 public research partner and 1 application partner - Measure 2: In addition to the 2 partners, a consulting or engineering service provider
Innosuisse – Innovation checks	4.5-6.5, thereof ~0.5					Max 15'000	100 %	300–450 (thereof ~10 % in energy)	- Small pre-studies - Cost of wages	- Payment exclusively to public partner - just one innovation check per company every 2 years
Swiss National Science Foundation SNSF, incl. SNSF Transitional Measures Horizon Europe	2021: 1'108, thereof ~45 2022: 1'137, thereof ~45					Project support: 100'000–600'000, partly up to 2,5 million Careers support: 50'000–360'000 Others: not specified	100 %	1'000 projects 1'000 careers 1'000 others (thereof ca. 2 % each in Energy)	- wages - Costs of infrastructures - Publications, seminars, and events	- Participation restricted to scientific staff - Calls for proposals with strict specifications
BRIDGE (Innosuisse and SNF)	26, thereof ca. 3.0					Area Discovery: max. 2,55 million Area Proof of Concept: max. 130'000/year	Up to 100 % for both areas	Area Discovery: 10–12 Area Proof of Concept: ca. 30–35	-- All relevant project costs	- Participation limited to research staff of the research organisations defined in the Research and Innovation Promotion Act (FIFG)
SECO New Regional Policy NRP, incl. NRP-mountain areas	100, thereof 2.7					Project support Federation: 10'000–1 million Loans by the Federation: 300'000–2 million	<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
FEDRO and FOT – Federal Roads Office and Federal Office of Transport	FEDRO: 8.5, thereof ca. 0.9 OFT: Ca. 9, thereof ca. 3					FEDRO: 50'000–700'000 OFT: 20'000–700'000	10–100 % Energy projects FOT: 40–(60) %	ca. 50, ca. 15 in energy	- Energy strategy public transport ESöV: All relevant project costs	- ESöV: Contribution to energy saving or energy production, innovation, benefit for practice

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
		Basic Research	Applied R+D	P+D	Market					
Federal Offices with Energy Topics	200, thereof 4 (external studies 37, thereof 0,74)					NA	Variable	NA	NA	NA
Cantonal support offers	NA, thereof min. 20					NA	Variable	NA	NA	Variable
Foundations & Funds (w/o Swiss Climate Foundation, myclimate and KliK)	200, thereof 10 (ca. 5 %)					Variable	Variable	NA	NA	Variable
Swiss Climate Foundation	3, thereof 1					up to 200'000	50 %	ca. 20	Reduction of CO_2 by promoting innovations with a climate protection effect	- Individual grants - Seat of applicant in CH or LI
myclimate	24, thereof 10					NA	NA	ca. 6	- Compensation CO_2	- Individual grants
KliK	2021 and 2022: 250 each, thereof 210					NA	NA	NA – several hundred	- Compensation CO_2	- Individual grants - Funding from 2022 onwards also abroad in developing countries
Technology Fund (Federal)	2021 and 2022: 30 each, thereof ~20 (loan guarantees)					50'000–3 million (mean value 1,7 million)	60 %	30, thereof ca. 20 in energy	- OpEx and CapEx for the commercialisation of innovation	- Applicant and lender with seat in Switzerland

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
		Basic Research	Applied R+D		P+D	Market					
European and international support programmes											
Horizon Europe [5,6] (w/o the following separately shown EU programmes and Partnerships)	9'600, thereof ~720 (10 %) in energy. Swiss share: 300, thereof ~33 in energy						600'000–100 million	100 % R+D 100 % acc. measures 70 % P+D	~3'000, thereof 10 % in energy)	– All direct project costs + overhead of 25 %	– Min. 3 partners from 3 EU or associated countries. Min. 1 partner from an EU country. - Applications just on the basis of calls for proposals
Horizon Europe – Climate, Energy and Mobility	1'734, thereof ca. 870 in energy. Swiss share: ca. 35, thereof 17 in energy						3–15 million	100 % R+D 100 % Acc. measures 70 % P+D	230–300 (ind. SME projects) in old H2020, thereof 11–14 % Swiss partners	– All direct project costs + overhead of 25 %	– Min. 3 partners from 3 EU or associated countries. Min. 1 partner from an EU country. – Applications just on the basis of calls for proposals
Horizon Europe – European Partnerships	ca. 3'930, thereof ca. 536 in energy. Swiss share: ca. 157, thereof 32 in energy						3–15 million	100 % R+D 100 % Acc. measures 70 % P+D	NA	– All direct project costs + overhead of 25 %	– Min. 3 partners from 3 EU or associated countries. Min. 1 partner from an EU country. – Applications just on the basis of calls for proposals
EURATOM	215, thereof 215 / Swiss share: up to 15						1.25– 470 million	100 % R+D 70 % P+D 50 % Cofund	10–15, thereof 5–6 with Swiss partners	– All direct project costs + overhead of 25 %	– Min. 3 partners from 3 EU or associated countries. Min. 1 partner from an EU country. – Applications just on the basis of calls for proposals

[5] For Horizon Europe (2021–2027) the Swiss Parliament approved a (negotiation) credit of CHF 4.65 billion in Dec. 2020, i.e. on average about CHF 665 million per year. These means are also used for the partial financing of European partnerships, including Eureka-Eurostars, EPM, as well as in the case of Switzerland's third-country participation. The allocation of funds to the sub-areas is not explicitly defined. The average Swiss means are lower at CHF 400-500 million per year for the current third country participation.

[6] Horizon Europe is made up of various sub-areas, incl. the following energy-relevant topics: Climate, Energy and Mobility; European Innovation Council EIC; and the embedded European Partnerships. Other themes with less energy relevance are only listed here in summary form and include: ERC European Research Council, JRC Joint Research Centre of the EU, EIT European Institute of Innovation and Technology, etc.

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
		Basic Research	Applied R+D	P+D	Market					
EUREKA – Network Projects	Support by the member states/ CH: ~1 million CHF/year 10 % in energy					0–1.5 million	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
Eureka – Clusters	Support by the member states – Network Projects					500'000–50 million	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/ usually 10–30 partners
Eureka –Eurostars	Support by the member states and EU / CH: ~12 million, thereof <5 % in energy					500'000–1.65 million	50 % (SMEs and science) 20 % Others	350, thereof ~40–50 with CH partners (<5 % in energy)	– All direct project costs	– Min. 2 partners from 2 countries – SMEs/ open for other partners – Innosuisse rates to be used
EPM – European Partnership on Metrology	EU support: 26 (2021) – 50 (2022 onwards), thereof ca. 20 % in energy Swiss share in the programme: 4.8 %					600'000–3 million	50 %	30–40, thereof 8–12 with CH partners (20 % in energy)	– All direct project costs + fix share for overhead	– As a rule, at least 3 partners from 3 EU or associated countries. Switzerland as additional 4th partner – Euramet members and project partners contribute the remaining 50 % – Applications just on the basis of Euramet calls for proposals

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
		Basic Research	Applied R+D	P+D	Market					
REPIC – Renewable Energy, Energy- and Resource Efficiency Promotion in Intern. Cooperation	2.0, thereof 1.25					100'000–150'000	50 %	10–15	– All direct project costs	– Min. 1 Swiss partner and 1 partner from a developing or transition country
Other International (research) Organisations	Total ca. 90[7] Ca. 110 million as return flow for R&D projects, services and procurements					NA	Variable	NA	- NA	- NA

[7] The annual investments by Switzerland are taken into account. Reflux occurs through supplier contracts from Swiss industry for construction projects and components, and to a lesser extent through the use of facilities by Swiss researchers for R&D project. The high return flow is largely due to CERN in Geneva. The energy-relevant share of the return flow cannot be estimated.