Resource efficiency and circular economy in Europe – even more from less

An overview of policies, approaches and targets of Switzerland in 2018

July 2019

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Acknowledgements

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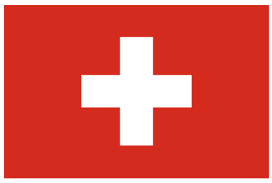
This country profile was prepared as part of the 2019 EEA review of material resource efficiency, circular economy and raw material supply policies, which aimed to collect, analyse, and disseminate information about experience with the development and implementation of these policies in EEA member and cooperating countries.

At the time of writing, a summary report is being finalised. The report reflects on trends, similarities and differences in policy responses, showcases selected policy initiatives from member countries and identifies possible considerations for the development of future policies.

These country profiles were compiled and finalised by members from the European Topic Centre on Waste and Materials in a Green Economy, namely Bart Ullstein, Bettina Bahn-Walkowiak, Jeroen Gillabel, Margareta Wahlström, Jutta-Laine Ylijoki, Dirk Nelen, Theo Geerken, Veronique Van Hoof and Evelien Dils. The responsible EEA project managers for the work were Pawel Kazmierczyk and Daniel Montalvo.

Switzerland, facts and figures

Note: data in this section was sourced from Eurostat databases (April 2019), except where noted otherwise



GDP: EUR 601.4 billion (3.8 % of total EU28 in 2017)

Per capita GDP: EUR 71,200 (purchasing power standard) (236.9 % of EU28 average per capita figure in 2017)

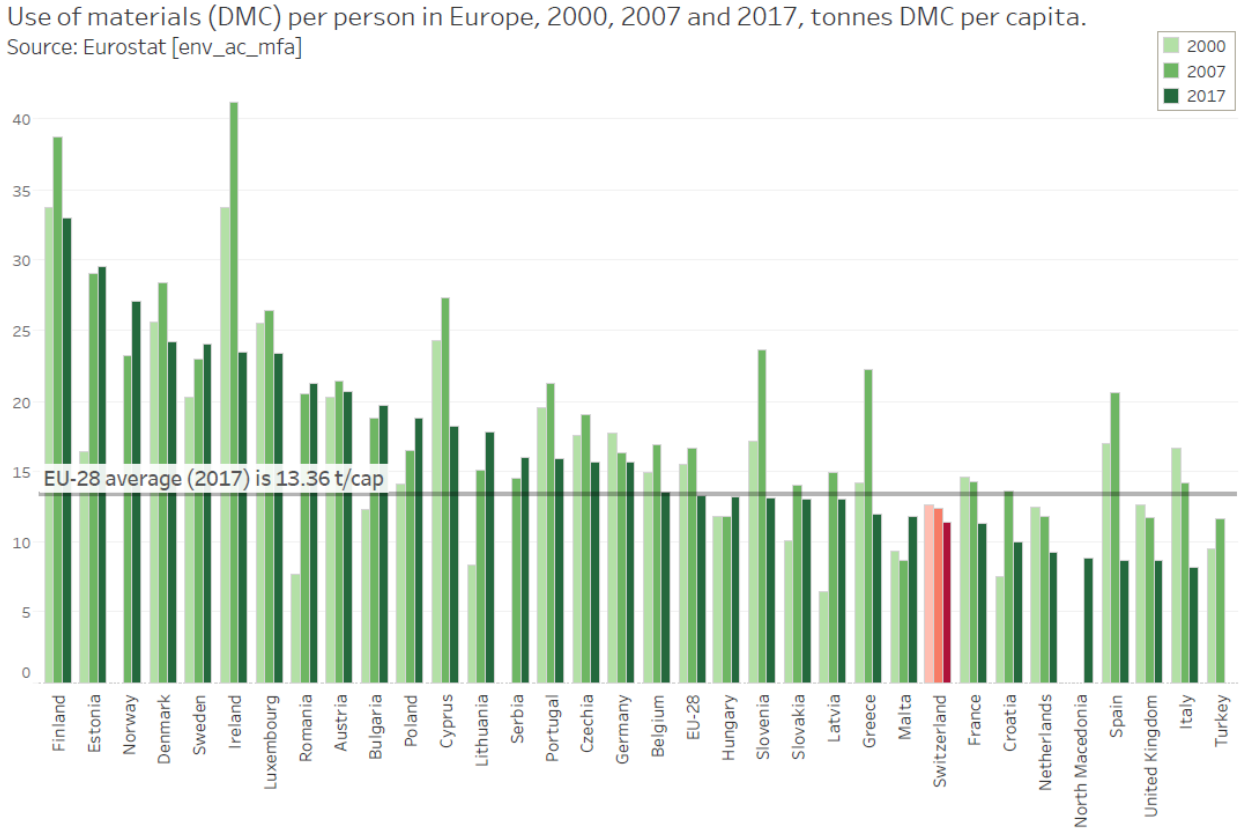
Use of materials (domestic material consumption (DMC))
96.9 million tonnes DMC (1.4 % of EU28 total in 2017)
11.5 tonnes DMC/capita (85.8 % of EU28 average per person in 2017)

Structure of the economy:
agriculture: 0.7 %
industry: 25.5 %
services: 73.8 %

Surface area: 41.3 thousand square kilometres (km^2) (0.9 % of total EU28)

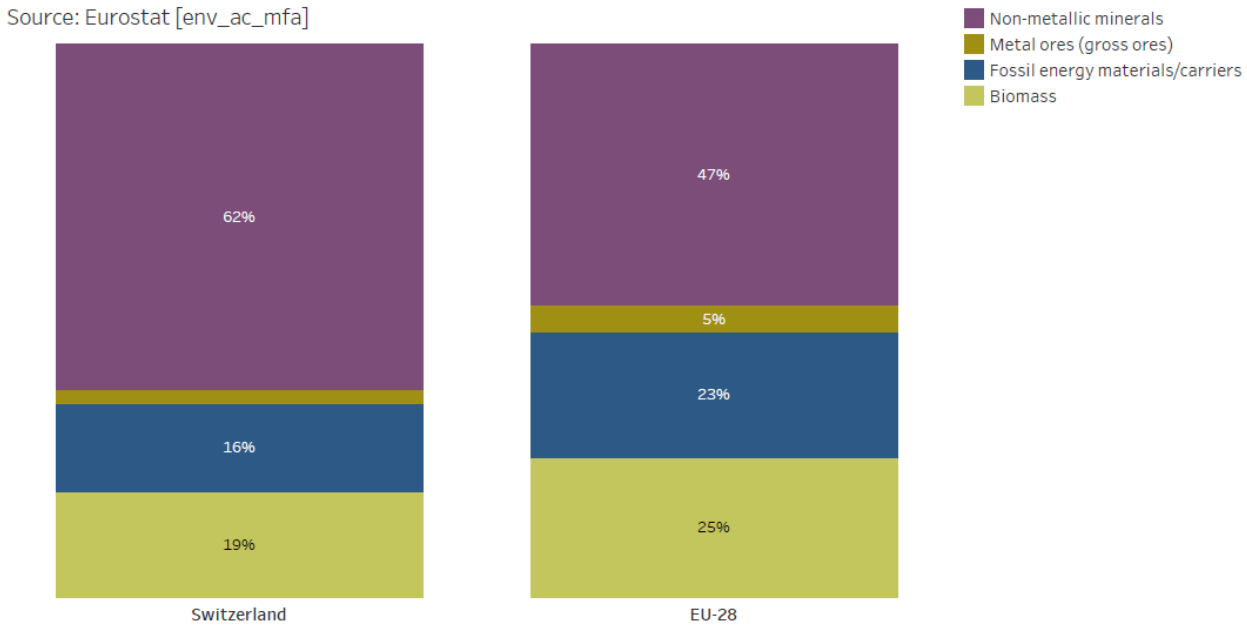
Population: 8.4 million (1.65 % of EU28 total in 2017)

Use of materials (DMC) per person in Europe, 2000, 2007 and 2017, tonnes DMC per capita.
Source: Eurostat [env_ac_mfa]



Switzerland & EU-28. Domestic Material Consumption by material category, 2017.

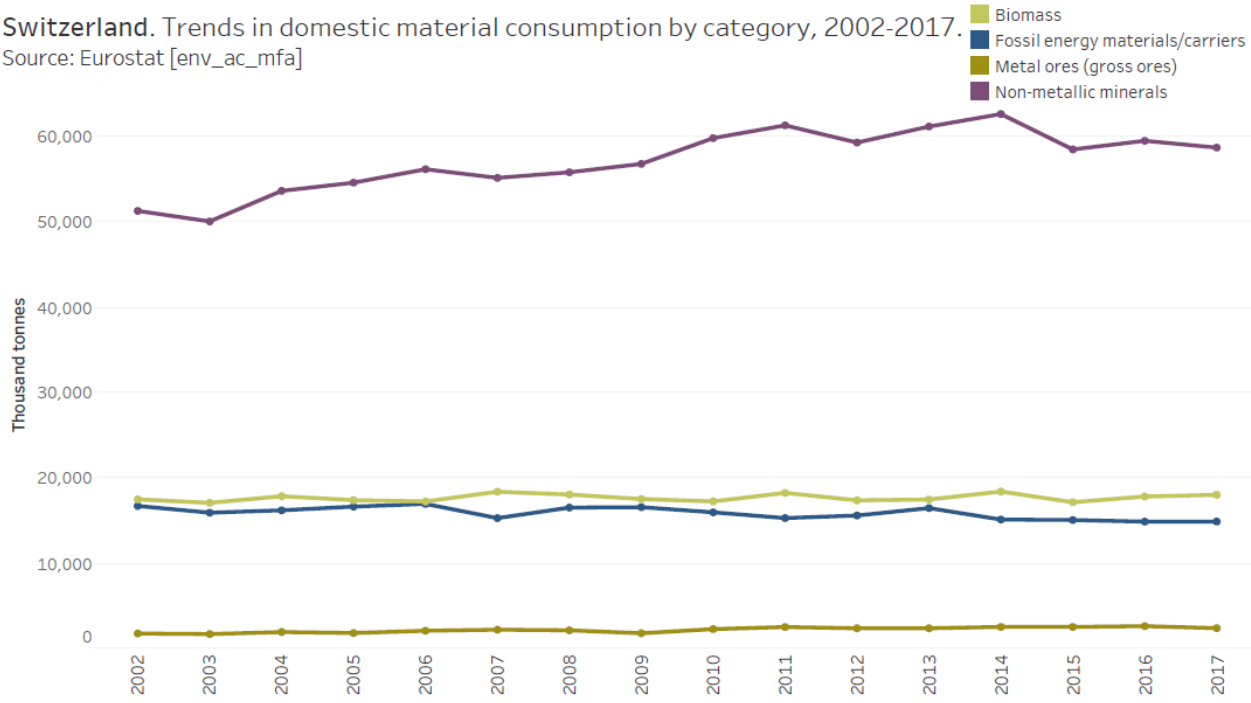
Source: Eurostat [env_ac_mfa]



Note: The domestic material consumption categories 'other products' and 'waste for final treatment and disposal' are excluded from the figure.

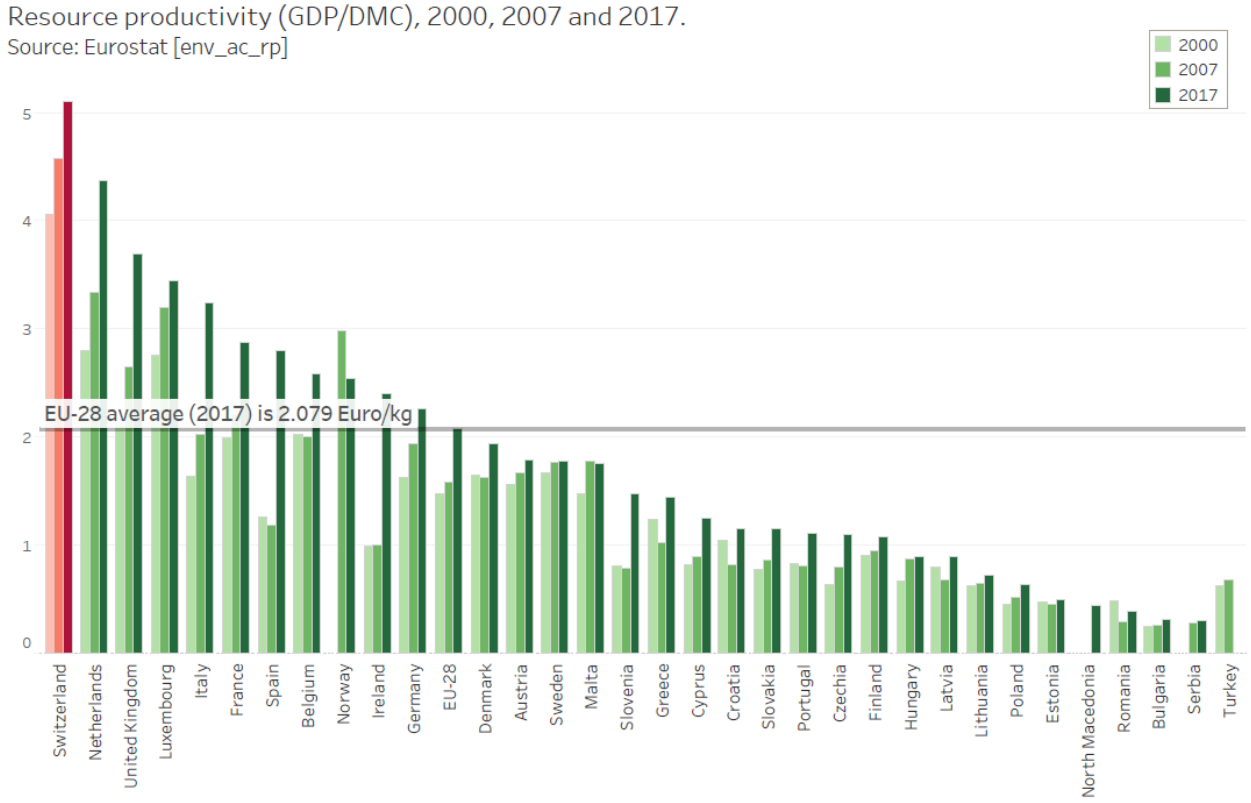
Switzerland. Trends in domestic material consumption by category, 2002-2017.

Source: Eurostat [env_ac_mfa]



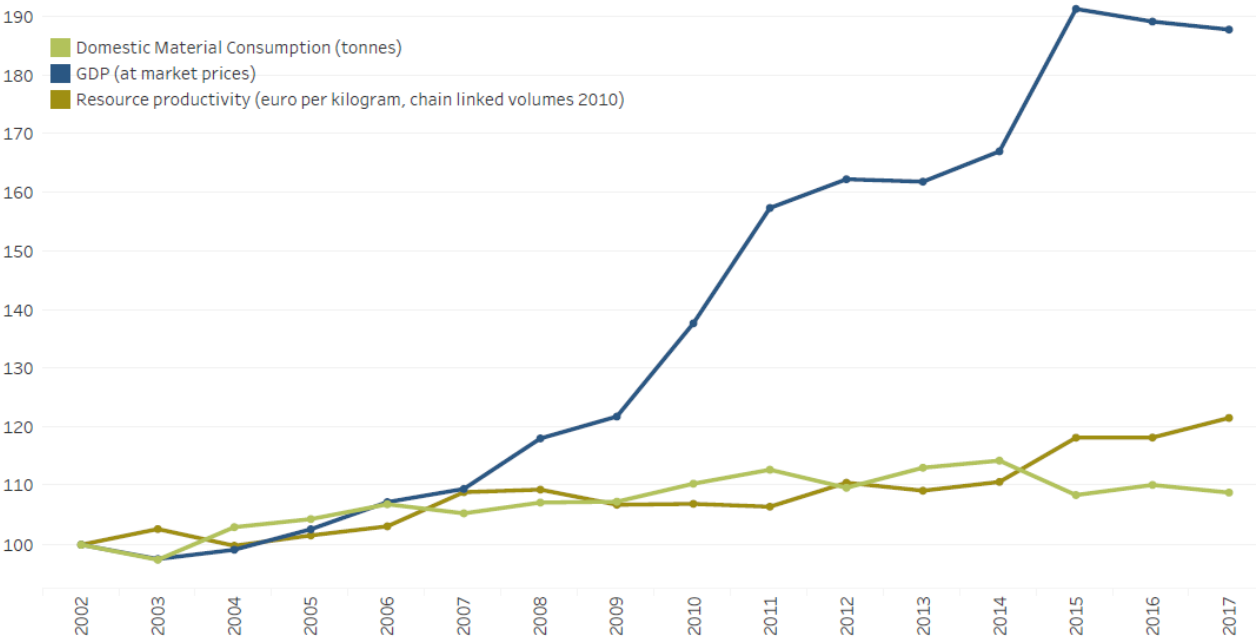
Note: The domestic material consumption categories 'other products' and 'waste for final treatment and disposal' are excluded from the figure.

Resource productivity (GDP/DMC), 2000, 2007 and 2017.
Source: Eurostat [env_ac_rp]

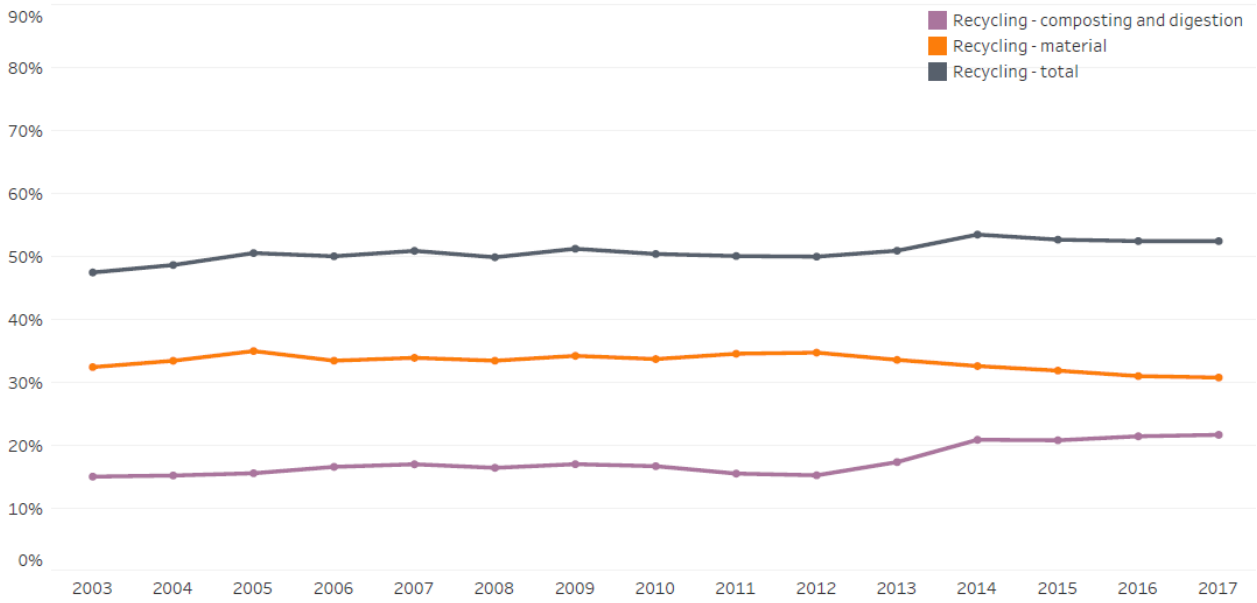


Note: GDP expressed in chain linked volumes 2010.

Switzerland. GDP, DMC and resource productivity trends, 2002-2017, index 2002=100.
Source: Eurostat [env_ac_mfa], [env_ac_rp] & [nama_10_gdp]



Switzerland. Recycling of municipal waste, 2003-2017, as share of total waste treatment.
Source: Eurostat [env_wasmun]



Note: The amount of municipal waste treatment is reported for the treatment operations incineration (with and without energy recovery), recycling, composting and landfilling.

Policy framework

Driving forces for material resource efficiency and circular economy

In Switzerland, there are several different drivers.

Drivers/conditions:

- the scarcity of certain raw materials in Switzerland;
- growing volumes of household waste despite recycling rates being considered high, leading to political pressure, for example, on packaging[1];
- shortage of space for the construction of landfill sites;
- rising consumer awareness, for example, on product lifespans.

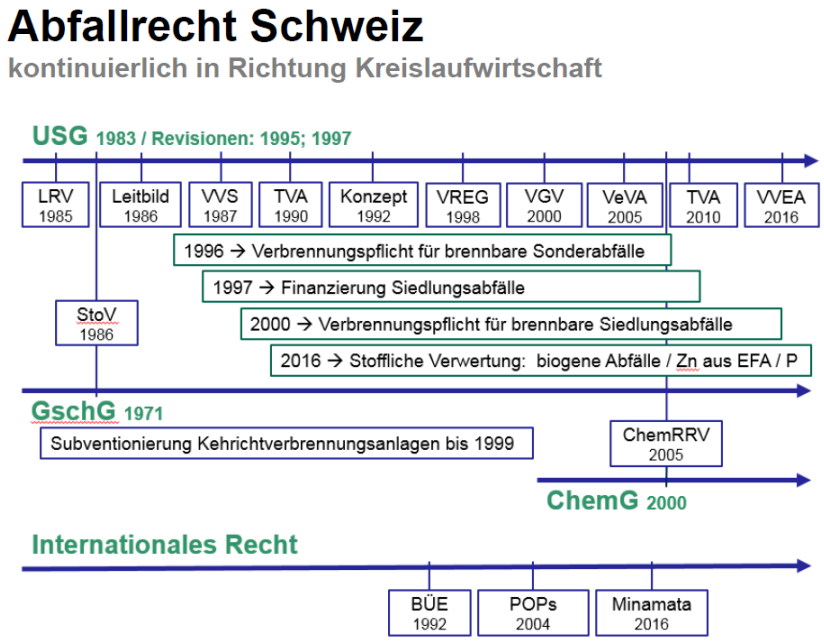
Priorities:

- environmental concerns: necessity to reduce footprints to within planetary boundaries;
- increasing competitiveness through resource efficiency;
- the availability of technological know-how.

Dedicated national strategies or roadmaps for material resource efficiency and a circular economy

Switzerland currently does not have a comprehensive national resource efficiency strategy, action plan or roadmap with quantified targets. Switzerland neither has a comprehensive national circular economy strategy, action plan or roadmap with quantified targets. Some aspects of the circular economy are covered by various policies and initiatives (see section on Policies which include elements of material resource efficiency, the circular economy is part of the Green Economy Action Plan (GEAP)). However, there is a policy on waste with a long tradition[2]. A more recent binding measure, the Ordinance on the Avoidance and the Disposal of Waste (VVEA)[3], which is based on the Environmental Protection law (USG) and the Law on the Prevention of Water Pollution (GSchG), can be considered a political framework.

The following graph shows the history of the Swiss legal framework for waste management. The recycling system has been evolving since 1985.



[1] https://www.bafu.admin.ch/bafu/en/home/topics/waste/in-brief.html (English)

[2] https://www.bafu.admin.ch/bafu/en/home/topics/waste/in-brief.html (English)

[3] https://www.admin.ch/opc/de/classified-compilation/20141858/index.html (French/German/Italian)

Overview of dedicated national or sectoral strategies for raw materials

Switzerland does not currently have a comprehensive national raw material strategy, action plan or roadmap.

However, the Swiss Federal Office for the Environment (FOEN) has supported the development of RESCHECK through its instrument for the promotion of environmental technology (see section on Examples of good practice and innovative approaches, financial support programmes). RESCHECK is a resource checking tool that enables small and medium-sized enterprises (SMEs) to determine their specific exposure to the growing scarcity of rare metals and to develop corresponding innovation and response strategies[4].

Policies which include elements of material resource efficiency

Green Economy Action Plan

The Federal Council adopted the GEAP in 2013. Switzerland's green economy policy focuses on three priority areas: consumption and production, waste and raw materials, and cross-cutting instruments[5]. The Federal Council aims to conserve natural resources and use them more efficiently, reducing the environmental impact of consumption and production, facilitating the financial industry's engagement for a sustainable financial system, promoting ecological public procurement and moving to a more circular economy. Therefore, it envisages setting smart framework conditions and sustaining voluntary initiatives from businesses, the scientific community and society[6].

The GEAP considers that existing policies on, for example, energy, climate and spatial planning already contribute to reducing the economy's environmental impact but that resource efficiency must be improved further to remain within or return to the safe operating space defined by planetary boundaries. The green economy measures contribute to the goals of the national Sustainable Development Strategy and the global UN Sustainable Development Goals (SDGs).

Important achievements of GEAP 2013 are the:

- organisation and launch of the national resource efficiency network for companies[7];
- development of a raw materials concept for non-energy mineral raw materials in Switzerland;
- implementation of guidelines and a national exposition on reducing food waste;
- (co-)founding of the Sustainable Construction Network Switzerland[8];
- strengthening of Switzerland's commitment to the green economy in international organisations, such as PAGE, IRP, 10YFP and GGKP;
- promotion of dialogue such as on sustainable financial markets and participation in the resource trialogue as well as the development and launch of a green economy dialogue portal[9].

For further information see also the section on Examples of good practice and innovative approaches.

On 25 September 2016 the green economy initiative For a Sustainable and Resource-Efficient Economy was rejected by voters. The initiative aimed at building the basis for an economy that does not overuse

[4] http://www.metal-risk-check.ch (French/German)

[5] https://www.bafu.admin.ch/bafu/en/home/topics/economy-consumption/info-specialists/green-economy/green-economy-action-plan--priority-areas.html (English)

[6] https://www.bafu.admin.ch/dam/bafu/en/dokumente/wirtschaft-konsum/fachinfo-daten/gruene_wirtschaftberichterstattungundaktionsplan.pdf.download.pdf/green_economy_reportandactionplan.pdf (English)

[7] www.reffnet.ch (German)

[8] www.nnbs.ch (German)

[9] www.gruenewirtschaft.admin.ch (English/French/German/Italian)

natural resources with the target for 2050 of attaining an ecological footprint that does not exceed Switzerland's bio-capacity[10].

Further development of the green economy, 2016–2019
Due to the rejection of the initiative by voters as well as the rejection by parliament of the proposed revision of the Federal Act on the Protection of the Environment (USG) as an alternative to the initiative, the 2016–2019 measures are based on existing legislation and do not target the drafting of new provisions in the short term. They are primarily intended to support the voluntary commitment of the actors concerned and to create potential for resource efficiency and conservation. The current legislation lacks more extensive and binding measures and there are no clear political goals for improving resource efficiency or other similar goals.

A large portion of current measures under the 2013 Green Economy Action Plan will be continued. Several have come to an end as such tasks as greening the tax system and the global welfare indicator have been completed or, as in the case of minimum requirements for placing products on the market or the obligation to take back packaging from consumers, discontinued.

Measures to improve environmental information about products and product lines, as well as minimum requirements for placing products on the market, have either been discontinued or have continued but not as planned due to the failed revision of the Act on the Protection of the Environment (in the context of the rejected initiative) in parliament.

Due to political developments in Switzerland or the European Union (EU) – such as the Circular Economy Action Plan[11] – additional requirements have been investigated for sustainable public procurement, the assessment of environmental technologies, waste avoidance, sustainable financial markets and higher vocational education.

Due to the high proportion of impacts abroad, the international dimension of measures to reduce the country's footprint is of central importance. Involvement in the relevant international organisations and bodies and international environmental agreements are important pillars in the transition to the green economy.

Expected future developments

- *Report on raw materials*

A national report on raw materials is in progress. The report tackles non-energy, mineral raw materials only. In addition, a study on the recovery of rare technical metals from electronic scrap and end-of-life vehicles (ELVs) is currently under way.

- *Strategy for biomass*

Regarding biogenic raw materials, a dedicated strategy for biomass was put in place in 2009. It aims at sustainable production, as well as material and thermal use of biomass in the agriculture, energy, environment and spatial planning sectors.

- *Waste ordinance*

A national policy, the Waste Ordinance, was set up in 2015 defining the use or obligation to recover secondary raw materials from:

- construction and demolition waste;
- soil;
- biogenic waste;

[10] https://www.bafu.admin.ch/bafu/de/home/themen/wirtschaft-konsum/fachinformationen/gruene-wirtschaft/volksinitiative-fuer-eine-gruene-wirtschaft.html (French/German/Italian)
[11] https://www.bafu.admin.ch/bafu/de/home/themen/abfall/recht/rechtsgutachten.html (French/German/Italian)

- phosphorus[12];
- raw materials for cement production;
- electric-arc steelmaking slag.

For a broad set of examples see also http://www.swissrecycling.ch/ (French/German/Italian).

- *Strategy for the avoidance of waste*
  A national strategy for the avoidance of waste is currently being developed – (to date, a stakeholder analysis has been conducted.
- *Improving the conditions of the commodity trading sector*
  The Federal Administration has been given the task of improving the conditions of the commodity trading sector and reducing potential and existing risks.
  For a more detailed explanation see the section on Seeking synergies with other policy areas.

Examples of initiatives at sub-national level (also relevant to section Resource efficiency and circular economy policy initiatives from subnational to local level*, but not exclusively focused on resource efficiency)*

New Regional Policy (NRP)[13]
The NRP, based on the 2006 national law on regional policy and its corresponding ordinance of 2007, came into effect in 2008. It is set up as a business-oriented structural policy. The goal is to support the structural transition of mountain, rural and border regions and to foster their competitiveness. The State Secretariat for Economic Affairs (SECO) evaluates project proposals by cantons for the Federal Department of Economic Affairs, Education and Research (EAER). The NRP is committed to sustainability and proposals have to include a sustainability assessment. However, it is up to the cantons to choose an assessment method and resource efficiency is not a default criterion.

Sustainable Development Strategy
The Sustainable Development Strategy 2016–2019[14], adopted in 2016, mentions the importance of resource efficiency and the promotion of the circular economy. The need for a reduction in Swiss resource use in order to stay within planetary boundaries is included under Action 4 of the Strategy. Besides renewable and non-renewable resources for energy and material use, the definition of natural resources includes, amongst others, biodiversity, landscape, soil, air, water and forests. Within this Strategy, cantons and municipalities play an important role in making sustainable development a reality, because of the distribution of responsibilities across the federation.

Institutional setup and stakeholder engagement

Institutional set-up
The FOEN is in charge of resource efficiency and circular economy policies. Raw material supply matters are jointly handled together with the Federal Office of Topography Swisstopo. Resource-related activities on an international level (trade) are processed by the State Secretariat for Economic Affairs (SECO). The Federal Office for Spatial Development (ARE) leads the Sustainable Development Strategy and the State Secretariat for International Financial Matters (SIF) leads on issues of sustainable finance.

[12] https://www.bafu.admin.ch/bafu/de/home/themen/abfall/veranstaltungen/phosphorrecycling-wie-weiter.html (French/German/Italian)
[13] https://www.seco.admin.ch/seco/de/home/Standortfoerderung/Regional_Raumordnungspolitik.html (French/German/Italian)
[14] https://www.are.admin.ch/are/en/home/sustainable-development/strategy-and-planning/sustainable-development-strategy-2016-2019.html (English/French/German/Italian)

Stakeholder engagement

As explained in section 'Seeking synergies with other policy areas', the FOEN is currently focusing on stakeholder engagement, besides the promotion of environmental technologies (section 'Examples of good practice and innovative approaches'). Furthermore, there is a variety of programmes and fora that promote resource efficiency among other priorities.

Programmes

- Reffnet.ch[15]

  The Swiss government supports the Reffnet network of experts offering advice to companies, especially SMEs, on increasing the material and energy efficiency in their products and production processes and therefore reduce costs and environmental impacts throughout their value chain. Enterprises can get targeted advice and audits.

  Since the creation of Reffnet in 2014, advice has been given to 184 enterprises and concrete measures have been adopted by 55, leading to a reduction in environmental damage of 100 billion ecopoints – this amounts to the environmental footprint of 5,000 people living in Switzerland. Furthermore, the production costs of participating companies have been reduced by CHF 50 million (EUR 43 million). For more information on ecopoints see the section on Indicators to monitor progress towards a resource-efficient circular economy.

- *Ressourcentrialog*[16]

An example of a voluntary initiative is the Ressourcentrialog. The collaboration of the economy, society and the public authorities has the scope to decouple environmental burden and economic growth by integrating waste management into resource policy, resource-efficient consumption and innovative economic activities. Therefore, 11 guiding principles have been developed.

1) Economy and society act primarily on their own responsibility.
2) There is fair competition between market actors in the waste treatment sector.
3) Waste has to be avoided, if feasible.
4) There is an optimal circulation of resources – the circular economy concept.
5) Producers, consumers and other actors carry the responsibility for the environmental burden of products over their whole life-cycle.
6) Primary and secondary resources are used/recovered in a sustainable manner.
7) There is a prioritisation of measures for avoidance and recovery of waste with regard to ecological and economic efficiency and effectiveness.
8) Transparency of financial and material flows is the basis for the optimisation of disposal systems.
9) High standards are applied in the waste recovery and treatment process.
10) The enhancement of disposal systems seeks an optimisation of costs, environmental benefit and customer service quality.
11) Owing to innovation and advanced technology, Switzerland has a considerable international impact.

- Go for Impact[17]

In order to promote the efficient management of resources and to raise awareness of its need, the FOEN is working on a voluntary platform to join forces, seek solutions and implement them with business, science, society and the public sector.

[15] https://reffnet.ch (/French/German/Italian)

[16] https://kommunale-infrastruktur.ch/cmsfiles/08_kuhn_trialog_rk2017.pdf (German)

[17] https://www.gruenewirtschaft.admin.ch/grwi/en/home/go-for-impact/Go-for-Impact/ueber-go-for-impact.html (English/French/German/Italian)

For this reason, the FOEN invited individuals from business, science, society and the public sector to participate in a Green Economy Dialogue Impulse Group for one year – between summer 2015 and summer 2016. The purpose of the group was to discuss how the transformation to a resource-conserving and efficient economy and consumption can be tackled expediently, and to identify particularly promising models, approaches and levers and the actors whose participation in this process is essential. The members of the impulse group did not primarily represent their organisations but participated in the dialogue as individuals.

The result of the process is Go for Impact – an appealing model which invites further dialogue and shows ways to turn challenges into opportunities. The model's effectiveness is measured on the basis of how many people it reaches, whether it is used in practice, and whether it also generates IMPACT by encouraging people to INTEGRATE and INNOVATE and adopt a focused economic orientation. Impact means decreasing resource consumption while improving economic efficiency and social conditions.

The FOEN supported a follow-up process during 2017. Economic, private and public associations including Economiesuisse, Swissmem, Scienceindustries, öbu, the World Wide Fund for Nature (WWF), Pusch and the FOEN are willing to raise a Go-for-Impact Association to support Swiss companies in becoming more resource efficient. The Association was launched on 12 February 2018.

Forums and portals

- **Swiss Green Economy Symposium**[18]
  This forum brings together decision makers from politics, economy, science, and the environmental sector. It is an annual platform, supported by the FOEN and private sponsors, for open dialogue on sustainability in business and on the potential for a sustainable Swiss economy.

- **The Green Economy Dialogue portal**[19]
  This portal demonstrates the variety of business models, activities and initiatives that exist in the area of the green economy and provides a space for airing different views. The portal aims to facilitate networking, inspire innovation and combine strengths to promote the more sparing and efficient use of natural resources.

  The portal presents ideas and concepts of companies that have already successfully implemented resource-efficient solutions on a voluntary basis and are generating profits or accessing new markets as a result. However, it also demonstrates the concerns of businesses, shows how science is researching new solutions, how new initiatives are emerging in society and how the state can contribute to solving the problem of resource scarcity. Although the focus is on natural resources, examples from the areas of energy, climate and sustainable development that contribute to reducing environmental pollution are also presented.

- **World Resources Forum**
  Since 2012 the FOEN has supported the World Resources Forum (WRF), an international platform for sharing knowledge about the economic, political, social and environmental implications of global resource use. The WRF promotes innovation for resource productivity by building bridges between researchers, policymakers, businesses, SMEs, NGOs and the public.

[18] http://sges.ch/lifefair/ (German)

[19] https://www.gruenewirtschaft.admin.ch/grwi/en/home/about-this-portal/about-this-portal.html (English/French/German/Italian)

- **Schweizer Ressourcenforum**[20]
  The Swiss Resource Forum is an initiative supported by, among others, the FOEN, WRF and the Swiss Federal Laboratories for Material Science and Technology (Empa). The conference is a networking event for decision makers in the fields of economy and politics, government and NGOs as well as scientists, to exchange information on best practice and the feasibility of resource-efficiency projects and initiatives.

- **Sustainable Recycling Industries**[21]
  The State Secretariat of Economic Affairs (SECO) has been developing e-waste knowledge partnerships worldwide since 2003. These have led to the development of a comprehensive approach in the form of the Sustainable Recycling Industries (SRI) follow-up programme. The development objective of SRI is the sustainable integration and participation of small and medium-sized enterprises (SMEs) from developing and transition countries in the global recycling of secondary resources. The programme includes experts in the field and builds strong local partnerships with governmental organisations, industry and civil society. The SRI is funded by SECO and is jointly implemented by Empa, the WRF and ecoinvent, a life-cycle-inventory database[22]. The FOEN acts as an advisory board member.

- **Forum Bauen**[23]

At the forum on construction, challenges related to the recycling of construction waste have been discussed based on actual examples.

- **Forum Biogene Abfälle**[24]
  According to the Ordinance on the Avoidance and the Disposal of Waste (VVEA) it has been mandatory to use biogenic waste under certain conditions, either as a material or through fermentation, since January 2017. The contamination of biogenic waste with plastic and other non-degradable products causes big challenges, especially for its use as compost. At the forum on biogenic waste 2017, two potential solutions were discussed: better sorting plants and the introduction of a fee for the collection of biogenic waste.

- **G21 Swisstainability Forum**[25]
  The G21 Swisstainability Forum is supported by, among others, the FOEN. This Forum deals with sustainability in general and thus has a broader scope than the Swiss Resource Forum. The G21 is organised by the association NiceFuture[26]. Partners come from both the public and private sector: Canton de Vaud, École polytechnique fédérale de Lausanne (EPFL), BCorp[27], Néstle and others.

Approaches to resource efficiency and circular economy policy evaluation

For ex-ante evaluation new regulations or substantial revisions of existing legislations, the State Secretariat for Economic Affairs recommends a so-called Regulatory Impact Analysis (Regulierungsfolgenabschätzung,

[20] https://www.wrforum.org/events/wrf-events/schweiz-rohstoffwende-forum/ (German)
[21] http://www.sustainable-recycling.org/ (English)
[22] https://www.ecoinvent.org/ (English)
[23] https://www.bafu.admin.ch/bafu/de/home/themen/abfall/veranstaltungen/forum-bauen-22-11-2017.html (English/French/German/Italian)
[24] https://www.bafu.admin.ch/bafu/de/home/themen/abfall/veranstaltungen/forum_biogene_abfaelle_17-11-2016.html (English/French/German/Italian)
[25] http://www.g-21.ch/ (French)
[26] http://www.nicefuture.com (French)
[27] https://www.bcorporation.net/ (English)

RFA), an evaluation of the impacts of the regulation[28]. The goal is to analyse the economic, ecological and social impacts of policies according to a given checklist.

The Sustainability Assessment (Nachhaltigkeitsbeurteilung, NHB)[29] is commonly used as an *ex-ante* assessment tool.

Both these tools evaluate the economic, social and environmental consequences of initiatives or regulations, although they differ in terms of focus. Impact Analyses concentrate mainly on economic consequences but also look into the impact on individuals who are affected, not just the economy or society as a whole. Sustainability Assessments aim to incorporate environmental, social and economic aspects into laws, action plans and public projects at both national and local levels. Despite these differences, there are many common points, which make switching from one instrument to another much easier. Responsibility for carrying out an Impact Analysis or Sustainability Assessment falls within the remit of federal offices which can adapt the tool to suit the proposal being assessed.

The FOEN has developed its own instrument for ex-ante evaluation. The Economic Assessment (Volkswirtschaftliche Beurteilung, VOBU) is based on – and considered equivalent to – the Regulatory Impact Analysis, but specifically fitted to assess the economic impacts – as well as social and environmental impacts – of environmental policies. It is mandatory for new environmental policies and substantial revisions to existing legislation. It includes a step-wise procedure for the assessment of the relevance of possible impacts on the economy and the environment and for the actual assessment of the impacts. In order to assess the full scope of impacts of regulations, some instruments may have to be analysed in greater detail. The exact methodology typically depends on the type of instrument. Market-based instruments such as taxes or trading systems are usually assessed with general equilibrium models. Other instruments are best evaluated using bottom-up approaches. Legislation usually does not prescribe the use of specific approaches for such in-depth-analyses[30].

Based on the Sustainability Assessment, the Federal Office for Roads developed sustainability indicators for highway infrastructure projects (Nachhaltigkeitsindikatoren für Strasseninfrastrukturprojekte, NISTRA) and the Federal Office for Transports, ustainability indicators for railway infrastructure projects (Nachhaltigkeitsindikatoren für Bahninfrastrukturprojekte, NIBA) which focus on road and rail infrastructure projects respectively.

With regard to *ex-post* assessment tools, a general guide has been developed, the Guide de l'évaluation de l'efficacité à la Confédération[31].

Monitoring and targets

Targets for resource efficiency and circular economy

Quantified general material targets have not yet been adopted by political decision makers.

The need for action that deviates from the SDGs is currently assessed by the responsible federal offices under the lead management of the Federal Office for Spatial Planning (ARE).

[28] http://www.seco.admin.ch/air (French)

[29] https://www.are.admin.ch/are/en/home/sustainable-development/data/assessing-sustainability.html (English/French/German/Italian)

[30] http://www.bafu.admin.ch/wirtschaft/15556/15566/index.html?lang=fr (French)

[31] https://www.bj.admin.ch/bj/fr/home/staat/evaluation/materialien.html (French/German/Italian) and https://www.bj.admin.ch/bj/fr/home/staat/evaluation/netzwerk.html (French/German/Italian)

Furthermore, possible targets are explored in scientific research papers, to provide a basis for political discussion[32].

While the Green Economy Action Plan does not quantify specific targets, the footprint indicators used to monitor progress towards a green economy include the planetary boundaries as context information (see the section Indicators to monitor progress towards a resource-efficient circular economy on the green economy online indicator set and the study[33]).

There are targets and prohibitions for specific materials and waste:
- the disposal of municipal waste at landfill is prohibited;
- the recovery of phosphorus from sewage treatment plants is going to be mandatory in 2026;
- if the recycling share for PET plastics, aluminium and glass drops below 75 per cent, a deposit-based solution will be implemented.

See also the section on Policies which include elements of material resource efficiency on expected future developments and waste ordinance.

Indicators to monitor progress towards a resource-efficient circular economy

In Switzerland, the FOEN as well as the Federal Statistical Office publish indicators related to resource efficiency, waste and the green economy, among others.

Indicators related to resource use are:
- material footprint (raw material consumption (RMC));
- consumption-related material efficiency (gross domestic product (GDP)/RMC);
- ecology in the construction sector (this indicator depicts the certified energy reference area and hence the demand for buildings certified by the Minergie standard[34].

Besides the material footprint, the green economy indicator set includes energy, biodiversity, water, greenhouse gas and the ecological footprint as well as the total environmental impact of Swiss consumption. The latter indicator depicts aggregated impacts arising from Swiss consumption at home and abroad with ecopoints based on the ecological scarcity method, also known as the UBP method[35]. Ecopoints can also be used to calculate the environmental impact of products and processes, as applied in the Reffnet.ch projects (section 'Examples of good practice and innovative approaches').

The share of environmental impacts generated abroad by Swiss consumption is increasing. Currently three quarters of the total environmental burden are caused beyond Swiss borders. The FOEN uses footprint indicators to make the global environmental effects of Swiss consumption visible.

The green economy indicator set includes efficiency indicators but also focuses on per person footprints in absolute numbers because an increase in efficiency alone is not sufficient. Instead, the FOEN provides a comparison with the available limits derived from planetary boundaries to communicate the need for action[36].

[32] https://www.ebp.ch/sites/default/files/project/uploads/2012-03_ausblick-2050_bericht_def.pdf (German)
[33] http://pb.unepgrid.ch/planetary_boundaries_switzerland_report.pdf (English)
[34] https://www.minergie.ch/de/verstehen/baustandards/ (German)
[35] https://www.bafu.admin.ch/bafu/de/home/themen/wirtschaft-konsum/dossiers/aktualisierung-der-ubp-methode.html (English/French/German/Italian)
[36] https://www.bafu.admin.ch/bafu/en/home/state/indicators.html, Topic Green Economy (English/French/German/Italian)

Indicators related to waste[37] are:

- energy efficiency during waste incineration processes;
- fees for waste incineration;
- hazardous wastes, hazardous waste recovered, and exported hazardous waste;
- separate collection of electrical and electronic scrap;
- waste incineration, residues of incineration;
- municipal solid waste;
- recycling rate;
- energy production during waste incineration processes;
- quantity of WEEE collected per person;
- separately collected waste;
- waste in landfills;
- beverage packaging put into circulation;
- waste used in cement mills.

The Federal Statistical Office (FSO) uses a system of 73 indicators (MONET) to measure progress towards sustainable development. MONET combines socio-economic indicators with output and outcome indicators related to resource use and environmental pollution[38].

Resource-related indicators are:

- material footprint (RMC);
- material intensity (RMC/GDP);
- consumption of organic products;
- municipal waste;
- rate of separately collected waste;
- material footprint of imports.

Resource efficiency, circular economy and the 2030 Sustainable Development Goals

As already mentioned in the section on Targets for resource efficiency and circular economy, the need for action in the context of the SDGs is currently being assessed with the involvement of stakeholders[39].

The Swiss government mandated the Federal Office for Development and Cooperation (DDC) and Federal Office for Spatial Development (ARE) to submit proposals to implement Agenda 2030 by January 2018, including proposals for a first report.

In the transition phase for the establishment of these proposals (2016–2017), a working group involved several federal departments.

In an online consultation from June to August 2017 non-governmental stakeholders were asked about their views on the information on SDG targets.

Concrete measures, targets and strategies are currently being developed and the first resulting publications are planned for summer 2018.

Events to date and further planned steps are described on the 2030 Dialogue for Sustainable Development.

[37] https://www.bafu.admin.ch/bafu/en/home/state/indicators.html, Topic Waste (English/French/German/Italian)
[38] https://www.bfs.admin.ch/bfs/de/home/statistiken/nachhaltige-entwicklung/monet/alle-nach-themen.html (English/French/German/Italian)
[39] https://www.eda.admin.ch/agenda2030/en/home/umsetzung/dialog-2030.html ((English/French/German/Italian)

The GEAP (see the section on Policies which include elements of material resource efficiency) assigns measures that contribute to the SDGs[40].

Most of these measures focus on the development of methodological approaches and strategies such as optimisation of recycling and on evaluating feasibility and priorities, for example, on food waste, as a first step before concrete targets can be set and aimed at.

The SDGs offer valuable support to the FOEN strategy of dialogue and engagement with stakeholders and are specifically integrated in the discussions. For example, the already mentioned reffnet.ch programme (section 'Examples of good practice and innovative approaches') contributes to the SDG 8.4 target.

Examples of innovative approaches and good practice

Examples of good practice and innovative approaches

1. Product-related policies, including on repair and reuse

There are no national policies. However, the FOEN gave financial support to the consumer organisation Stiftung für Konsumentenschutz (SKS) to coordinate and support the repair café movement in the German-speaking part of Switzerland. Repair cafés are usually one-day events to which people can bring broken everyday items. At the event, volunteer repair experts help with repairs and tools are available. Often, there is also a small café and information about sustainable consumption and production is sometimes provided. Repair cafés are organised by volunteers and are free of charge. Most initiatives cover their costs with donations from visitors and many find locations they can use for a very small sum or free of charge (sometimes provided by the municipality). In order to support new as well as existing repair cafés, SKS offers the following services.

- Creation of a website that provides guidelines on how to establish and organise a new repair café, lists existing repair cafés and provides information on upcoming repair events.
- Support for repair cafés with flyers and posters that can easily be adapted; personal advice on topics such as how to set up an association, most repair cafés are set up this way,; organisation and communication; and a range of templates including articles of association or press releases.
- Organisation of a yearly networking event for repair initiatives in Switzerland. This event facilitates exchange between the various repair projects and helps to improve the support network by sharing concerns and wishes among the initiatives.
- Common liability insurance for repair cafés cooperating with SKS – this is an example of a solution to a concern that was brought up at a networking event.
- Coordination of an annual national repair day when repair cafés all over the country organise repair events. At each event the repaired items are counted and weighed. This allows an evaluation of the number of items refurbished and the volume of garbage prevented. These numbers can be picked up by the press, thus increasing press coverage.

2. Producer/supplier responsibility

Food waste: individual coaching programme for the food service sector (by United Against Waste)

United Against Waste[41] is a food service sector association committed to reducing food waste within the industry. It developed a short and individual coaching programme for companies to monitor and reduce their food waste. The aim is to reveal the quantities and sources of food waste within a specific company in order to determine the most effective measures for reduction. The association adopted software (Lean Path) that records food waste quantities and categorises them in the kitchen with minimal effort.

[40] https://www.bafu.admin.ch/dam/bafu/fr/dokumente/wirtschaft-konsum/fachinfo-daten/bericht_an_den_bundesratgruenewirtschaft.pdf (French)

[41] http://www.united-against-waste.ch (French and German)

Companies receive a weekly analysis by email. After four weeks the data is analysed by a coach who then develops an individual catalogue of possible measures and supports the company in adopting them.

Moreover, companies are informed of the financial aspects of food waste. The case studies created so far demonstrate that companies taking part in the programme reduce food waste by an average of 25 per cent within just four weeks.

In 2015, the FOEN provided financial support for a pilot phase to test and evaluate the coaching programme. At the same time, it allowed the association to compile case studies which subsequently helped in promoting the programme. The programme is self-sustaining with companies paying for the service (members of United Against Waste get a discount).

The innovative aspect of the programme is that it is based on on-site monitoring as part of a very simple and short but personal coaching programme. In many cases, waste quantities begin to decline after one or two weeks of monitoring – before any specific measures are taken – showing that being informed about the actual quantities is an important part of the success of this approach. Experience shows that the programme leads to substantial reductions in food waste within a short time while requiring minimal time and financial resources. At the same time, companies can save considerable amounts of money. This is also documented in the case studies that help to promote the programme[42].

Taxation and economic instruments to encourage investment in resource efficiency and circular economy.

- Associations are allowed to use the money gathered from the so-called pre-recycling fee for awareness raising – with the goal of increasing the return rate for recycling.
- The so-called VASA[43] fee for the disposal of inert material, residual products, and reactor waste is an incentive for the reduction of waste disposal. Landfill disposal of municipal waste is prohibited.
- The introduction of a fee for solid municipal waste bags has led to an increase in the recycled share of municipal waste of about one-third. The fee is based on article 32a, 1 of the Act on Environmental Protection. Cantons are responsible for waste management. The fee itself is set by municipalities. The fee was first introduced by St. Gallen in 1975, and most other cantons followed suit in the 1990s.

3. Financial support programmes

Environmental technology promotion

The FOEN supports the development of technologies, processes and products (goods and services) that reduce environmental impacts and enable a sustainable use of our resources, and has been providing CHF 4.3 million (EUR 3.7 million) per year since 1997. Projects are mainly supported at the demonstration and pilot phase, with some accompanying measures at the phase of market access and diffusion. Basic and applied research is not supported by this instrument. Public and private partners are eligible, including universities, research institutes, NGOs and private companies, in particular SMEs. Financial support is limited to a maximum of 50 per cent of the total cost of the project. The governmental contribution is subject to reimbursement within 10 years, based on effective commercial benefits[44].

[42] https://www.bafu.admin.ch/bafu/de/home/themen/abfall/abfallwegweiser-a-z/biogene-abfaelle/abfallarten/lebensmittelabfaelle.html (English/French/German/Italian)

[43] https://www.bafu.admin.ch/bafu/de/home/themen/altlasten/fachinformationen/altlastenfinanzierung/abgabeerhebung-vasa.html (English/French/German/Italian)

[44] https://www.bafu.admin.ch/bafu/de/home/themen/bildung/innovation/umwelttechnologiefoerderung--projekte.html (English/French/German/Italian) and https://www.bafu.admin.ch/dam/bafu/de/dokumente/innovation/fachinfo-daten/wirkung_der_umwelttechnologiefoerderung2007-2011.pdf.download.pdf/wirkung_der_umwelttechnologiefoerderung2007-2011.pdf (German)

Pilot, demonstration and flagships programme
With its pilot, demonstration and flagships programme, the Swiss Federal Office of Energy (SFOE) promotes the development of innovative technologies and solutions and their introduction to the market. Providing CHF 25 million (EUR 21.5 million) per year, the programme supports projects that promote the economical and efficient use of energy or the use of renewable energy. Through its support measures, the programme facilitates the practical implementation of the results of Swiss energy research. Financial support is limited to a maximum of 40 per cent of the total cost of the project.

Technology fund[45]
The technology fund was created by the federal government to promote innovative technologies that reduce greenhouse gas emissions and the consumption of resources, support the use of renewable energy and increase energy efficiency. The fund lowers the bar for innovative companies to get the necessary financing by guaranteeing loans. If their application is approved, the companies receive a confirmation of a guarantee. The guarantee is then issued to banks or other suitable lenders. To cover losses on the guarantee, a maximum of CHF 25 million (EUR 21.5 million) out of the revenues from a carbon dioxide levy is invested in the technology fund each year.

4. Innovation: practical application
Reffnet[46]
The Swiss government supports the Reffnet network of experts offering advice to companies, especially SMEs, on increasing the material and energy efficiency in their products and production processes and therefore reduce costs and environmental impacts throughout their value chain. Enterprises can get targeted advice and audits.

Since the creation of Reffnet in 2014, advice has been given to 184 enterprises and concrete measures have been adopted by 55, leading to a reduction in environmental damage of 100 billion ecopoints – this amounts to the environmental footprint of 5 000 people living in Switzerland. Furthermore, the production costs of participating companies have been reduced by CHF 50 million (EUR 43 million). For more information on ecopoints see section 'Indicators to monitor progress towards a resource-efficient circular economy'.

RESCHECK
The FOEN has supported the development of RESCHECK (metal risk check)[47]. This easy-to-use tool is based on a questionnaire that allows SMEs to assess their dependence on critical metals and to develop corresponding innovation and response strategies. RESCHECK has been supported by the instrument for environmental technology promotion (see point 3, above, on financial support programmes). It is not directly linked to the Reffnet project.

Cleantech Masterplan
Published in 2011, the Cleantech Masterplan for Switzerland forms a framework that enables the Swiss Federal Council to undertake activities in the fields of resource efficiency and renewable energy by including different federal departments. These activities on the evaluation of innovation and professional education landscapes in Switzerland were implemented between 2011 and 2014. From 2016 onwards, the Federal Council decided to include any remaining activities in other strategies of the Swiss government such as the GEAP. The activities are followed and evaluated by a Cleantech Coordination Group within the Federal Administration.

[45] https://www.bafu.admin.ch/bafu/en/home/topics/climate/info-specialists/climate-policy/technology-fund.html (English/French/German/Italian) and http://www.technologyfund.ch/ (English)
[46] https://reffnet.ch (German)
[47] http://www.metal-risk-check.ch (French/German)

Swiss Cleantech Report[48]

The Swiss Cleantech report presents examples of innovation projects that have been supported by different Swiss governmental financial support programmes: for example, promotion of environmental technology[49]; pilot, demonstration and flagships programmes for the promotion of an efficient use of energy or the use of renewable energy; and Renewable Energy, Energy and Resource Efficiency Promotion in Developing and Transition Countries (REPIC)[50]. So far two reports have been published. They were initiated and written by private companies from the clean-tech sector and financially supported by the Federal Administration.

5. Innovative business models

The FOEN has assisted a study on business models that promote a circular economy.

6. Public procurement[51]

There are many voluntary actions in relation to sustainable public procurement which contribute to the circular economy and resource efficiency, based on the Sustainable Development Strategy. The conference of federal procurers has mandated a working group on sustainability to strategically promote sustainable procurement at all organisational levels. The French-speaking cantons in Switzerland developed a guide on sustainable procurement which includes aspects related to resource efficiency. Recommendations for the procurement of cleaning services have been recently published by an association of public authorities, with clear requirements regarding limited use of cleaning products. Furthermore, the current revision of the federal law on public procurement is planning on giving sustainability a prominent place, thus allowing for the integration of relevant criteria regarding circular and green economy such as life cycle costings.

7. Institutional and regulatory arrangements to support the transition towards a resource-efficient circular economy

The FOEN participates in a discussion on resources with multiple stakeholders (Ressourcen-Trialog, mentioned above). A coherent concept has been developed to support the paradigm change towards an economy that uses waste materials as valuable resources (section 'Institutional setup and stakeholder engagement')[52].

8. Sharing economy, buying services instead of purchasing products, etc.

There are no national policies on this issue. The FOEN gave financial support to the project Pumpipumpe[53] which sets out to promote sharing principles in Switzerland. Pumpipumpe is a neighbourhood project that facilitates sharing by providing labels that a willing sharer can stick on to a mailbox to indicate what they are willing to lend. Conditions are arranged individually between the people who lend and borrow.

Seeking synergies with other policy areas

The initiatives and programmes mentioned in the previous sections have a broad scope and understanding of resources and sustainability. The aim is a green economy in which resource efficiency as well as circular concepts play a role.

A prerequisite for a resource-efficient and future-fit economy is a policy framework that secures policy coherence. Regarding environmental policy in connection with financial market policy, an important

[48] http://www.swisscleantechreport.ch/ (English)

[49] https://www.bafu.admin.ch/bafu/de/home/themen/bildung/innovation/umwelttechnologiefoerderung--projekte.html (English/French/German/Italian)

[50] http://www.repic.ch/repic-en/ (English)

[51] http://www.achats-responsables.ch/ (French)

[52] https://kommunale-infrastruktur.ch/cmsfiles/08_kuhn_trialog_rk2017.pdf (German)

[53] www.pumpipumpe.ch (French/German/English)

milestone was achieved in February 2016, when the Federal Council adopted principles regarding the environmental dimension of sustainability in connection with financial market policy. The principles are geared to the primacy of market solutions and to the subsidiarity of state action and focus on transparency and the long-term outlook. These principles have been integrated into the Federal Council's report on the strategic thrusts of the financial market policy of October 2016, emphasising that Swiss financial institutions and investors should play their part in the mitigation and management of global environmental risks and in the transition to a resource-saving economy. Thanks to its expertise in the environmental sector, the favourable framework and a strong financial sector with immense specialist knowledge, Switzerland has the potential for a long-term competitive advantage in the area of sustainable investments[54].

In cooperation with the FOEN, the State Secretariat for International Financial Matters (SIF) hosts a regular exchange of ideas with representatives of the finance industry on the inclusion of environmental criteria in financial business. One of the joint objectives is to harmonise sustainable investment methodologies developed by the sector and to work towards best practice in implementing them in day-to-day business.

Furthermore, the FOEN has prepared a publication together with experts from the financial sector, academia, NGOs and other federal offices which recommends measures for a sustainable Swiss financial system (*Proposals for a Roadmap towards a Sustainable Financial System in Switzerlan*d) [55] . Swiss Sustainable Finance (SSF), the association promoting sustainable finance in Switzerland, has taken ownership of these measures and continuously develops them and monitors the implementation process.

In 2017, the FOEN and SIF initiated pilot tests to analyse the climate alignment of financial portfolios. All Swiss pension funds and insurance companies could voluntarily have their portfolios of stocks and corporate bonds tested, anonymously and free of charge, for their compatibility with the 2°C target. Some 79 pension funds and insurance companies, which represent about two thirds of the total market, as measured by assets under management, accepted this invitation. The climate-impact tests carried out in 2017 show that investments currently support a path towards 4–6 ºC. But there are large differences between individual insurance companies and pension funds. Some are already making climate-friendly investments, while others in certain sectors or classes of investment are not[56].

Examples of policy initiatives in Switzerland which seek to make imports of materials and products more sustainable are:

1. **Support of voluntary measures**

The FOEN supports the implementation of voluntary measures for the responsible use of ecologically sensitive raw materials[57].

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[54] Magazine «environnement» 2/2017 - Le levier de l'argent, https://www.bafu.admin.ch/bafu/fr/home/documentation/magazine/magazine2017-2.html (English/French/German/Italian)and FOEN Information for specialists - Sustainable Finance, https://www.bafu.admin.ch/bafu/en/home/topics/economy-consumption/info-specialists/sustainable-finance.html (English/French/German/Italian)

[55] https://www.bafu.admin.ch/bafu/en/home/topics/economy-consumption/economy-and-consumption--publications/publications-economy-and-consumption/proposals-roadmap-financial-system-switzerland.html (English/French/German/Italian)

[56] Quantifying the alignment of Swiss pension funds and insurances with the Paris Agreement, https://www.bafu.admin.ch/dam/bafu/en/dokumente/klima/fachinfo-daten/klimavertraeglichkeitsanalyse.pdf.download.pdf/EN_2ii_Out_of_the_fog_v0_full_report_October_2017.pdf (English)

[57] https://www.bafu.admin.ch/bafu/de/home/themen/wirtschaft-konsum/fachinformationen/rohstoffe.html (English/French/German/Italian)

A 2015 study investigated 14 imported raw materials that cause a high environmental burden abroad[58].

The 14 initially selected – cotton, fish, coffee, cocoa, palm oil, rape oil, rice, cane sugar, beet sugar, black pepper, soy, sunflower oil, tea and peat – were identified by the WWF Market Transformation Initiative, the IDH Dutch Sustainable Trade Initiative and through stakeholder interviews. The 2015 study showed that peat, cotton, fish, soy, coffee, palm oil and cocoa are the most relevant imported raw materials.

Peat
The FOEN is implementing the peat exit plan as accepted by the Federal Council in 2012. The focus is initially on a continuous reduction of peat use through voluntary measures. As peat applications are diverse and at different levels of maturity for substitution, the FOEN opted for a staged approach with an initial focus on the availability of peat-free alternatives in gardening applications. The FOEN is the coordinator of a working group comprising retailers, garden centres, soil producers and trade associations. The working group developed a memorandum of understanding (MoU) for the industry through which the signatory parties commit to continuously reducing peat use across their areas of influence and by 2020 to specifically reduce peat use in soil bags to a maximum of 5 per cent of total volume across soil product ranges. The MoU, which has been signed by eight organisations with more having expressed an interest in joining, is also followed up by communication measures to engage the peat industry and consumers[59].

Cocoa
To accelerate the transition towards imports of sustainable cocoa, the FOEN is supporting the Swiss Platform for Sustainable Cocoa (Schweizer Plattform für Nachhaltigen Kakao) and, together with 45 companies and organisations, signed the declaration of intent for a sustainable cocoa value chain in June 2017.

Soy
In this area the focus is on supporting the work of existing networks such as Sojanetzwerk Schweiz. The FOEN financed the benchmark study on leading standards for soy in Switzerland as run by the Swiss soy network. The results enable the association to work with organisations on the continuous development of their standards.

Gold
In 2013, the private sector (Swiss Better Gold Association – SBGA) and the Swiss government (State Secretariat for Economic Affairs – SECO) launched/created a public-private partnership called the Better Gold Initiative (BGI). It is an integrated supply chain project that aims at improving the social and environmental condition of artisanal, small and medium-scale gold mining throughout the world[60].

In addition, the Swiss government has supported the development and implementation of a variety of other non-binding private standards that promote the sustainable production and processing of natural resources in the context of multi-stakeholder processes. Examples are coffee (4C), cotton (Better Cotton Initiative, BCI), soy (Roundtable on Responsible Soy, RTRS), and bio-fuels (Roundtable on Sustainable Biofuels, RSB).

2. Increase the environmental responsibility and transparency of the raw materials sector

As mandated by the GEAP 2013 (measure 18) and the 2016 revision (measure 6b), Switzerland is engaged in strengthening the ecological responsibility of the extractive sector and developing global rules in this

[58] https://www.bafu.admin.ch/dam/bafu/de/dokumente/wirtschaft-konsum/externe-studien-berichte/analyse_zu_in_derschweizverarbeitetenrohstoffen.pdf.download.pdf/analyse_zu_in_derschweizverarbeitetenrohstoffen.pdf (German)
[59] www.bafu.admin.ch/torfausstieg (English/French/German/Italian)
[60] http://www.swissbettergold.ch/en/about (English)

field. In this context Switzerland supports UN Environment, in particular the International Resource Panel (IRP), in its work on mineral resource governance, which aims to identify political options to strengthen the contribution of the sector to the SDGs. International efforts to increase transparency are also supported. Switzerland also supports the World Resources Forum with the objective of strengthening global dialogue.

The work is coordinated by the Interdepartmental Platform on Commodities. In 2013, the Platform issued a background report on commodities which was adopted by the Federal Council[61]. The report includes 17 recommendations aimed at improving the global framework conditions of the commodity trading sector in order to address challenges related to human rights, environmental and social responsibility standards, particularly in terms of resource extraction, and transparency of finance flows. The report shows Switzerland's support of international efforts to deal with the challenges of commodity production, mining and trading. The Federal Council tasked the Federal administration with fulfilling these recommendations.

In 2016, the Federal Council approved the third status report on the implementation of the recommendations of the background report[62]. If progress has been made in many areas, such as economic promotion, other areas such as the environment need further work. An evaluation of the situation in the Swiss commodities sector, including any possible need for state action with regard to competitiveness, integrity and environmental issues will be conducted by November 2018.

Resource efficiency and circular economy policy initiatives from subnational to local level

Within the Swiss federal system, cantons, cities and municipalities have a high degree of autonomy which is respected in national programmes such as the Sustainable Development Strategy and the New Regional Policy (see section on Policies which include elements of material resource efficiency).

The Canton of Zürich, for example, implemented an action plan for its waste and resource industries. It considers measures and strategies for seven identified challenges: urban mining, reduction of barriers to trade concerning waste and recycled products, resource efficiency in production and consumption, innovation, risks related to new products and technologies, quality of waste management, and safety of disposal sites.

Other resources

Examples of policies which go beyond "material resources"

The FOEN is working towards a green economy. In a green economy it is paramount to look at products as is the case in a circular economy (see, for example, the EEA report *Circular by Design*). Hence, the product life cycle and its impact on the environment, its footprint, have to be considered.

Production processes leave their footprint on resources other than materials. In this sense, the FOEN has a broad understanding of resources, encompassing water, biodiversity, clean air, soils and land, etc.

This broad understanding of resources is reflected in the scope of the Green Economy Action Plan (GEAP) and other initiatives that consider material efficiency among other priorities (see section on Policies which include elements of material resource efficiency).

[61] http://www.news.admin.ch/NSBSubscriber/message/attachments/30136.pdf (English)
[62] https://www.newsd.admin.ch/newsd/message/attachments/46475.pdf (English)

The way forward

Reflections on future directions of policies on resource efficiency and circular economy

From the FOEN's point of view, there is a number of challenges to the implementation of resource efficiency, circular economy and raw material policies.

Political reasons

- The current composition of parliament: no majorities for a political breakthrough in environmental subjects (see the section on Policies which include elements of material resource efficiency), consequently there is a lack of financial resources to fund projects.

Economic reasons

- Low product and resource prices (externalities are not internalised); businesses underestimate the potential for cost cutting.
- Slow diffusion of resource-efficient technologies.
- Low acceptance of secondary raw materials on the marketplace.
- Partly missing transparency in supply chains.
- Correlation of economic wealth and throwaway society.

Political and economic reasons

- Missing sense of urgency in economy and among citizens (see section 'Policies which include elements of material resource efficiency' on the rejected popular initiative in 2016).

Because of these challenges, the FOEN will continue to focus on dialogue and co-operation with stakeholders, as shown with various examples in the answers above.

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