Environmental law and practice in Switzerland: overview

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A Q&A guide to environment law in Switzerland.

This Q&A provides a high level overview of environmental law and practice, and looks at key practical issues including emissions to air and water; environmental impact assessments; waste; contaminated land and environmental issues in transactions.

To compare answers across a number of jurisdictions, to assist in the management of cross-border transactions, visit the Environmental law and practice *Country Q&A comparison tool*.

This Q&A is part of the global guide to environment. For a full list of jurisdictional Q&As visit *global.practicallaw.com/environment-guide*.

Environmental regulatory framework

1. What are the key pieces of environmental legislation and the key regulatory authorities?

Legislation

The key pieces of environmental legislation are based on Articles 74 seq. of the Federal Constitution of the Swiss Confederation. The Swiss Parliament has enacted a wide range of federal statutes to protect natural resources. The main statutes are the:

- Federal Environmental Protection Act of 1983 (EPA).
- Federal Water Protection Act of 1991 (WPA).
- Federal Act on the Protection of Nature and Cultural Heritage of 1966 (NCHA).
- Federal Forest Act of 1991 (ForA).

- Federal Agriculture Act of 1998 (AgricA).
- Federal Act on Non-Human Gene Technology of 2003 (GTA).
- Federal Act on the Reduction of CO2 Emissions of 2011 (CO2 Act).

The Federal Council enacts the complementing ordinances.

European Union (EU) environmental regulations do not directly apply to Switzerland, as Switzerland is not a member of the EU. However, Switzerland maintains extensive co-operative relations with the EU, including with regard to the harmonisation of environmental legislation. Further, Switzerland is a party to numerous international environmental agreements (*see Question 9*).

The Swiss Civil Code of 1907 (CC) contains rules that apply to the abatement of nuisances such as water or air pollution, as well as noise (for example, Articles 679 and 684 CC regarding liability of landowners).

In Switzerland, environmental protection law focuses on preventing environmentally harmful activities as well as on abating and remediating environmental harms. Further, several federal statutes (such as the EPA and the WPA) provide criminal sanctions (fines or imprisonment) for deliberate or negligent infringement of specific duties under the relevant statutes. Both natural persons and legal entities can be sanctioned.

Regulatory authorities

The cantons are responsible for implementing the federal statutes and ordinances, except where the law attributes this duty to the Confederation. The cantons enact the appropriate legislation.

Regulatory enforcement

2. To what extent do regulators enforce environmental requirements?

The intensity of enforcement can differ from canton to canton, but environmental legislation is generally implemented strictly, both at the federal and cantonal levels. The Federal Office for the Environment (FOEN) and the cantonal authorities are constantly striving to strengthen the level of enforcement. For the purpose of enforcement, administrative authorities can request all necessary information from the operators and can also rely on the usual data and information compiled in the due course of monitoring compliance. They can issue injunctions and orders that may be challenged in legal proceedings.

Environmental NGOs

3. To what extent are environmental non-governmental organisations (NGOs) and other pressure groups active?

NGOs and other pressure groups are active in Switzerland. They participate in the legislative process, exert influence on the formation of public opinion and initiate legal proceedings. The main environmental NGOs and other pressure groups that are active in Switzerland are:

- The World Wide Fund For Nature (WWF).
- The Swiss Heritage Society.
- The Swiss Foundation for Landscape Conservation.
- Greenpeace.
- The Swiss Planning Association (EspaceSuisse).
- The Swiss Alpine Club.
- The Traffic Club of Switzerland (VCS).

About 30 environmental protection organisations have a statutory standing to appeal rulings and decisions of the federal or cantonal authorities within the scope of the Federal Environmental Protection Act (EPA), the Federal Act on the Protection of Nature and Cultural Heritage (NCHA) and the Federal Act on Non-Human Gene Technology (GTA).

Environmental permits

4. Is there a permitting regime for polluting emissions to land, air and water? Can companies apply for a single environmental permit for all activities on a site or do they have to apply for separate permits?

Integrated/separate permitting regime

There is no integrated permitting regime.

Numerous industrial activities having a potential impact on the environment require specific authorisations under the Federal Environmental Protection Act (EPA) or other federal statutes and their ordinances. Further, all construction and infrastructure projects must comply with the requirements set by the spatial planning law and

with all relevant environmental regulations. The planning authorities must also integrate the requirements of environmental regulations into the zoning and planning instruments.

Single/separate permits

Companies cannot apply for one single environmental permit for all activities on a site. Pollution prevention and pollution control require a co-ordination between various regulatory and compliance authorities, as well as between the Swiss Confederation and the cantons.

The authorities apply the principle of co-ordination, which requires that the issuance of the various permits and the compliance with all environmental rules applicable to a project must be co-ordinated both procedurally and in substance.

5. What is the framework for the environmental permitting regime?

There is no integrated permitting regime (*see Question 4*).

Water pollution and abstraction

6. What is the regulatory regime for water pollution (whether part of an integrated regime or separate)?

The Water Protection Act (WPA), supplemented by ordinances, applies to all public and private surface and underground waters. The Water Protection Ordinance (WPO) has recently been revised to improve the protection of drinking water and as of 1 April 2020, stricter thresholds were introduced for twelve pesticides that are particularly harmful for aquatic organisms as well as, newly, for three medicinal substances.

The Federal Fishing Act of 1991 (FFA) includes further water protection provisions.

Permits and regulator

The following activities require a permit issued by the competent cantonal authorities:

- Discharging or infiltrating polluted wastewater into a body of water.

- Constructing and converting buildings and installations (including operations such as excavations, earthworks and similar works) in areas that are particularly vulnerable, if they may pose a risk to the waters.
- Drawing water from a watercourse with permanent flow (if the activity goes beyond normal use).
- Drawing water from a lake or groundwater body, which significantly affects the water flow of watercourse with a permanent water flow (if the activity goes beyond normal use).
- Flushing out and emptying impoundments.
- Extracting gravel, sand and other materials.

A cantonal permit is necessary in particular for intervention in waters, the use of hydropower, the creation of artificial streams, the withdrawal of water and the exploitation of gravel and sand in waters (FFA).

Prohibited activities

The WPA prohibits the direct or indirect discharge or drain of any substance that may pollute the waters. The cantonal authorities can grant exceptions and discharge permits based on strict statutory requirements.

Clean-up/compensation

Under the WPA, the "polluter pays" principle applies. Based thereon, the authorities can impose on both the operator and the owner of an installation that causes pollution all necessary measures to prevent an immediate threat to waters and to assess and repair the effects of a pollution. In an emergency, the competent authorities can carry out the necessary measures themselves. The costs of the remediation measures will then be imposed on the persons responsible for the pollution (be it by operating or owning the installation).

Penalties

The WPA provides for criminal sanctions in the form of fines or a prison term of up to three years for deliberate or negligent infringement of specific duties enumerated in the Act. In addition, the Swiss Penal Code imposes a custodial sentence of up to five years or a fine on any person who wilfully contaminates drinking water intended for people or domestic animals with substances that are harmful to health. If the person acts negligently, the penalty is a custodial sentence of up to three years or a fine.

7. What is the regulatory regime for water abstraction (whether part of an integrated regime or separate)?

Permits and regulator

According to the WPA water withdrawal is subject to a permit by a cantonal authority (*see Question 6*).

Prohibited activities

When withdrawals occur from a watercourse with permanent flow, the permit is subject to a minimal residual flow as defined by the statute. The cantons determine the appropriate residual flow rate separately for each water body and withdrawal site, subject to specific exceptions provided by the statute. The same provisions apply if water is withdrawn from lakes or groundwater resources and the rate of flow of watercourses is substantially affected by the activity.

Compensation

The general compensation provisions apply (*see Question 6*).

Penalties

The general penalty provisions apply (*see Question 6*). Further, anyone who wilfully does not maintain the required residual flow rate set forth by the authorities or does not take the measures required for protecting the water below a point of withdrawal will be subject to a custodial sentence of up to three years or a monetary fine.

Air pollution

8. What is the regulatory regime for air pollution (whether part of an integrated regime or separate)?

Air pollution is regulated by the Federal Environmental Protection Act (EPA) and the Ordinance on Air Pollution Control of 1985 (OAPC). As a general rule, air emissions must be limited at their respective source using state-of-the-art technology, provided the costs of doing this are not excessive.

Permits and regulator

Anyone who operates or wishes to construct an installation that causes air pollution must provide the cantonal authorities with information on the:

- Type and level of emissions.
- Release location, release height and time course of emissions.

Existing and new facilities must comply with the emissions limitation standards provided by the OAPC and/or the construction and operating permits. Emission standards are amended from time to time to reflect new scientific developments and knowledge. If the emissions due to combined sources of air pollution exceed exposition thresholds, the competent authorities will order stricter abatement measures.

Prohibited activities

It is prohibited to operate new or existing stationary installations in such a way that they cause emissions exceeding the threshold limits defined in the OAPC. Further, it is prohibited to incinerate waste except in the facilities specified in the OAPC's annex.

Clean-up/compensation

Stationary installations that do not meet the OAPC requirements must be retrofitted or can be shut down.

Penalties

Any person who wilfully puts substances into circulation which he/she knows or must assume may present a danger to the environment (or indirectly endanger people when used in a certain manner) is liable to a custodial sentence not exceeding three years or a monetary penalty. In addition, any person who wilfully fails to comply with emissions limitations or with remediation orders is liable to a fine not exceeding CHF20,000. If the person acts negligently, the sentence is a monetary penalty or a fine.

Climate change

> 9. Is your jurisdiction party to the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol and/or the Paris Agreement? How are the requirements under those international agreements implemented or being implemented?

Switzerland is a party to the UNFCCC and the Kyoto Protocol. The Kyoto Protocol's first commitment period started in 2008 and ended in 2012. Switzerland accepted a second commitment period that started in 2013 and ends in 2020. The legal framework for the implementation of the Kyoto Protocol is set in the Federal Act on the Reduction of CO2 Emissions of 2011 (CO2 Act) and the Ordinance for the Reduction of CO2 Emissions (CO2 Ordinance). On 6 October 2017, Switzerland ratified the UNFCC Paris Agreement and, as a consequence, on 1 December 2017 revised the CO2 Act implementing the Paris Agreement. The Council of States draft of the revised CO2 Act for the time after 2020 went further than the proposal of the Federal Council and sets out a reduction of greenhouse gas emissions by 50% by 2030 as compared with 1990 levels.

A similar scenario would have been unimaginable last year but became possible due to the raising political pressure and the awareness for environmentally-related topics throughout the population and the media. The National Council is to discuss the draft of revised the CO2 Act in the 2020 spring session. However, due to the COVID-19 crisis, the debate has now been delayed. Time is pressing, because originally the new law should have come into force in 2021.

The common measures to achieve the reduction targets were mostly maintained in the new CO2 Act, although they will be partially adapted. They are the following:

- Technical measures to reduce CO2 emissions of buildings and passenger cars.

- Emissions trading scheme.
- Compensation obligations.
- CO_2 levy on thermal fuels.

The draft CO_2 Act foresees new measures as follows:

- Incentive tax on airline tickets for flights departing from Switzerland.
- Creation of a climate fund.
- The environmental impact assessment (EIA) is supplemented by a climate impact assessment.

10. Are there any national targets or legal requirements for reducing greenhouse gas (GHG) emissions? How far are the targets aligned with the 1.5 degree target in the Paris Agreement, if at all? Has a climate emergency been declared? Is there a national strategy on climate change?

Targets

The national target for reducing greenhouse gases is set at a reduction rate of 50% by 2030 as compared with 1990 levels. At least two-thirds of the reduction will take place in Switzerland and a third within projects abroad. These targets are consistent with the Paris Agreement to reduce the global temperature below 2°C compared to the pre-industrial level. As Switzerland has already announced its intention to reduce greenhouse gas emissions to zero by 2050, a further revision of the draft CO_2 Act will have to be carried out for the period after 2030.

National strategy

The Federal Council promulgated the Energy Strategy 2050 in the aftermath of the Fukushima nuclear incident in Japan. As a first step, the Energy Act was revised as of 1 January 2018 with the aim to reduce energy consumption, increase energy efficiency, promote renewable energies and withdraw from nuclear energy. To achieve these targets, the Energy Act stipulates benchmarks for the expansion of electricity from renewable energies and energy consumption per person.

The Energy Act provides among other requirements:

- Federal thresholds for energy and power consumption, as well as for power production from renewable energies.
- Stricter thresholds for CO_2 emissions by cars.
- Incentives and tax relief for energetic restorations.
- Smart metering.

- Incentives for renewable energy plants.
- Withdrawal from nuclear energy. This will mean that no new nuclear power plants will be allowed to be built in Switzerland, but existing ones stay on the grid as long as they are safe.

11. Do any emissions/carbon trading schemes operate?

Switzerland has an emissions trading scheme (ETS). While larger companies (with a total thermal input of their combustion installation of 20 MW or more) must participate in the ETS, medium-sized companies (with a total installed rated thermal input of 10 MW or more) can "opt-in". In return, the participating companies are refunded the CO2 levy on thermal fuels.

Since 1 January 2020, the ETS of Switzerland and the EU are connected. Fossil fuel thermal power plants and aircraft operators operating intra-European aviation, which were previously excluded from the Swiss ETS, will now be integrated into the European system.

To ensure the obligations under the agreement between Switzerland and the EU, adjustments to the CO2 Act and the CO2 Ordinance are necessary. However, the revision of the CO2 Act may be delayed due to the COVID-19 crisis (*see Question 9*).

Renewable energy

12. Are there any national targets or legal requirements for increasing the use of renewable energy (such as wind or solar power)? Is there a national strategy on renewable energy?

The Energy Act stipulates thresholds for the power generation of new renewable energies of at least 4.4 TWh by 2020 and at least 11.4 TWh in 2035.

In addition to the thresholds in the Energy Act, the cantons can stipulate further regulations in their planning and building laws. For example, the cantons can authorise their communes to issue mandatory prescriptions for the use of renewable energies in the building and zoning regulations for areas designated in the zoning plan. This means that a commune may require a real estate developer to use more renewable energy or dictate the proportion of renewable energy to be used.

13. Do any renewables support schemes operate?

With the new CO2 Act of 2018, more subsidies have been made available but the subsidy instruments have been heavily modified. The feed-in rate system (*kostenorientierte Einspeisevergütung (KEV)*) is limited until the end of 2022. After that date, the KEV will be replaced by the one-off payment system (*Einmalvergütung*) (EIV)) and will become the main subsidy instrument for photovoltaic systems. In terms of one-off payments, a distinction must be made between large (100 kW-50MW) and small (less than 100 kW) photovoltaic systems. The compensation rates are stipulated in the Energy Promotion Ordinance (EPO).

Despite the national regulations, the funding support schemes are regulated at a cantonal level and might contain specific provisions.

Energy efficiency

14. Are there any national targets for increasing energy efficiency (for example, in buildings and appliances) or legal requirements for achieving energy efficiency standards? Is there a national strategy on energy efficiency?

The national targets for increasing energy efficiency are set out in the Energy Act or the CO2 Act (*see Question 10*).

More than 40% of the aggregate energy consumption and about a third of the climate-damaging CO2 emissions are attributable to the building industry. Through the so-called Building Programme, the Federal Government and the cantons hope to considerably reduce energy consumption and lower CO2 emissions in the Swiss building industry. To achieve this goal, energy-saving renovation programs of building is heavily subsidised by the Federal Government, partially through revenues from the CO2 levy on fuels.

In accordance with previous decisions on the total revision of the CO2 Act, the Swiss Parliament intends to continue the Buildings Programme. To achieve the reduction of 50% of greenhouse gas emissions, the draft of the new CO2 Act provides a CO2 value limit as per 2023 (*Article 9, Draft CO2 Act*).

15. Do any mandatory or voluntary labelling schemes exist to identify energy efficient goods or buildings?

Various energy labels are used to identify energy efficient goods and buildings. The most important ones are the following:

Energy labels for cars: Based on the Energy Act (Article 44), the Federal Council has issued the Ordinance on Energy Efficiency which stipulates product declaration regulations for the registration of new cars. Under the Ordinance, it is mandatory to indicate details of the energy consumption of mass-produced cars such as litres, cubic meters or kilowatt-hours per 100 km for the type of energy used by the vehicle. The efficiency category (A – G) indicates what the vehicle consumes. There are no direct subsidies for the purchase of an energy efficient vehicle. However financial benefits for efficient vehicles can be granted by some cantons and municipalities as well as by the insurance and the gas industries.

Building energy certificate of the cantons (*Gebäudeenergieausweis der Kantone (GEAK)*): The GEAK uses a classification system to show the energy quality of a building and is comparable to the energy label for cars. The GEAK is consistent all over Switzerland and can only be issued by certified GEAK experts. The application for a GEAK is voluntarily. However, certain cantons make the granting of a building permit subject to a GEAK. On a federal level, the legal basis for the GEAK can be found in the Energy Act and the Energy Ordinance.

Another well-known label in the construction industry is the "Minergie-standard". There are several Minergie certificates which can be applied for.

16. Do any energy efficiency support schemes operate?

Within the scope of the Energy Act, the Swiss Confederation supports energy efficiency measures either in the form of annual global contributions to the cantons or financial support for individual projects.

Further, there are competitive calls for tenders carried out by ProKilowatt, the support programme of the Swiss Federal Office of Energy. ProKilowatt intends to reduce electricity consumption in industrial and service companies and households by providing financial support for electricity efficiency measures.

Environmental impact assessments

17. Are there any requirements to carry out environmental impact assessments (EIAs) for certain types of projects?

Scope

Construction or planning projects for facility or transport infrastructures that may substantially impact the environment are subject to an EIA. EIAs are regulated by the Federal Environmental Protection Act (EPA) and the Federal Ordinance on Environmental Impact Assessment of 1988, which contains a list of projects that are subject to an EIA. The aim of an EIA is to assess the project's compliance with all relevant statutory provisions as well as cantonal and municipal regulations.

As part of the parliamentary discussion on the revision of the CO2 Act, it is proposed that the EIA should be supplemented by a climate impact assessment (*Article 17b and 17c, draft of the revised CO2 Act*).

Permits and regulator

The applicant must conduct a preliminary investigation to determine whether the project may have substantial adverse effects on the environment. In the affirmative, he/she must prepare an environmental report that contains a description of the initial state of the environment as well as details of the project, adverse effects which are likely to remain and measures that could reduce those adverse effects. The report must then be evaluated by the competent cantonal or federal authorities, depending on the project. The report and the authorities' evaluation of the report must be filed with the request for approval of the project, to allow a consultation by the public during a period that varies depending on the canton (usually 30 days). Every person or entity that has an interest at stake, and designated environmental organisations, can file an observation or opposition, or become a party to the authorisation procedure.

The competent authority must assess the project's environmental impact based on the environmental report, the recommendations and observations of the other authorities, and the observations and oppositions filed by any interested party. It can require all necessary additional measures or conditions to ensure compliance with the environmental regulation. The EIA is not a licence but is part of the (lead) procedure to obtain the permit to build. The final decision (that includes the EIA) is published.

Penalties

Specific NGOs (*see Question 3*) have a statutory right to appeal building permits or zoning plans that have been granted to projects subject to an EIA. They can also file an appeal against the approval of a project if an EIA was necessary but has not been performed. The failure to conduct an EIA will lead to the refusal to grant the authorisation to build or to the revocation of an authorisation by the court.

Habitats and biodiversity

18.What requirements and regimes apply for the conservation of nature, habitats and biodiversity that affect development? What assessments or obligations are required before any development begins?

Requirements are regimes

The Federal Act on the Protection of Nature and Cultural Heritage (NCHA) was enacted in (1968) and is complemented by several Ordinances. The cantons also have autonomous competences to protect specific elements of nature and cultural heritage and have enacted their own legislation. Further, the Federal Spatial Planning Act (SPA) stipulates that the natural foundations of life such as soil, air, water, and forests must be protected and the landscape should be preserved. Switzerland has ratified several international treaties such as the Convention on Biological Diversity (CBD, the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and the Nagoya Protocol.

In spite of the above, according to the Federal Office for the Environment, biodiversity in Switzerland has declined dramatically since 1900 and its current state is a cause for alarm. Pressures persist due to agricultural unsustainable management practices, large scale past alteration of waters' structure, urban sprawl and the expansion of transport infrastructure.

In 2012, the Federal Council adopted the Swiss Biodiversity Strategy that outlines a plan for halting biodiversity loss and conserving ecosystem services. Based on this, the Federal Council passed an action plan on 6 September 2017.

The Federal and Cantonal legislation imposes a large array of measures and obligations that must be taken into consideration when planning a developments project. The requirements and level of protection vary depending on the affected sites. As an example, Art. 3 NCHA provides that in the fulfilment of federal tasks, the Confederation, its institutions and enterprises, and the cantons must ensure that heritage landscapes and sites of local character, historical sites, and natural and cultural monuments are carefully managed and, where there is an overriding public interest, preserved undiminished. This obligation can be fulfilled by suitably designing and maintaining their own buildings and installations, or by foregoing their construction altogether; or by imposing conditions or requirements on the issue of licences and authorisations or refusing to issue them.

Compliance with these legal requirements is reviewed as part of the impact assessment for projects subject to them and for the others, in the spatial planning procedure or as requirement to the granting of a building permit.

Prior assessments and obligations

Waste and the circular economy

Regulatory regime

19. What is the regulatory regime for waste?

Permits and regulator

Waste is any movable material disposed of by its holder or the disposal of which is required in the public interest (Federal Environmental Protection Act (EPA)). The EPA is complemented by several Ordinances, including the:

- Ordinance on Avoidance and Disposal of Waste of 2015 (replacing the Technical Ordinance on Waste of 1990).
- Ordinance on Movement of Waste of 2005.
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.

In construction projects, a waste disposal concept has to be submitted to the competent authorities if either:

- More than 200 cubic metres of construction waste is expected.
- Construction waste containing substances that are hazardous to the environment or health, such as polychlorinated biphenyls, polycyclic aromatic hydrocarbon, lead or asbestos are expected.

Radioactive waste is governed by the Federal Statute on Radioprotection of 1991 and by the Federal Statute on Nuclear Energy of 2003.

Waste can only be stored in specific categories of landfills. The construction and operation of a landfill are subject to specific planning requirements and to authorisations by the competent cantonal authority. The export of waste requires a permit issued by the Federal Office for the Environment (FOEN).

Prohibited activities

It is prohibited to permanently store waste somewhere other than in one of the five types of landfills that are subject to various constructive and operative conditions and licences. Further, it is forbidden to mix waste to reduce their toxicity by means of dilution.

Operator criteria

Among other obligations, the operator of a landfill must:

- Require and obtain a construction permit and operating licence.
- Prevent as far as possible any harmful or nuisance effects on the environment.
- Employ qualified personnel.
- Ensure that only allowed waste is being disposed of.
- Keep a register of the waste.

- Document the filling and upgrading of the landfill.
- Regularly control the installations and their impact on the groundwater; and inform the authorities twice a year about the results of groundwater samplings.
- Guarantee the coverage of the costs necessary to close the landfill and to conduct monitoring and potential remediation measures after its operation has ended.

Special rules for certain waste

Specific rules are applicable to hazardous waste, which:

- Must be marked as such for transfer within Switzerland as well as for import, export and transit.
- Can only be exported with authorisation from the FOEN.
- Can only be accepted or imported by companies with authorisation from the canton.

Penalties

A person is liable to a custodial sentence not exceeding three years or a monetary penalty if he:

- Wilfully constructs or operates a landfill without authorisation.
- Fails to mark special waste as such for transfer, or hands it over to an undertaking that does not hold the relevant authorisation.
- Accepts, imports or exports special waste without authorisation.
- Infringes regulations on waste or on the movement of special waste.

A person is liable to a fine not exceeding CHF20,000 if he:

- Wilfully burns waste illegally outside installations.
- Deposits waste outside authorised landfills.
- Infringes the reporting duties in connection with waste.
- Infringes the regulation on waste.
- Infringes the regulations on the movement of other forms of waste.
- Fails to guarantee coverage of the costs of closing and remediation of a landfill.

National strategy, targets and producer responsibilities

20. Is there a national strategy to tackle particular types of waste (such as plastics waste or marine litter)? What waste targets exist? What producer responsibility schemes exist?

National strategy

Switzerland has one of the highest municipal solid waste volumes in the world, at 716 kilogrammes of waste per person and year. Nearly 53% of it is recycled. Further, construction waste accounts for the largest portion of waste generated in Switzerland (84%). To reduce the country's high primary material consumption, the federal government wants all material and substance flows throughout the value chain (from raw material mining and product design to waste management) to be taken into account.

In a report to the Federal Council on the green economy, the federal authorities seek to ensure, in collaboration with industry, that waste is avoided as much as possible and that open material cycles are closed (for example, the phosphorus cycle):

Targets

As set out in the VVEA, the FOEN and the cantons will encourage the avoidance of waste through appropriate measures such as raising the awareness of and providing information to the public and businesses. In doing so, they will work with private sector organisations.

Producer responsibility schemes

The "polluter pays" principle is widely applied in Switzerland: Whoever creates waste must pay for its disposal. Well over 90% of the municipalities successfully apply this principle by introducing a waste disposal fee. As a consequence, these municipalities produce an average of 80 kilogrammes less waste per capita to be incinerated each year than municipalities that have not yet introduced a waste disposal fee.

Asbestos

21. What is the regulatory regime for asbestos?

The handling of asbestos is regulated by The Federal Ordinance on the Reduction of Risks relating to the Use of Certain Particularly Dangerous Substances, Preparations and Articles of 2005 (ORRChem).

Prohibited activities

The ORRChem prohibits the use of asbestos and the marketing and exportation of asbestos-containing preparations or articles.

Main obligations

There is no obligation to run asbestos diagnoses and to remediate asbestos-containing buildings at the federal level. A few cantons have introduced specific provisions to that effect in their statutes on construction and planning. However, the Confederation and the cantons have carried out programmes to detect and remove asbestos in public buildings, such as schools and hospitals. Protection against asbestos exposure is primarily achieved through the legislation protecting the employees and construction workers, such as the Federal Accident Insurance Act of 1981. Further, the obligation to remove asbestos in a building may be based on contract law.

Asbestos-contaminated material is a hazardous waste that must be disposed of according to the specific provisions applicable to hazardous waste.

Permits and regulator

On receipt of a justified request and with the agreement of the Federal Office of Public Health (FOPH), the Federal Office for the Environment (FOEN) can grant exemptions to the prohibition to use asbestos, under strict conditions (for example, in the current state of the art no substitute for asbestos is available and the quantity of asbestos used is no greater than required for the intended purpose). In such a case, the packaging is marked with the name of the manufacturer, a warning about the dangers of asbestos to human health and the environment, and a reference to protective measures.

A few cantons (for example, Geneva and Vaud) have enacted specific provisions in their cantonal construction laws that impose on the owner of a building the obligation to run an asbestos diagnosis if he/she wishes to transform the building. If asbestos is detected, the owner must submit a remediation and asbestos removal plan, otherwise he/she will not be able to transform the building. There is no such obligation at the federal level.

Penalties

A person is liable to a custodial sentence not exceeding three years or a monetary penalty if he/she either:

- Wilfully puts substances into circulation which he/she knows or must assume may present a danger to the environment or indirectly endanger people when used in a certain manner.
- Handles substances contrary to instructions in such a manner that they, their derivatives or waste may present a danger to the environment or indirectly endanger people.

Any person who wilfully fails to comply with remediation orders is liable to a fine not exceeding CHF20,000.

Contaminated land

22. What is the regulatory regime for contaminated land?

Regulator and legislation

The Federal Environmental Protection Act (EPA) and the Ordinance on the Remediation of Polluted Sites of 1998 (CSO) provide for comprehensive qualitative and quantitative protection, as well as remediation of soil contamination. Swiss law makes a distinction between polluted sites and contaminated sites. A site is deemed polluted if (based on the past activities on the site) the soil is likely polluted by waste. If the polluted site presents a threat to the groundwater, surface water, soil fertility or to the air or actually impairs them, then it is deemed contaminated and must be cleaned up.

The levels of contamination that trigger remediation or surveillance are provided in the CSO or determined by the authorities.

Investigation and clean-up

As a rule, investigation and remediation measures follow a procedure in several steps under the CSO. In urgent cases, some of these steps can be omitted:

- Recording of the site in a register.
- Assessment of the need for monitoring and remediation by means of investigation within a reasonable period of time.
- Assessment of the objectives and urgency of remediation.
- Decision on monitoring or on objectives of remediation.

The objective of remediation can be achieved by measures that enable environmentally hazardous substances to be eliminated (decontamination) or prevent the diffusion of hazardous substances into the environment (securing).

Penalties

Any person who wilfully fails to comply with remediation orders is liable to a fine not exceeding CHF20,000.

23. Who is liable for the clean-up of contaminated land? Can liability be excluded in transactions?

Liable party

As a rule, the owner or operator of the site must perform the necessary investigation, monitoring and remediation measures.

The obligation to carry out the remediation (clean-up) must be distinguished from the obligation to bear the costs of remediation. The costs must be borne by the persons liable for the pollution and be divided among them according to their causal part in the pollution (*Article 32d, Federal Environmental Protection Act (EPA)*).

The canton or Confederation must bear the share of the costs of any person responsible who cannot be identified or is unable to pay. The authority can request the person liable for all or part of the costs to provide appropriate financial security to cover his probable share of the costs (*Article 32dbis, EPA*).

Owner/occupier liability

The current "polluter by situation" (the person who legally or actually controls the site and the installations (that is, the owner, operator or tenant)) must bear part of the costs (usually between 5% and 20% depending on the canton), even if he/she did not cause the pollution, unless he/she did not or could not have any knowledge of the pollution at the time he/she acquired the property.

Previous owner/occupier liability

Previous operators or occupiers are liable for the costs to the extent that they were liable for the pollution by their actions or omissions ("polluters by behaviour"). This liability is not time-barred.

Limitation of liability

Environmental liabilities under Article 32d of the EPA are based on public law and cannot validly be excluded towards the authorities. Provisions to the contrary inserted in purchase agreements or other contracts do not bind the authorities.

Voluntary clean-up programme

There are no general programmes or legislation for the clean-up of contaminated land for redevelopment.

24. Can a lender incur liability for contaminated land and is it common for a lender to incur liability? What steps do lenders commonly take to minimise liability?

Lender liability

The lender can be liable if he/she controls the site and can be deemed "polluter by situation" or if he/she causes the pollution to occur.

Minimising liability

The liability is based on public law and cannot validly be excluded (*see Question 23*). However, the financial risks for the lender can be mitigated by a valid indemnity clause in the agreement with the site owner.

25. Can an individual bring legal action against a polluter, owner or occupier?

Pollution can cause damage to health, property and natural resources. A person injured by pollution can seek pecuniary compensation for the injury sustained, under tort law. The relevant provisions are contained in the:

- Federal Environmental Protection Act (EPA) (strict liability imposed on installations that present a special hazard to the environment and liability for pathogenic organisms).
- Swiss Code of Obligations of 1911 (CO) (general rule regarding civil liability originating from tort and liability of the owner for construction or maintenance defects).
- Civil Code (CC) (liability of landowners).

Strict liability provisions are also enacted in special statutes, such as the Nuclear Civil Liability Act of 1983.

Whatever the legal cause of action may be, the plaintiff must prove that he/she suffers damage, that the tortfeasor committed an unlawful act or omission, and the causation between the damage and the unlawful act.

Pure environmental damage (that is, damage to natural resources that are not subject to property rights or to the sovereign powers of the cantons) is not compensated under civil law except where a specific legal provision provides otherwise (for example, Article 15 of the Federal Fishing Act (FFA)). Switzerland has signed, but not yet ratified, the International Convention on Civil Liability for Damages Resulting from Activities Dangerous for the Environment of 21 June 1993, which provides for compensation of pure environmental damages.

Environmental liability and asset/share transfers

26. In what circumstances can a buyer inherit pre-acquisition environmental liability in an asset sale/ the sale of a company (share sale)?

Asset sale

As some environmental liabilities are tied to the facility or to the industrial site itself, environmental risks or liabilities can pass to the buyer through asset deals. Further, liabilities attached to past operation or activities can be transferred to the takeover company in the case of a transfer of business, even though no liability claim is pending or known at the time of the transfer.

Special attention must be paid to possible contamination of soil and groundwater, and disposal of waste. The buyer must ensure that the seller complied with environmental legal requirements relating to the assets in question. The buyer generally requests warranties and indemnifications to cover these risks.

Share sale

In a share deal, environmental liabilities remain with the target company and, therefore, the buyer indirectly acquires these risks. The buyer (shareholder) can only become directly liable to the extent that the corporate veil is lifted, which can only occur in exceptional circumstances as an application of the abuse of right theory. Share purchase agreements often provide for representations and warranties, as well as for indemnification obligations with respect to environmental aspects.

27. In what circumstances can a seller retain environmental liability after an asset sale/a share sale?

Asset sale

Some environmental liabilities are not tied to the assets themselves (the "property of production") but to a specific conduct (operational activities). In these cases, the seller remains liable (except in the case of a merger or transfer of assets and liabilities, or in cases where the competent authorities agree with the transfer of liabilities to the buyer).

Share sale

In a share deal the seller may retain his environmental liability if he/she is deemed a polluter by behaviour and has contributed to the contamination together with the target company.

28. Does a seller have to disclose environmental information to the buyer in an asset sale/a share sale?

In an asset deal, such as a real estate transaction, it is usually recognised that the seller must disclose environmental information to the buyer, unless they are both professional. As a rule, from a buyer's perspective, it is important to require representations and warranties together with an indemnification from the seller.

29. Is environmental due diligence common in an asset sale/a share sale?

Scope

The environmental aspects to be considered in M&A transactions depend on the specific activities the target company is carrying out or has carried out. It is common to conduct environmental due diligence. Special attention must be paid to existing and past enforcement or compliance procedures, in particular in the field of air pollution, noise abatement, soil pollution and the remediation of contaminated sites, waste disposal and the prevention of hazardous accidents. The buyer should carefully analyse the liabilities attached to past and present activities based both on public and private law.

Types of assessment

An environmental due diligence includes the following assessments:

- **System boundary (scope).** The scope of the object to be acquired must be precisely defined. This also includes former operating locations of the object of purchase at which subsoil pollution may have been caused.
- **Surrounding area.** The surrounding area is of particular importance in environmental due diligence. On the one hand, the operation can be affected by environmental influences. On the other hand, influences of the operation on the environment must be considered.
- **History of the company**. The history of the company has a special significance, especially with regard to possible burdens in the building structure or subsoil caused by the activities and processes in the past. The history of the company is recorded by the land register, the commercial register, interviews with long-time employees, a review of the company archives, old plans and national maps as well as old aerial photographs.
- **Environmental aspects**. Among others, the following environmental aspects are of importance and are checked on site:
    - consumption of resources (energy, water);
    - emissions of polluting substances into the air;
    - loads in the subsoil, soil and building fabric (contaminated sites).
- **Conclusion**. The results of the assessments are summarised and the cost risks are estimated.

Environmental consultants

Environmental consultants are usually consulted in transactions involving substantial real estate and in particular if such real estate was or is used for industrial operations and/or if the purchaser intends to build on that real estate.

The most important way for the consultant to avoid liability is to take appropriate measures to ensure the fulfilment of their own duty of care. Apart from this, the consultant can avoid or reduce liability risks with the following precautions:

- **Definition of the order**. The first step is to clearly define the mandate and the consultant's area of responsibility. It is also possible for the consultant to contractually stipulate a certain standard for their own activities to provide clarity about the scope of their activities (even if the duty of care of the consultant cannot be contractually excluded).
- **Disclaimer of liability**. Since the parties have the right to regulate their contractual legal relations by mutual agreement, including liability issues, exclusion clauses are possible. However, there are various barriers to far-reaching exclusion clauses in contract law. The diligence of the consultant is the central content of the contractual relationship. Accordingly, the duty of diligence cannot be waived. Under the Code of Obligations (*Article 100*), it is not possible to contractually exclude liability for intentional and grossly negligent damage.

30.Are environmental warranties and indemnities usually given and what issues do they usually cover in an asset sale/a share sale? Are there usually time limits or financial caps on environmental warranties and indemnities?

Representations and warranties usually relate to:

- Past and present compliance with environmental legal provisions.
- The possession of all necessary operating permits.
- Entry of the related site in the register of polluted sites.
- The absence of claims, proceedings or investigations regarding environmental issues and compliance.
- The fact that the seller duly disclosed all relevant environment-related facts.

Standard representations and warranties may not be adequate in the particular transaction at hand and must be carefully worded to reflect the existing or potential environmental liabilities. It is also recommended to use the terminology of the relevant environmental statutes.

Warranties and indemnities depend on the particular case. They are typically limited both in time and amount.

Reporting and auditing

31. Do regulators keep public registers of environmental information? What is the procedure for a third party to search those registers?

Public registers

Various environmental statutes provide for the duty to disclose to governmental authorities information on air and water emissions and rejects into the environment. Further, the Federal Ordinance on the Register relating to Pollutant Release and the Transfer of Waste and of Pollutants in Waste Water (PRTRO) ensures public access to information on pollutants released into the water, the air or the soil by listed installations and plants. Reporting happens on a yearly basis. In addition, governmental agencies keep publicly available registers of polluted sites.

Third party procedures

The Federal Act on Freedom of Information in the Administration of 2004 (FolA) seeks to promote transparency with regards to the Federal administration's activities. Any person can inspect official documents and obtain information from the federal authorities. Similar rules apply at the cantonal level. Further, in 2014, Switzerland ratified the Aarhus Convention which seeks to improve access to environmental information. Citizens can review official documents with environmental content.

32. Do companies have to carry out environmental auditing? Do companies have to report information to the regulators about environmental performance?

Environmental auditing

Everyone is obliged to provide the authorities (on request) with the information required to enforce the Federal Environmental Protection Act (EPA) and, if necessary, to conduct or acquiesce in the conduct of enquiries (*Article 46 § 1, EPA*).

Reporting requirements

See *Question 31*.

33. Do companies have to report information to the regulators and the public about environmental incidents (such as water pollution and soil contamination)?

There is no general duty to report environmental incidents under the Federal Environmental Protection Act (EPA). However, several statutory provisions provide for such an obligation regarding specific incidents (for example, a leak of liquids which may pollute the waters or the occurrence of a hazardous accident).

34. What powers do environmental regulators have to access a company?

Administrative authorities can both:

- Request all necessary information from the operators to carry out their duties.
- Rely on the usual data and information compiled in the due course of monitoring compliance.

They can issue injunctions and orders that may be challenged in legal proceedings within the administration and in court.

35. What obligations are there on companies to report on environmental issues in their annual corporate reports?

There are no specific requirements for environmental issues. However, companies that must publish annual corporate reports must include information on environmental issues if they have, or are expected to have, a material impact on the financial situation of the company and to make appropriate provisions.

36. What mandatory GHG, carbon reporting or transparency requirements apply to corporates, including as part of their annual corporate reporting requirements? Is reporting in accordance with the Task Force on Climate-related Financial Disclosures (TCFD) recommendations? Do any voluntary GHG reporting schemes exist?

Mandatory requirements

There is no mandatory reporting obligation for companies regarding environmental issues in their annual corporate reports (*see Question 35*). However, several laws provide a reporting obligation that can be accessible to the public. For example, the CO2 Act obliges the operators of installations and the operators of aircraft to annually report to the federal government on their greenhouse gas emissions (*Article 20*).

Voluntary schemes

The Federal Council welcomes the work of the TCFD and primarily supports the voluntary efforts of financial market players. The Federal Council therefore lays the foundation and is actively committed to internationally comparable measurement methods and standards. In 2017, for example, the Federal Office for the Environment (FOEN) and the State Secretariat for International Financial Matters (SIF) initiated voluntary and free 2-degree Celsius scenario analyses of stock portfolio and corporate bond portfolios for all Swiss pension funds and insurance companies. It is up to the participants whether they disclose their results, as recommended by the TCFD guidelines. The Confederation aims to periodically record the effects of voluntary efforts on the climate and thus create incentives for financial institutions to take action on a voluntary basis.

37. What corporate governance requirements apply in relation to climate change?

Stock exchange rules deal with sustainability and climate risks for listed companies. According to the Corporate Governance Directive of the Swiss Stock Exchange (RLCG), issuers can use an opting-in clause to commit to prepare sustainability reports in accordance with an internationally recognised standard and publish them on their website (*Article 9, RLCG*).

Environmental insurance

38. What types of insurance cover are available for environmental damage or liability and what risks are usually covered? How easy is it to obtain environmental insurance and is it common in practice?

Types of insurance and risk

Common business liability insurance is available for environmental damage but is typically limited to sudden and accidental damage.

Obtaining insurance

Other types of environmental insurance (such as insurance to cover remediation costs of a polluted site or coverage for gradual pollution) may be available but are not common.

Environmental taxes

39. What are the main environmental taxes?

Taxes are levied on volatile organic compounds (VOC), extra light heating oil and thermal fuels. Biofuels can be exempted from tax on request.

Tax liability

The persons liable to pay the environmental taxes are defined in the Customs Act and Petroleum Tax Act. They are, usually, importers, producers and manufacturers in Switzerland.

Tax rates

The following tax rates apply (for example):

- Volatile organic compounds: CHF3 per kilogramme of VOCs.
- Extra light heating oil: 0.3 centimes per litre (*www.ezv.admin.ch/ezv/de/home/information-firmen/steuern-und-abgaben/einfuhr-in-die-schweiz/mineraloelsteuer.html*).
- Unleaded petrol: 73.12 centimes per litre.
- Diesel: 75.87 centimes per litre.
- Coal and other fossil fuels: CHF96 per tonne of CO2.

Reform

40.Are there any proposals for significant reform of environmental law?

*S*everal reforms are pending including:

- **Group responsibility initiative**. The popular constitutional initiative for "responsible companies - to protect people and the environment" (Group Responsibility Initiative) was submitted in 2016 to the Federal Council. It calls for the introduction of a new constitutional provision that would set out the obligation for companies with headquarters, head offices or principal places of business in Switzerland to respect internationally recognised human rights and environmental standards both in Switzerland and abroad. Firms that would not provide evidence of such diligence would be held responsible for the damage caused by the foreign companies they control when they violate human rights internationally recognised or international environmental standards. The parliamentary debates around the initiative are ongoing as two counter-projects to the initiative have been elaborated. The debates were interrupted to the current COVID-19 crisis and it remains unclear to date when the initiative and the counter-projects will be put to vote.
- The CO2 Act is being revised (*see Question 9*).

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