

Switzerland



1 Country Details

1.1 Population

The total area is 41.300 km² and the population is about 7,3 millions inhabitants.

25,9 % (10.700 km²) of the land area is farmland area. The area of 4.290 km² is used to grow crops.

1.2 Climate

Average temperature (annual)	4,4° C (1.500 m) 11° C (450 m)
Average rainfall (annual)	700 – 2000 mm
Wind regime	variable: still to windy

2 Political and Legislative Background

2.1 Governmental and regulatory structure

Switzerland is a federal republic consisting of 26 cantons. The legislative branch of the national government is a bicameral assembly, consisting of a Council of States (Ständerat) and a National Council (Nationalrat). The executive branch is a Federal Council of seven members (Bundesrat). Each canton has its own executive (Regierungsrat) and parliament (Kantonsrat). The cantons are divided into municipalities (Gemeinden).

Legal provisions on the subject of waste management are drafted at the federal level by

the Federal Office for the Environment and Landscape (FOEN). Any new law or modification of existing texts is subjected to a consultation procedure requiring the opinion of cantonal authorities, political parties and other interested circles, before being discussed and approved by the two chambers of Parliament.

The Federal Technical Ordinance on Waste (TOW, 1990) decrees that municipal waste clearing operations and management are the responsibility of the cantons, which must establish a plan for waste management, defining among other things the sites for waste treatment plants. Whenever possible, the Cantons shall provide for the separate collection and recovery of the recyclable fractions of municipal waste, such as glass, paper, metals and textiles. Regarding biowaste, cantons must encourage, in particular by information and advice, the individual recycling of compostable waste in private gardens or neighbourhoods (home and community composting). Where this is not possible, the Cantons shall, whenever possible, provide for the separate collection and recycling of biowaste from households. This ordinance also states basic requirements regarding the licensing of biowaste treatment plants.

Each canton then has its own waste management law and prescriptions. The majority of the cantons have delegated the practical execution of municipal waste clearing operations and treatment to the municipalities or regional consortia for waste management. All the disposal operation are subject to federal and cantonal approval. Each canton must also establish an annual inventory of the quantities of waste produced in their jurisdiction and of its destination (type of treatment, disposal or recycling) which must be communicated to the FOEN.

2.2 Regulatory bodies

- **Federal Office for the Environment (FOEN):** drafting of national laws and ordinances
- **Cantons and cantonal agencies:** cantonal laws and prescriptions

The regulatory organisations perform other functions as well as regulation.

FOEN:

Tasks specific to waste management: the FOEN Waste and Raw Material Division is responsible for establishing a legal framework for environmentally sound waste disposal and for overall coordination and national statistics. The Division develops programmes and regulations for the avoidance, recycling, treatment and landfilling of wastes of all kinds, and is also responsible for issuing licences for exports of waste.

Other tasks of FOEN:

- provide a scientific basis for environmental protection measures
- implement environmental protection measures in cooperation with cantonal authorities, industry, non-governmental organizations (NGOs) and other players
- provide aids to enforcement for cantonal and communal authorities
- inform and advise the public
- international involvement and coordination

Cantons and cantonal agencies:

Plant licensing and control (siting, operation, emissions, material flows), statistics, planning.

3 Site Planning, Licensing and Legislation

3.1 Requirements for new facilities

New sites require building permission, which is granted by the municipal planning authority, in particular on the basis of the local land use plan. Within their area of responsibility, the Cantons must coordinate all the necessary licensing procedures for the construction or operation of waste treatment facilities, in particular the licenses for land use, forest clearing and water protection, and those required under the Labour Law.

Composting plants which treat more than 100 t of compostable waste per year are subject to the following requirements for building and operation (Art. 43 and 44 of the Technical Ordinance on Waste):

- they must not be constructed in groundwater protection areas
- they must be enclosed and the entrances must be lockable
- they must be designed in such a way to provide for wastewater collection and diversion to a sewage treatment plant or an outlet channel.

During operation, the owner of the plant must:

- check that the waste received is compostable;
- record the weight of the waste received and communicate this data annually to the authorities
- analyse the heavy metal and nutrient content of the products (compost or solid or liquid digestate) at least once a year.

Facilities designed to treat more than 1.000 t/year are subject to an environmental impact assessment, which must be approved by the cantonal authorities, in particular the environmental and spatial planning offices.

3.2 Problems with obtaining permission

One or more of the above-mentioned requirements are not satisfied.

Opposition by the public (NIMBY syndrome), which at best slows down the procedure, at worst halts it completely.

3.3 Permit/Licence to operate

This depends on the specific cantonal laws. In some cases the building permit is also an operation permit, in other cantons a specific operation license is required. Building permits are delivered by the municipal authorities, whereas operation permit are delivered by the cantons.

3.4 Regulatory body

The regulatory bodies are the cantonal authorities (if applicable).

3.5 Monitoring of composting facilities

- **Federal Law (TOW):** Quantities and compostability of the waste
- **Federal prescriptions:** Compost quality: heavy metals, sanitation (temperature).

The Cantons may edict more severe prescriptions.

3.6 Regulatory standards and control procedures for odour management

There are no specific limits (limit values) for odours. In the federal law (Ordinance on Air Pollution, 1983), odours are listed as atmospheric pollutants and must be limited at source (OAP, art. 11). Immissions of atmospheric pollutants must not cause nuisance or harm to the environment and populations (OAP, art. 13 & 14).

Cantonal or local authorities may fix more severe or precise prescriptions, for example minimum distances.

3.7 Difficulties in meeting requirements

There is a trend towards enclosed systems equipped with biofilters due to complaints about odours (real or feared).

3.8 Voluntary/Statutory Requirements

Voluntary:

- Standards scheme – Quality criteria (VKS-ASIC-ASCP Quality guidelines, 2001).
- See also under section 9.3, "Plant inspectorate and label".

Statutory:

- Technical Regulations (Ordinance on the treatment of waste, OTW 1990, SR 814.600).

- Limit values (Ordinance on the reduction of risks linked to chemical products, ChemRRV, 2005, SR 814.81): definition of compost and digestate, minimum quality requirements, limit values for heavy metals, duties of the compost producer., limit quantities for application.
- Fertilizer Ordinance (DüV SR 916.171): licensing of fertilizers (compulsory licensing/registration).
- Fertilizer Marketing Ordinance (DüBV, SR 916.171.1): classification of all types of fertilizers.
- Minimum quality requirements for compost (FAC Instructions 1995): quality, control, sampling, utilization of compost, list of authorized laboratories for fertilizer control.
- Environmental Impact Assessment (for plants designed for more than 1.000 t/year).
- Government policies – waste management plans (Both national and cantonal).

3.9 Standards - Regulations

Voluntary:

- Nutrients
- Organic matter
- Moisture
- Other agronomic properties (e.g. conductivity, humification)

Statutory:

- Limits for heavy metals
- Limits for plastics
- Limits for physical contaminants e.g. stones, glass
- Nutrients
- Standard Operating Procedure (for sanitation)

Limit values for physical contaminants in compost:

Parameter	Limit value	Observations
stones > 5 mm Ø	50 g per kg dry weight	smaller stones and sand are not considered impurities
impurities such as metals, glass, plastics > 2 mm Ø	5 g per kg dry weight	
plastic and aluminium film > 2 mm Ø	1 g per kg dry weight	

3.10 Specific provisions for meat or catering waste

According to Art. of the Federal Ordinance on epizootic diseases (1995), catering wastes must be e.g. boiled for 20 minutes in a boiler with a system for monitoring and display the process temperatures.

The Ordinance on animal by-products (2004) classifies and regulates the disposal of meat wastes. Catering wastes are specifically excluded from this Ordinance.

3.11 Other special requirements for wastes

The addition of sewage sludge to compost or to liquid or solid digestate was banned in 2003 (Ordinance on Substances, Annex 4.5, n. 221, para. 2)

4 MSW – Economic aspects

4.1 Average prices of disposal / treatment processes for MSW

Process	€/ t	What part of this price is tax %
Incineration	100 - 130	0
Composting	70 - 100	0
Anaerobic digestion (of biowaste)	80 - 107	0

4.2 Type of tax

There is no national tax on waste treatment or disposal processes. Some cantonal taxes exist, e.g. on the waste incinerated (for example in the canton of Geneva). The proceeds of these taxes are then used to promote waste recycling (i.e to finance civic amenity sites, public awareness campaigns, etc.).

Taxes (advance disposal fees) are levied on some consumer goods (batteries, beverage bottles, electrical and electronic appliances) to

finance collection and recycling of the waste goods.

4.3 Average price of MSW landfilling of MSW incineration

MSW incineration 100 – 130 €/tonne

NB: landfilling of combustible waste (sewage sludge, MSW and combustible construction waste has been banned in Switzerland since 1.1.2000). At present less than 5% of MSW is still landfilled.

5 Future evolution of biological treatment and MBT

The driving forces for the evolution of biological treatment in Switzerland are:

- legislation
 - public awareness – lobbying
 - marketing incentives
 - promotion of renewable energy sources
 - waste strategies (national and cantonal): increased separate collection/diversion goals
- Comments: by "marketing incentives" we intend the effort of the professional associations to improve the image of compost as a product

6 Composting

6.1 Quantities

The total amount of organic material composted in 2002 was 639.900 tonnes.

NB: the sum total of biologically treated waste (composting + anaerobic digestion, see below sect. 7.1) was 728.400 tonnes in 2002. It continue to increase slowly, reaching 740.000 tonnes in 2003 and 770.400 tonnes in 2004. No details on material input streams are as yet available for 2003 and 2004.

6.2 Material Input

Communities/Households

Type of waste	Tonnes/year
Biowaste/Organic fraction of MSW (OFMSW)	320.000
Garden waste	incl. in OFMSW
Kitchen waste	incl. in OFMSW

Industrial/Trade

Type of waste	Tonnes/year
Food and beverage processing waste	60.000
Landscaping/ground maintenance	250.000
Digestate from AD facilities	9.900

6.3 Composting facilities

Type of composting facilities	Number
Mechanically turned windrow	290
Static pile with passive aeration	7
Static pile with forced aeration	10
Vermicomposting	2
In-vessel	12

6.4 Economic aspects

The average gate fee at a composting facility amounts to 80 €/t (excl. 7,6 % sale tax).

The average selling price of compost in:

- Agriculture: -7 €/t*
- Landscaping: 27 €/t
- Hobby gardening: 40 €/t

*negative price because the composting facilities subsidize the spreading of compost

7 Anaerobic Digestion

7.1 Quantities

The total amount of organic material anaerobically digested in 2002 was 89.400 tonnes.

This amount does not include the sewage sludge stabilized by anaerobic digestion in wastewater treatment plants (total production in 2002: 200.000 t DW*). Since 2003, sewage sludge cannot be composted with other biowastes and its use as fertilizer will be banned in 2006. Only 21% of sewage sludge was still recovered in agriculture in 2002 (circa 42.000 t DW*). The rest was mostly incinerated (153 000 t DW*).

Co-digestion of farm wastes with OFMSW, catering wastes or other biowaste is still in the development phase.

*DW: dry weight

Communities/Households

Type of waste	tonnes/year
Biowaste / Organic fraction of MSW (OFMSW)	50.000
Garden waste	incl. in OFMSW
Kitchen waste	incl. in OFMSW

Industrial/Trade

Type of waste	Tonnes/year
Food and beverage processing waste	39.400

7.2 Anaerobic digestion facilities

Type of facilities	Number
Continuous vertical tank	3
Continuous horizontal tank	1
Continuous plug-flow systems	8
Continuous multiple tank systems	1
Others/unspecified (co-digestion)	n.d.

These statistics refer to the number of anaerobically digestion plants which treat solid wastes, mainly OFMSW.

A further 300 facilities located on wastewater treatment plants anaerobically digest the sewage sludge produced. 55 of these plants co-digest other substrates (OFSW or industrial biowastes).

There are also some 20 anaerobic digestion plants for the treatment of industrial wastewaters (e.g. food and beverage industry, paper mills).

Most of the digestate is used directly. Only about 10% is post-composted.

7.3 Trends

Estimated increase in the amount of organic waste digested: 10.000 tonnes per year.

- Communities/Household: 5.000 t
- Industrial/Trade: 5.000 t

New anaerobic digestion facilities are planned:

- about 1 industrial (>5.000 t/y)
- and/or 5 co-digestion plants (farm and other biowaste)

7.4 Economic aspects

The average gate fee amounts to 80 – 107 €/t and the average selling price of the digestate is -7 €/t (negative price because the composting facilities subsidize the spreading of compost).

8 Existing Outlets

8.1 The market for products from compost

A total of 360.000 tonnes of compost was produced in Switzerland in 2002.

Market Sector:

Market Sector	%
Amateur gardening	12
Agriculture	50
Landscaping, grounds maintenance and horticulture (incl. potting soils)	38

8.2 The market for products from digestate

A total of 45.000 tonnes of digestate produced in Switzerland in 2002 (50 % as solid digestate, 50 % as liquid digestate/press water).

Market Sector:

Market Sector	%
Agriculture	100

9 Comments and relevant information

9.1 Public awareness and lobbying

Campaigns are regularly organised by local authorities to improve separate collection of biowaste. In the past years, The **Kompostforum Schweiz** has co-ordinated several campaigns ("Compost spring", "Compost summer", "Compost autumn") to promote composting, where local authorities, compost plants and compost counsellors have organised action days around themes relating to biowaste collection and composting. In 2004, over 100 local and regional authorities took part in the campaign.

In 2005, a nationwide "Treasure hunt" campaign (called *Wahre Werte / Chasse au trésor / Tesoro nascoto*) was co-sponsored by the authorities and a large number of organisations involved in waste management, including the two main composting organisations (ASCP and Kompostforum Schweiz). This "Campaign to promote a better management of our resources, products and wastes" culminated on the "Action days" on May 27 and 28 2005, with over 150 regional and actions. The campaign will be repeated in coming years and it is hoped it will increase its sponsoring platform (including wider support from the private economy) and its impact on the public.

Various awareness raising programs are also offered to schools by different organisations (see under Section H, the references on the FOEN homepage).

9.2 Home composting

According to the Swiss Ordinance on Waste, encouragement of home and neighbourhood composting is to be given priority over separate collection and centralised treatment. In reality, separate collection and centralised treatment have become generalised throughout the country and the amounts treated on a private or neighbourhood scale are estimated at about 300.000 t/year, less than half the amount separately collected in 2003 (740.000 t).

Several cities (e.g. Zürich, Bern, Basel) and regions have programs to encourage home and neighbourhood composting, offering helplines, documentation, compost counselling and free shredding services.

The organisation Kompostforum promotes home and neighbourhood composting and trains compost counsellors.

9.3 Lobbying training, marketing and promotional schemes

Promotion of compost as a quality product: the ASCP professional association, training, quality standards and plant inspectorate

Swiss waste management guidelines require that the recycling of a waste fraction be not only environmentally beneficial, but also economically sustainable. Advanced disposal fees have thus been introduced on many products (PET beverage containers, batteries, glass bottles, electrical and electronic appliances) to finance collection and recycling schemes. This is not possible for biowaste. Nevertheless, the economic sustainability of biowaste treatment is a necessary long-term goal and can only be achieved if a real market can develop for its products. All this confirms how necessary it has become to change the image of compost in the eye of the public and users, from a waste by-product to a valuable resource.

The ASCP

It is in this context of decreasing economic sustainability and increasing demands from the food producers and consumers regarding traceability that the Association of Swiss Compost and Methanisation Plants (ASCP) was founded in 1999, with three main aims:

- close material and energy cycles in biowaste management
- encourage high professional standards in compost production
- create the conditions for a real market for compost and its by-products

The Association, which groups the plants processing more than 100 t/y of biowaste, now counts over 40 members, who together process more than 400.000 t of biowaste, 2/3 of the amount collected yearly in Switzerland.

Training, quality and monitoring are the three keywords of the ASCP strategy. Encouraged and partially funded by the federal authorities and by several cantons, the ASCP developed a training program, quality guidelines and a branch inspectorate and label, aimed at guaranteeing high standards of quality, both for the process management and for its products.

Training program

To produce quality compost every worker on the plant must possess some basic knowledge that enables him to understand the consequences of his actions. In practice, the driver of the front-end loader must not only know how to drive his vehicle, but must for example also be conscious that by piling up compost without the necessary precautions, the resulting compaction will cause a decrease in the quality of the product.

A modular training program has been developed and carried out by the ASCP at a national level since 2000, both in German and French. The training courses are tailored for workers on composting and anaerobic digestion plants and aim to promote best practice during compost production, but also to raise self-awareness and esteem among compost workers, by a better knowledge of their products and of their properties and qualities.

From now on, these courses and will be organised by EduCompost Ltd, a newly formed independent training institute for the recycling of biomass (see below, the address sections 11.1 and 11.2).

Basic module (initially 3 days, now reduced to 2): participants are given a general overview of biowaste management and a grounding in the legal basics. After this introduction, the biological basics of composting are taught. In this way every participant learns what is happening in a compost pile. All the other aspects of the management of a composting plant which are then treated relate more or less directly to this biological basis: choice of

treatment techniques, type of waste accepted, worksheets, quality assurance systems, etc. Site visits complete the course, so the participants get an insight into the variety of existing composting techniques and processes.

Quality module: here, the accent is placed on process and quality control. Simple chemical analyses and plant tests are taught, that can be used by the workers themselves after a minimal training, to monitor the quality of their compost on-site. Such analyses, in particular the plant-germination and growth tests, allow compost workers and producers to discover directly the influence of their own products on plant health and growth. This serves to promote awareness that producing high-quality compost is no mean feat and demands specific skills and careful process management.

Educompost also offers other more specific modules and refresher courses.

Quality criteria for composts and digestates from biowaste

The compost and digestate quality guidelines were published in 2001 by the ASCP in collaboration with the Swiss Biogas Forum. The aims of these guidelines are to assist producers in producing compost of consistent and reliable quality and to encourage greater consumer confidence in composts. They define the characteristics a compost must possess for its use in agriculture, in horticulture and market gardening, landscaping or in covered cultures. Covered cultures and private gardening require the highest quality and degree of maturity. Slightly lower standards suffice for commercial horticulture. The minimal requirements set out in the Federal guidelines apply for agricultural and other use.

The guidelines are intended as complementary to the federal instructions and recommendations, and in no case do they replace them. The minimal quality requirements have been amended and the meaning of the terms "rotted" and "digestate" has been further specified. Compost complying with all the requirements of the present guidelines can be obtained from digestates which have undergone state-of-the-art aerobic post-composting.

A further novelty of these guidelines, going considerably farther than any of the standards formulated by the federal research stations, are the quality requirements for compost used in horticulture and landscaping, both for outdoor and covered cultures. Beside chemical

and physical parameters, normalised biological tests are also proposed.

To obtain a high quality finished product requires not only state-of-the-art processing, but also a correct choice of feedstocks. Only materials with low levels of pollutants should be used. This excludes wastes susceptible of being highly contaminated, such as sewage sludge, or waste from street cleansing. The ASCP and Biogas Forum recommend that the feedstock and additives be declared.

The 3 quality grades defined in the ASCP Guidelines 2001 are:

- Composts and digestates for agricultural use are materials that conform to the statutory minimum quality grade. This grade defines "properly composted" wastes, stating that compost can be regarded as mature when the feedstock is no longer recognizable (except in the case of wood) and the ammonium content is less than 300 mg/kg fresh weight.
- Composts used in horticulture, market gardening and landscaping must satisfy additional requirements (over and above the minimum quality grade) with regard to biological (plant compatibility tests), chemical and physical parameters.
- Composts used in greenhouses and private gardens must satisfy more stringent requirements with regard to biological (plant compatibility tests), chemical and physical parameters.

Plant inspectorate and label

In 2003, the ASCP set up an independent and nationally recognised auditing scheme for biowaste processing plants (inspectorate), in close co-operation with the other professional associations in the field and with the regional and federal authorities. An inspectorate commission was constituted, with representatives of all the parties involved: compost producers and their branch associations, federal and cantonal authorities, research institutes and end-users (agriculture, horticulture and market gardening). The audits are carried out by accredited inspectors, who are specialists of composting processes and compost quality, but are not compost producers themselves. This independence is essential to guarantee the strict conformity and quality of the inspections.

Since 2005, the inspectorate is piloted by a consortium of the three main professional

organisations in the field (ARGE Inspektorat). It can now aim to be recognised by the federal and cantonal authorities as the official branch inspectorate, thus substituting the controls carried out by the authorities. This is already the case in the cantons of Aargau, Solothurn Zürich, Zug, Lucerne and Thurgau, where the authorities have given mandate to the branch inspectorate to inspect all the plants treating more than 100 t/y of biowaste. In cantons where no such mandate exist as yet, it is up to the plants themselves to ask to be inspected. In some cases the cantonal authorities then recognise the inspection as equivalent to the controls they carry out. Discussions are continuing with the cantonal authorities throughout Switzerland to extend the recognition of the branch inspectorate. In all some 100 plants were inspected in 2003 and 2004, and 160 in 2005.

The total annual capacity of the plants under inspection amounted to 508.000 tonnes, corresponding to about two-thirds of the total amount of biowaste treated annually in Switzerland (750.000-800.000 tonnes). The annual report of the plant inspectorate is available online in pdf form (in German and French): see below, section 11.2.

At present, this inspectorate controls the minimal quality requirements prescribed by the law. These concern mainly environmental protection (water, air and soil protection), and compliance with the minimal quality requirements set out in the federal recommendations. In the future it is planned to extend the auditing scheme to higher quality specifications (compliance with the ASCP quality guidelines for their higher-quality products) and to develop a label for these products. Negotiations are here underway, including attempts to standardize the label requirements with those of BIO SUISSE label for organic farming.

Positive list of input feedstocks and additives for composting and anaerobic digestion facilities (December 2005)

This list was published by the inspectorate commission which supervises the plant inspectorate and also acts as a motor for promotion of quality and optimization of processes and controls.

The positive list is intended as a practical tool for the competent authorities and for biowaste-treatment facility managers. It classifies the wastes in three different hygiene categories, depending on their relative risk for food safety and defines which types of waste and additives may serve as feedstock materials for

composting and anaerobic digestion, depending on the treatment process.

The positive list is available online in pdf form (in German and French): see below, section 11.2.

9.4 Research and development

Compost studies

Two Swiss research projects were launched in 2003 and are due to be finished in 2006.

The first project, "Effects of Composts on the Environment, Soil Fertility and Plant Health", aim is to assess the beneficial effects of compost and digestate application on plant growth and health, on soil parameters and on the environment in general. During this research project, which will enter its main phase in 2004, the accent will be placed on determining to what degree these beneficial qualities are widespread in composts and digestates and how they can be selectively enhanced.

The second parallel national project is looking at the organic pollutants in composts. The research team of "Organic pollutants in compost and digestate in Switzerland" aim to determine the contamination level of composts and digestates by substances such as PAHs, PCBs, dioxins, phthalates, polybrominated flame retardants, chlorinated paraffins and plant treatment agents. It then intends to assess the possibilities of minimizing such contaminants and propose measures to improve quality management, risk analyses and regulation concerning biowastes from this point of view.

The composts and digestates used in these two projects were collected during a common countrywide sampling campaign carried out in 2004 and 2005. Literature studies were published in 2004 for both these projects.

10 Respondent – Key contact

- **Ecoservices Yverdon Sàrl**
Associate director
Mrs Catherine Fischer Schleiss
rue des Pêcheurs 8A
1400 Yverdon-les-Bains
Tel.: +41-244242040
Fax: +47-244442049
catherine@ecoservices.ch

11 References, other sources of information

11.1 Addresses

ASCP: Association of Swiss Compost and Methanisation Plants

Oberdorfstrasse 40
Postfach 603
CH-3053 Münchenbuchsee
Switzerland
Tel.: +41 (31) 858 22 24
Fax: +41 (31) 858 22 21
vks-asic@email.ch
www.vks-asic.ch

GCP: Groupement des compostières professionnelles romandes

(French-speaking branch of the ASCP)
Secretariat:
Catherine Fischer Schleiss
Centre St-Roch
rue des Pêcheurs 8A
CH-1400 Yverdon-les-Bains
Tel.: +41-244242040
Fax: +47-244442049
info@gcp-compost.ch
www.gcp-compost.ch

Kompostforum Schweiz

Waldhofweg 27b
CH-5034 SUHR
Switzerland
Tel.: +41 (62) 213 88 78
forum@kompost.ch
www.kompost.ch

Biogas Forum

Biogas Forum, Sekretariat
c/o Dr.A.Wellinger
Nova Energie
Châtelstr. 2
CH-8355 Aadorf
Tel.: +41 (52) 368 34 70
Fax: +41 (52) 365 43 20
arthur.wellinger@novaenergie.ch
www.biogas.ch (also some pages in English)

ARGE Inspektorat

Consortium of the three above-mentioned associations for the implementation of the national plant auditing scheme
Secretariat:
René Estermann
Waldhofweg 27b

CH-5034 SUHR
Switzerland
Tel.: +41 (62) 213 93 73
arge@kompost.ch

Training Institute for Biomass Recycling

Educompost GmbH
Weinbergstrasse 46
CH-2540 Grenchen
Switzerland
Tel.: +41 32 653 29 23
Fax: +41 32 653 29 22
info@educompost.ch
www.educompost.ch

11.2 Links

Biowaste management in Switzerland - legislation, statistics, quality, environmental education etc., see the English pages of the Waste and Raw materials division of the Federal office for environment :
www.environnement-suisse.ch/buwal/eng/fachgebiete/fg_abfall/zahl/en/index.html

in particular the pages on biowaste (www.environnement-suisse.ch/buwal/eng/fachgebiete/fg_abfall/abfallwegweiser/gruengut/index.html)

Compost quality guidelines (in English):
www.vks-asic.ch/acrobatreader/vks_richtlinie_english.pdf

Annual report of the compost inspectorate (including other data on composting and anaerobic digestion in Switzerland): available in German from www.vks-asic.ch (see under "Aktuell"), and in French from www.gcp-compost.ch (see under "Documentation").

Positive list of input feedstocks and additives for composting and anaerobic digestion facilities: available in German: www.vks-asic.ch (see under "Aktuell") and in French: www.gcp-compost.ch (see under "Documentation")

Compost studies:

www.umwelt-schweiz.ch/buwal/eng/fachgebiete/fg_abfall/abfallwegweiser/gruengut/kompoststudien/index.html

Association of Swiss compost and methanisation plants:

www.vks-asic.ch (in German and French)

Kompostforum Schweiz: small-scale, farm and home composting (in German):

www.kompost.ch

Swiss association for anaerobic digestion
(Biogas Forum): www.biogas.ch

Energy from biomass:
www.biomassenergie.ch
www.biomasse-schweiz.ch

Training:
www.educompost.ch

Other interesting websites:

Beneficial effects of compost
www.biophyt.ch

Studies on standards, on compost quality and
marketing:
www.kschleiss.ch

Composting in developing countries:
www.sandec.ch

Home-composting counselling (in German):
www.kompostberatung.ch

Legislation:

www.environnement-suisse.ch/buwal/eng/fachgebiete/fg_abfall/zahlen/index.html

Statistics:

www.bfs.admin.ch/bfs/portal/en/index.html