

Creating an Eco-label for Electricity in Switzerland – The Art of mediating between diverging interests

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1. Abstract

The "Association For Environmentally Friendly Electricity" was founded on October 25th 1999 in Zürich. The objective of this Association is the development and broad use of a Swiss Quality Label for the labeling of ecological and renewable electricity products. This label is introduced in order to promote sustainable energy and to ensure its ecological quality. The Association has a broad support. Its founders are electricity producer associations, important Swiss electricity producers, electricity distributors and environmental and consumer organizations.

The foundation was preceded by a two-year discussion process, which aimed to achieve a consensus between different economical and political actors in the electricity business.

2. Basic consensus about the Quality Label

Objective of the Quality Label for electricity

The "Association For Environmentally Friendly Electricity" was founded on October 25th 1999 in Zürich. The objective of this Association is the development and broad use of a Swiss Quality Label for the labeling of ecological and renewable electricity products. This label is introduced in order to promote sustainable energy and to ensure its ecological quality.

Uniform and consistent quality criteria for all electricity products

Nowadays several "green electricity products" are offered on the electricity market. However, there are no internationally recognized and uniform criteria for the assessment of their sustainability. The quality label is provided by an independent authority, based on scientific appraisal factors. These factors can be equally applied to all sustainable electricity products on the market. In addition to a complete global life cycle analysis, criteria concerning local and regional matters are taken into consideration. The observance of the quality criteria is scrutinized during the labeling process. Products, which meet the quality standards, will be awarded the quality label. The label may be used for product marketing by electricity-producers (such as solar or hydro power stations) on the basis of a license agreement. The quality label guarantees an environmental quality assurance of sustainable electricity products. On one hand this will improve the credibility of these electricity products in the public, on the other hand the ecological profit can be communicated to the end-consumer. The labeled products will obtain a competitive advantage over conventional electricity products, which will result in a promotion of sustainable energy in medium-term.

The solution: Two steps of the quality label

The actors of the electricity market have different demands upon a quality label:

- Guarantee of quality assurance
- Labeling of sustainable electricity and electricity from renewable energy sources
- Awarding and promotion of the most environmentally sound products
- Establishment of a competitive advantage for electricity from renewable energy sources (e.g. hydro power) compared to electricity from non-renewable energy sources (e.g. petrol)

The diversity of these demands requires the introduction of a quality label with two different ecological quality levels. All power stations, which produce electricity from renewable energy sources (hydro power, bio gas, solar power, wind power) can be labeled, if they fulfill the corresponding criteria.

Level I – Eco-label

Eco-label marks the "ecological leaders" of electricity products, which meet the strictest requirements for the production of sustainable electricity. Hydro power plants, which are concessioned according to the newest environmental laws and which show a distinct added ecological value, can as well be labeled with eco-label.

Level II – Declaration for electricity products from renewable energy sources

The requirements for this declaration are less strict. The operation of the relevant power stations must be CO₂-neutral and mustn't contribute to climate change. Already operating power stations, mostly hydro power stations, will meet the requirements for this declaration.

Promotion model for electricity from renewable energy sources

The possibility for hydro power stations of being awarded an eco-label leads to the expectation, that electricity produced with new technologies will be marginalized on the liberalized electricity market. Therefore the Association has developed a basic concept for "new" renewable energies – electricity from bio mass, solar power or wind power. Every electricity-producer selling electricity labeled with either level of quality also has to offer his customers labeled electricity from a new renewable energy source. Within five years after the first labeling, electricity-producers must cover 0.5% of their sales with electricity from bio mass, solar power or wind power. For the average Swiss electricity-producer this is over ten times more than the present electricity production from new renewable energy sources. With this ambitious objective the Association emphasizes its will to develop a credible and trustworthy quality label for electricity-consumers.

Labeling starting from summer 2000

The Association is planning on labeling the first pilot power station in early summer 2000. The necessary preparations, such as a research cooperation with EAWAG Kastanienbaum in the field "eco-electricity from hydro power plants", have already been initiated.

3. Organization

The following institutions are the founders of the Association (in parenthesis are the names of the official delegates)

- Biogas-Forum (Arthur Wellinger)
- Electricité Neuchâteloise SA (Jacques Rognon)
- Elektrizitätswerk der Stadt Bern (Jürg Vaterlaus)
- Elektrizitätswerk der Stadt Zürich (Conrad Amman)
- Entreprises Electriques Fribourgeoises (René Viret)
- Schweizerischer Wasserwirtschaftsverband (Peter Molinari)
- Suisse-Eole (Robert Horbaty)
- WWF Schweiz (Carol Franklin)

At the foundation meeting the following people were elected as members of the executive board:

- Carol Franklin
- Conrad Amman
- Robert Horbaty
- Peter Molinari
- Joseph Rohrer (Kontaktstelle der Schweizerischen Umweltorganisationen, Bern)
- Jürg Vaterlaus
- René Viret
- Arthur Wellinger

Two chairs are still unoccupied and are reserved for the delegation of large electricity-consumers (business) and small electricity-consumers (households). The board is co-directed by the chairwoman Carol Franklin and the chairman Conrad Amman.

4. Consensus process

The foundation of the Association has been preceded by a two-year discussion process, which aimed to achieve a consensus between different economical and political actors in the electricity business.

Actors

The most important actors are the following groups and organizations:

- Urban electricity suppliers (e.g. organized in the IGSS – Interessensgemeinschaft der Schweizerischen Stadtwerke)
- Large electricity companies (e.g. NOK, EOS)
- Several large hydro power stations
- Small hydro power stations
- VSE – Verband Schweizerischer Elektrizitätswerke (Association of Swiss Electricity companies)
- Schweizerischer Wasserwirtschaftsverband (Association of Swiss Water Resources Industries)
- Cantonal energy administrations (Uri, Wallis, Graubünden)
- Federal administrations (BfE, BUWAL, BWW)
- Arbeitsgruppe Gewässerschutz der schweizerischen Umweltorganisationen ("freshwater" NGO)
- Several Swiss environmental organisations (WWF Schweiz, SES, Greina Stiftung)
- Associations of producers of new renewable energies (Biogas-Forum, Swissolar, Suisse-Eole)
- Research partners (EAWAG, IÖW)

Course of the process

The process of discussion can be divided into four phases, which each stand for a significant progress on the way to the result (see table 1).

*Table 1
Scheme of the course of the solution finding process*

Year and phase	Discussion process and (P) results	Most important actors
1997 Phase I	<ul style="list-style-type: none"> • A team from EAWAG develops the research idea for eco-electricity from hydro power. First talks with WWF Switzerland and ewz take place. ⇒ Research project "Eco-electricity from hydro power" at EAWAG • In relation with the marketing of solar power the need for quality assurance rises. 	<ul style="list-style-type: none"> • EAWAG • ewz – Elektrizitätswerk der Stadt Zürich • WWF Switzerland
1. half of 1998 Phase II	<ul style="list-style-type: none"> • On the initiative of WWF Switzerland the working group "Eco-electricity label" is established. Important economical and political actors of the Swiss electricity market are represented in the group. • The EAWAG research project "Eco-electricity from hydro power" is started. ⇒ Discussion about the requests for a label Kiefer & Partners AG presents the idea of a two level label, a concept, that is similar to the one presently applied. 	<ul style="list-style-type: none"> • WWF Switzerland • Department renewable energies E2000 • Different economical and political actors on the electricity market • EAWAG

<p>2. half of 1998 Phase III</p>	<ul style="list-style-type: none"> • From the working group "eco-electricity label" a body responsible for a businessplan "Association Eco-Electricity Label" is established. WWF Switzerland and ewz are represented in the body. ⇒ Kiefer & Partners AG prepares a draft of a business plan • Parts of the VSE are opposed to the concept of a two level label ⇒ The concept is changed into a basic label for electricity from renewable energy sources ("SwissReEnergy") and an additional label for "eco-electricity" ("EcoLeader"). • The EAWAG research project is to be speeded up, since some exponents of the electricity market urge a decision for hydro power. At the same time EAWAG gets resistance from the water economy section. 	<ul style="list-style-type: none"> • ewz • WWF Switzerland • Kiefer & Partners AG • VSE
<p>1. half of 1999 Phase IV</p>	<ul style="list-style-type: none"> • The business plan draft is discussed with the different actors. The presented solution for the label is welcomed by VSE. The resistance against EAWAG is transformed into support. Surprisingly resistance against the label solution now rises from environmental organizations. They fear an "erosion of ecological standards" because of the possibility of being awarded a basic label. ⇒ The label concept is reconsidered. Instead of the two level labels an "eco-label" and a declaration for electricity from renewable energy sources are taken into the new concept. • Preparation for the foundation of the Association 	<ul style="list-style-type: none"> • VSE • Environmental organizations • ewz • WWF Switzerland
<p>IX and X 1999</p>	<ul style="list-style-type: none"> • The members of the Association agree on the present solution ⇒ The Association is founded 	<ul style="list-style-type: none"> • Members of the Association