

## **Reliable Disclosure Systems for Europe**

### **Outline for a project to be submitted under the 2009 call of the IEE programme**

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### **Starting Points for the project**

EU Directive 2003/54/EC (which is currently under revision) requires Member States in Article 3 (6) to establish reliable disclosure systems for electricity. A note from the European Commission on the labelling provision in Directive 2003/54/EC gives further guidance to the Member States concerning how the disclosure systems should be implemented.

Article 5 of EU Directive 2001/77/EC and Article 15 of the new Directive on the promotion of renewable energy (2009/28/EC), which will be published shortly in the Official Journal) requires Member States to establish a reliable and accurate system of Guarantees of Origin for electricity from renewable energy sources. Similarly, Article 5 of Directive 2004/8/EC requires Member States to establish a system of Guarantees of Origin for electricity from high efficient cogeneration, which also needs to be reliable and accurate. The new Directive on the promotion of renewable energy clarifies that Guarantees of Origin issued under this Directive can be used for purposes of the electricity disclosure system established under Article 3 (6) of Directive 2003/54/EC.

Note: Guarantees of Origin for Heating and Cooling from renewable energy, which are also foreseen under the new Directive on the promotion of renewable energy, are not in the focus of this project proposal, which focuses solely on electricity.

Nearly all EU Member States and EEA countries have established electricity disclosure schemes and systems of Guarantees of Origin for electricity from renewable energy sources. This also applies to Switzerland. Systems of Guarantees of Origin for electricity from highly efficient cogeneration are under development in most countries across the EU.

16 EU Member States plus Norway and Switzerland have joined the European Energy Certificate System (EECS), which is a voluntary standard for a harmonised, reliable implementation of Guarantees of Origin in the form of transferable electronic certificates. The EECS system enables a European market for Guarantees of Origin, which covered more than 180 TWh of electricity from renewable energy sources in 2008, which equals approx. one third of the total electricity production from renewable energy sources in EU27.

In order to determine the data to be provided to electricity consumers under the electricity disclosure requirement, all countries need to establish a default set of information which can be used where no information about the origin of electricity is available. However, most European countries show a significant shortfall in doing so, see below.

## Previous Projects

The project “A European Standard for the Tracking of Electricity (E TRACK)”<sup>1</sup> has analysed the implementation of Guarantees of Origin for electricity from renewable energy and from highly efficient cogeneration and of electricity disclosure schemes across the EU and in Norway and Switzerland.

The project has found that the implementation of both types of Guarantees of Origin and also of electricity disclosure in many European countries does not fulfil the requirements set by EU Directives. The project has developed a set of recommendations for the countries how their systems could be improved.

The E-TRACK project has also developed best practice recommendations for the implementation of Guarantees of Origin and electricity disclosure. For Guarantees of Origin, these include:

- Guarantees of Origin should be implemented as electronic certificates in a system which is coordinated across Europe. Their lifetime should include issuing, transfer and cancellation.
- Besides GO for electricity from renewable energy and from high-efficient cogeneration, there should also be the possibility to use a similar “explicit” tracking mechanism for any other type of electricity generation.
- Guarantees of Origin should be used for electricity disclosure relating to the period in which the underlying electricity was produced.

For electricity disclosure, the E-TRACK best practice recommendations aim at avoiding a double counting of electricity attributes (fuel mix and environmental indicators as required by Article 3 (6) of Directive 2003/54/EC). In order to achieve this, the project has developed inter alia the following recommendations:

- The disclosure of electricity from renewable energy sources and from highly efficient cogeneration should be based on Guarantees of Origin.
- Where an electricity retailer wants to disclose electricity attributes from other individual production devices, this should be enabled by a system of Guarantees of Origin for electricity from any kind of electricity generation. Alternatively, countries might choose to establish a tracking system which is based on the trading arrangements in the electricity system. In both cases, these systems should be reliable and transparent.
- For certain purposes, e.g. the disclosure of renewable or high-efficient CHP electricity to consumers, which are subject to a public support scheme, specific allocation mechanisms might be used which are not based on Guarantees of Origin. This could be e.g. a pro-rata allocation of the attributes of supported energy to certain consumer groups. In any case, the way how supported energy production is to be disclosed to consumers should be clarified by all countries and the related allocation schemes should be reliable and transparent.
- A “residual mix” should be used as the default set of disclosure information instead of uncorrected statistical data about electricity production in a country or a region. This residual mix removes from the total production statistics all the electricity attributes which have been accounted for based on Guarantees of Origin or the other reliable tracking systems mentioned above.

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<sup>1</sup> The E TRACK project was performed in two phases, E-TRACK I and E-TRACK II. For details, see the project website <http://www.e-track-project.org>. The E-TRACK II project terminates in September 2009.

- The disclosure calculations used by European countries should also assign electricity attributes to net physical imports of electricity, and accordingly, exporting countries should account for the export of these attributes in their residual mix calculations. Similarly, countries which are exporting more Guarantees of Origin than they export physical electricity need to “import” a certain attribute mix back from those countries who are importing more Guarantees of Origin than they import physical electricity.

Such a European-wide balancing scheme would need to be established on a European basis and requires the cooperation of many, in the best case all, countries connected to European electricity systems and/or participating in the transfer of Guarantees of Origin.

The E-TRACK project has found that today’s implementations of electricity disclosure systems in European countries are usually based on national calculations. Several countries have already established a residual mix calculation, but only very few correctly account for exported and imported Guarantees of Origin and for the impact of physical exports and imports. Thus the implementation of the E-TRACK recommendations, amended according to the requirements of the bodies responsible for electricity disclosure in the individual countries, could help significantly to provide European consumers with disclosure information which is reliable, as required by Directive 2003/54/EC.

Recently, a proposal has been developed by the Association of Issuing Bodies and RECS International that interested competent bodies from countries in Europe should form a “Platform Disclosure Standard”, which follows similar objectives as the project proposed here (see below). These two activities are closely linked: The “Platform Disclosure Standard” will be a quick pilot activity, which can start working already in fall 2009, but will have only limited internal resources and organisational support. The project outlined here is meant to support this platform and to provide expertise where required. The resources of the project will ensure that the platform can work in a stable environment.

## **Objectives – Results – Impacts**

### **Objectives of the Project**

- To bring together the responsible bodies for disclosure from selected European countries in order to discuss experiences with implementing electricity disclosure, the use of GO for disclosure and the detailed calculations for national averages or residual mixes.
- To identify adequate mechanisms which can be used for the bilateral allocation of electricity produced from a certain production device to a single consumer or a group of consumers (explicit tracking). This comprises GO for RES-E and CHP-E, but can also include other tracking mechanisms, which fulfil certain reliability and transparency criteria.
- To improve the implementation of explicit tracking mechanisms in the respective countries to a joint best practice standard, which makes them reliable and easy to use for disclosure purposes.
- To identify adequate improvements in the methodology applied in the selected countries for calculating national averages or residual mixes for electricity disclosure. These improvements should properly reflect the use of GO and other qualified tracking mechanisms, the support systems used and the exports and imports of physical energy and Guarantees of Origin.

The starting point for the development of these improvements will be the recommendations from the E-TRACK project, but these can be modified as appropriate.

- To identify other problems which the responsible bodies in the participating countries have experienced in determining electricity disclosure information or in developing the related guidelines for the electricity industry, and to develop adequate solutions for these problems.
- To identify the requirements for exchanges of data between the responsible bodies in the participating countries and in other countries in order to provide these bodies with the information required for determining electricity disclosure information.
- To support the participating countries in the concrete improvement of their implementations of GO systems, other explicit tracking systems and residual mix calculations.
- To promote the Reliable Disclosure approach in those European countries which are not participating actively in the project.

### **Long-term Objectives of the Project**

- To increase the reliability of disclosure information provided to European consumers, which is a requirement defined in Article 3(6) of Directive 2003/54/EC.
- To support the allocation of true market values to electricity from different energy sources and using different conversion technologies, based on consumer preferences.
- Supporting the further integration of electricity from renewable energy or high efficiency co-generation receiving public support into the electricity market, and supporting the stability of these support systems.
- To provide general guidance which can also be applied for the design of similar energy certification systems, e.g. Guarantees of Origin for Biogas.

### **Composition of the Consortium**

Unlike the two phases of the E-TRACK project, the consortium for this project mostly consists of responsible bodies nominated by European countries for the implementation of GO and electricity disclosure. The work of these bodies – the development of reliable operational systems for disclosure – is supported and coordinated by selected consultants with extensive knowledge in issues relating to Guarantees of Origin and electricity disclosure.

Note: The set of participating countries should fulfil the following criteria:

- It should reflect a significant share of both the electricity production and demand in Europe.
- It should contain several large exporters and importers of physical electricity and Guarantees of Origin in Europe.
- It should consist of countries which want to improve the electricity disclosure information given to consumers.

The proposed project will be coordinated by Öko-Institut, which has been coordinating both phases of the E-TRACK project and therefore has extensive knowledge of concepts for electricity tracking and has a large number of contacts to responsible bodies for disclosure across Europe and related stakeholders.

Further project partners will be one responsible body for disclosure from each of the participating countries. These can be ministries, regulators or other bodies formally appointed as being responsible

for the development of detailed electricity disclosure regulations and / or performing the related calculations.

Note: It is proposed that the project be kept open for additional countries to join during the initial phase of the project. However, active participation of a minimum of four to six relevant countries will be required at the outset, in order to guarantee useful results and to make the project convincing for EU funding.

Potential further consultants:

- IT Power (GB) has contributed significantly to both phases of the E-TRACK project and has led the inventory work in E-TRACK II, which has assessed the implementation of Guarantees of Origin and electricity disclosure in 29 European countries.
- Grexel Ltd. (FI) has already developed a first version of a calculation model for residual mixes in different regions of Europe, which could be used as a starting point for further developments in the project.

The project will invite the European Commission to follow the work in the project. It will also involve several key stakeholders in order to take their views into account. These may include CEER / ERGEG, RECS International, the European Renewable Energy Council (EREC), Euroheat & Power, Cogen Europe, Eurelectric, ETSO, UCTE and ENTSOE, the European Federation of Energy Traders, BEUC as the umbrella organisation of consumer organisations and an organisation representing non-domestic energy consumers. (Note that most of these organisations have yet to be asked to agree to their involvement.)

## Work Programme

The work programme could be structured as follows:

### **WP1: Management**

This WP covers the typical project management tasks. This includes supporting the other project partners in their cooperation by organising meetings and workshops.

### **WP2: Defining the best practice to be achieved**

The best practice standard for this project will be defined jointly by the project partners. The starting point for this will be the recommendations from the E-TRACK project, but it will be possible to include additional considerations or restrictions. The objective is to agree on the best practice recommendation within six months of project inception.

### **WP3: Implementation of best practice recommendation**

In this WP, the participating countries will support each other in implementing the elements of the best practice recommendation. The consultants in the consortium will be available for giving detailed support where necessary. The implementation period is expected to last about 12 months.

Note: The development or adaptation of software for GO registries is NOT part of the project. If such development is necessary, this can be done outside of the project. Also, the project will not be able to perform changes in primary or secondary legislation. If such changes would be required in certain countries in order to implement the best practice recommendation, such requirements will be identified and put forward to the legislative bodies.

**WP4: Evaluation of achieved improvements**

The project partners will assess the actual progress made in adapting the tracking regulations in the participating countries to the agreed best practice standard.

**WP5: Dissemination**

This includes workshops which are aiming at promoting the best practice recommendation to those countries which are not participating in the project.

**WP6: IEE Common Dissemination Measures**

This includes the typical IEE dissemination measures.

**Project Schedule**

The project will last for 24 months, and it is intended that it will lead to the formation of a platform for administration and longer-term enhancement of the reliable disclosure system, possibly building on current organisational structures.

**IEE funding and co-financing sources**

The project consortium will apply for support from the IEE programme.

This programme may provide support for 75% of the eligible cost of the project. The proposal is to provide a 90% share of support to the work of the consultants in the project. Consequently, the responsible bodies from European countries involved in the project would receive a lower share of support for their work in the project.