

# Non-renewable energy entitlement scheme for Europe – a policy tool to fit our consumption within planetary limits

## Special Session: REDUCTIONS: Reducing Environmental Degradation & Unsustainable Consumption Trends & Impacts On Nature & Society

The non-renewable energy entitlement scheme is a means to achieve an absolute reduction of nonrenewable energy use at EU level with a progressive reduction rate each year, where everybody has the same share. It aims to provide a **comprehensive** set of tools for getting to the roots of the problems related to climate change, and mitigating the causes of climate change and other environmental problems. The scheme would gradually **reduce non-renewable energy use** in Europe and promoting **energy saving**, **energy efficiency and renewable energy resources** through providing **incentives and interest free loans** for citizens, communities and economies to realise necessary investments. Furthermore, it would enhance **environmental consciousness** for the necessary structural change. The proposed regulatory system is based on 3 + 1 pillars, which together can reach the environmental goals while taking into account social considerations.

#### Pillar 1: The Energy Entitlement

The energy entitlement means a yearly consumption entitlement for the entire economy and for every consumer individually in the European Union. Every year, the scheme aims to reduce the use of non-renewable energy resources at EU level by a rate defined in comparison to the consumption figures corresponding to the preceding year. The year before the scheme starts shall be the reference year.

The rate of reduction shall be determined in line with scientific recommendations, among others taking into account the tough contraction and convergence scenario of the Decoupling Report of UNEP's International Resource Panel focusing on fossil fuels, minerals, metals and biomass. This scenario requires far reaching absolute resource use reductions in the industrialized countries, by a factor of 3 to 5 by 2050, which is consistent with the 2.2 tons of carbon per capita recommended by the IPCC as the convergence point that could prevent warming by more than 2 degrees centigrade.

Taking into account scientific recommendations the European Parliament defines the target for the next ten-year-period in order to enable long term economic planning, while the yearly rate of reduction is published by 15 January each year defining the total amount of energy entitlement in PJ (petajoules) for that year.

The total amount of entitlements is allocated for free among EU Member States based on their own non-renewable energy use in the reference year and the yearly national reduction rate. The national reduction rates should be based on the EU reduction rate, while they should also take into account the differences in the per capita non-renewable energy use among the countries, in order to design a fair system.

The national entitlements shall be distributed among different consumers within the MSs, therefore the national governments define consumer groups. Except for the general population, the consumer groups (agriculture, transport - except individual transport -, industry, state bodies, etc.) receive entitlements before 31 January each year. With the aim of protecting public interest, civil society should be entitled to contribute to this definition and the allocation process.

A entitlement managing organisation for the allocation and monitoring of entitlements should be established both at a national and at EU level. The national entitlement manager organisation keeps

parallel accounts for all consumers. Parallel accounting is designed to ensure data security, to allow for the replacement of lost cards and the day-to-day traceability of all accounts.

If there is a surplus on the accounts due to under-consumption, this surplus is credited to these accounts by the entitlement manager in the form of **entitlement money**. Consumers are only allowed to use more non-renewable energy than their allocated entitlements, if they purchase the missing consumer rights through the entitlement manager. Trading of entitlements is possible both among MSs at EU level and among all consumers at a national level based on the same principles. The trade in consumption rights shall be managed through the entitlement manager, and shall be conducted between all consumer groups, i.e. not limited to the population. In this way, the entitlement manager trades in the consumption entitlements of **overconsumers and under-consumers**.

#### Pillar 2: The Market for Environmental Goods and Services

The market for environmental goods and services is an **open market** operating according to environmental and ethical rules including sustainability and market considerations. EU regulations shall specify the conditions based on the principle that it is always the goods and services requiring the lowest material and energy consumption which can be placed on this market from among all goods and services. The principle underlying the **ethical rules** is that the economic activities on the market serve the common good by realising an existing product, process or service with least negative social and environmental externalities.

The **environmental aspects** entail that products and services are provided with the least environmental pressure (energy and material use, transport needs, waste and pollution, etc.) using the best available technologies. Among the **social aspects**, priority shall be given to a high rate of human labour used, especially in cases where disadvantaged people are involved in the process.

Compliance with these conditions shall be verified by a product certification council, issuing a certificate for products on the market. The market of environmental goods and services is open to any market actor who fulfils the conditions imposed on the market and acquires the certificate.

The currency of the market is the **entitlement money**. The entitlement money has **no interest** and is alternative currency existing in the form of electronic signs. The national currency shall provide the collateral for the entitlement money through the purchase of entitlement for national currency by those who over-consume.

#### Pillar 3. The Revolving Fund

The scheme includes a Revolving Fund, which is designed to allow for providing loans to individual consumers and market actors offering environmentally friendly products and services. Therefore, the Fund serves the transformation of production and consumption patterns towards less material and energy use, stimulates the market for environmental goods and services and propels innovation, allowing socially disadvantaged people to realise low energy, energy efficient investments, and promoting the introduction of renewable energy sources on the market.

The Fund provides **interest-free loans** for anyone whose investments aim to increase energy and material efficiency and whose goods and services meet the rules of the market for environmental goods and services. The basic accounting instrument of the Fund is **entitlement money**. The repayment rate depends on the pace of income generation from the investment of the producers. If the investment financed by the Revolving Fund is aimed at increasing energy efficiency or switching to renewable resources, repayment of the loan is achieved through the savings on the energy consumption rights used throughout the year.

### Pillar +1: Support Service

In order to support the rational decisions of citizens and market actors in general, the scheme includes a Support Service, which operates on a not-for-profit basis. The Support Service provides advice on lifestyle, planning, social and environmental issues related to the operation of the entitlement scheme. The knowledge, qualifications of the staff, the operations of the service and establishing the service are governed by specific regulations.