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Proposed Climate Change Act for Hungary based on energy quota system

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Introduction

While we see more and more clearly that today's resource wasting, growth-bound economy serves the short term interests of a few, instead of the long term interests of the whole society, we still have not realised the urgent need for radical changes in our view and practice in order to reverse this trend. The direction and the toolkit for this radical change are both missing. Legislation focuses only on partial problems following contradictory objectives and thus often serves conflicting interests; therefore, harmonization of legislation becomes impossible beyond a certain point. As a conclusion, it is clear that solving the interrelated economic, social and environmental problems is only possible by using an 'overarching' and holistic regulatory framework – which is urgently needed now.

In order to make steps towards answering the complex challenge, the National Society of Conservationists (Friends of the Earth Hungary) initiated a piece of legislation: the Climate Change Act. In spite of its name, the Act attempts to deal with not only climate protection needs, but it also serves as an 'umbrella' legislation to answer recent economic, social and environmental challenges at the same time. It applies a holistic approach integrating the various aspects and focusing on energy access issues as a starting point.

The organization developed its independent position on the concept of the Act, and the National Council for Sustainable Development, established in December 2008, endorsed the initiative and put it on its agenda. As a result, the Hungarian Parliament passed a resolution on drafting the bill in May 2009.

The process was supported by the Big Ask complex public campaign of FoE Hungary between 2008 and 2010, with 525

supporting green, social and other NGOs, more than 15,000 supporting signatures, 30 information days across cities in Hungary, media campaigns reaching three million people, and 25 expert forums and conferences with stakeholders. The bill was debated by the Parliament in February 2010. Due to technical reasons (end of mandates of MPs and the Parliament running out of time, two amendment proposals), however, the bill failed to become law. Behind the lack of political support, the Act was in fact blocked by fossil lobby groups. In 2010-2012 the Big Ask campaign is focusing on the economic and social benefits of the proposed elements of the Act, namely the energy quota system, in order to dispel economic concerns about the Act. Further information on the campaign can be read (mainly in Hungarian) on www.klimatorveny.hu.

The purpose of this publication is to present the holistic approach for tackling the threefold economic-social-environmental problem and to provide adequate information about the centrepiece of this holistic approach: the proposed energy quota system. Thus it aims to support policy decisions serving the long-term interest of the whole society.

Our booklet does not include the text of the Act itself, as the government is likely to eventually submit a new draft bill to the Parliament. We strongly believe that the new draft cannot be 'softer'; in contrary it should be more detailed than the previous version. Bearing in mind the objectives above, we have formulated recommendations and present them in this booklet proposing that they become part of a future Climate Change Act.

The text below is based on individual, as well as common work of many people. Besides them we are grateful to the European Climate Foundation, which provided invaluable financial and intellectual support to the work.

The holistic approach starts from an energy quota scheme and attempts to answer the economic, social and environmental challenges through that. Choosing energy access as the focal point is not a co-incidence; most of our problems are rooted in energy use. The proposed energy quota scheme therefore provides a comprehensive set of tools for tackling various problems of the same roots. It mitigates inter alia the drivers leading to climate change; gradually decreases the total non-renewable – fossil and nuclear – energy use of Hungary; sets targets for reducing national GHG emissions for 2050 and interim periods; promotes energy reduction, energy efficiency and renewable energy resources through providing incentives and interest free loans for citizens, communities and economy actors; offers solution to balance social inequalities; as well as enhances environmental consciousness. The main features of the scheme are summarized below.

The four pillars of the energy quota system

Pillar 1: Non-renewable energy quota [1]

- The total national non-renewable energy use must be reduced year-by-year with a defined amount, which puts a limit on the total non-renewable energy use of the whole society.
- For the public an energy quota system is introduced with the quotas distributed evenly (equal quotas/person), = allowance/entitlement/right.
- Consumer groups handle quotas on electronic accounts, which show the balance between the available energy allowances and real consumption.
- Those who save energy, can sell their remaining allowances to those who need more quotas, through an independent quota handling institution.
- Energy savers receive their savings in quota-money (currency), while over-consumers can buy their energy allowances for HUF (Hungarian national currency), which gives the financial coverage of the quota-money.
- Quota-money can be spent on the green market (Pillar 2) for environmentally friendly products or services.
- Quota-money is interest free money.

Pillar 2: Market for environmentally friendly products and services (green market)

- This market is an open market based on environmental and ethical regulations, and is available for each consumer.
- Only those products/services can enter the market that are qualified and labelled by the mandated independent authority.
- The currency of the market is quota-money.

[1] *The name is a working title, it can be called also as 'fossil quota', bearing in mind that the non-renewable energy quota system includes the following energy sources: for the public: gas/oil/ carbon/non-renewable electricity heating, non-heating non-renewable electricity use, car fuel; while for companies: primary and secondary non-renewable energy use e.g. carbon, oil, natural gas, electricity.*

Pillar 3: Revolving fund

- The revolving fund provides interest free, 100% support in quota currency for individuals as well as for companies willing to invest in energy saving, -efficiency or renewable energy products or services.
- The fund can stimulate the green market both on the manufacturer/farmer and the consumer sides.
- The entire amount of the provided fund has to be paid back in quotas, but the timing of repayment is adjusted to the payback time of the green investment realised (which decreases non-renewable quota use).

Pillar 4: Advisory service

- The advisory service provides information for the public on lifestyle change, personal quota planning and trading in order to help reasonable use of the quotas.
- It increases employment with high added value.

The cap effect

The non-renewable energy quota pillar can be summarized as an input-side cap on non-renewable energy use. The cap aims to distribute non-renewable energy allowances in a reducing manner year-by-year for each consumer group of the society. Public quota consists of gas/oil/ carbon/non-renewable electricity heating, non-heating non-renewable electricity use, car fuel; while quota allowances for companies include primary and secondary non-renewable energy use e.g. carbon, oil, natural gas, electricity.

Scope

The proposal is applicable at regional, national and international levels. Some elements of the system already exist in Hungary (local currencies for local products/ services like blue francs in Sopron) as well as in other countries. The British Tradable Energy Quotas (TEQ) idea has similarities to the non-renewable energy quota pillar.

Indicators

The national quota is an indicator itself, measuring whether the country could stay within the total allocated quota cap or not. The year–by-year reduction rate can be country-specific (e.g. 1% is proposed in Hungary).

	Environmental justice	**Social justice**	**Economic justice**
Strengths	- Not just GHG, but all environmental burdens are tackled on the input side. - Environmental awareness is inherently promoted in the system. Those people/companies who use less energy, benefit twice (pay less energy price and their remaining quota can be sold), those, who over-consume, are pushed towards saving energy and changing lifestyle. - It transforms production and consumption patterns towards sustainability.	- Quota allows equal access to energy to everyone and the advisory service provides access to related information to everyone. - The poor, who use less quota, can increase their standard of living and initiate green investments by selling their quota on the green market. - Revolving fund provides 100% support so that also marginalized people can apply for it. - Employment would be increased in the green, building, advocacy, etc. sectors.	- Green market and revolving fund enhances demand for green (low material- and energy intensive) products and services, - The system boosts research and development especially in energy efficiency and renewable energies, shifts the economy to be less non-renewable energy dependent, low material and energy intensive, while it remains in line with EU regulations. - The revolving fund can be re-used many times as applicants pay it back from their energy savings within the payback time. - New and local green jobs are generated due to the green market and investments from the revolving fund. - the quota system can be introduced as supplementary currency in other EU countries as well.
Weaknesses	- It crosses the interests of non-renewable lobby groups.	-Such a complex system requires time and much information to be accepted, understood, and thus to be introduced.	- Its technical background is complex. - Transaction costs related to quota trading can be significant.

8 *Negative effects and risks*

As the input-side quota system is designed to minimize shifting environmental burdens (from natural resource use to pollution or land use), leakages are highly unlikely. There is an average risk of finding smaller loopholes in the system; however, they can occur in any other kind of systems. If necessary, those loopholes can be addressed through specific regulations as well as proper monitoring and reporting.

Feasibility

- technical feasibility

The challenge lies in the complexity of the system, but quota revenues and transaction costs would be able to overcome this issue and run the system.

- political feasibility

In Hungary a significant number of politicians, experts and NGOs support the climate law (Big Ask) campaign, which also includes the energy quota system. The first pillar serving the interest of the public sector has made its way to be considered in the Hungarian Energy Strategy. Since it is a radical economic tool, strong non-renewable lobby may discourage politicians though and prevent it from adoption, as it happened with the previous Hungarian climate law proposal.

- legal feasibility

The proposal is checked by legal experts. It is in line with EU regulations and does not contradict the free trade/free market criteria.

Albert Kozak : Perspectives

Climate Change Act for a sustainable society

Climate protection and sustainable society are obviously linked to each other, as society can only flourish if the natural environment provides the right conditions for it. Inter alia a stable, predictable environment is essential, where resources required for our well-being are capable for regeneration. In other words, the climate determines ecological conditions for the existence of biodiversity and they jointly determine the conditions for the existence of society. In addition, sustainable societies are needed to ensure that human beings do not cause environmental changes that they find difficult to adapt to. Changes brought about by forces outside human control pose more than enough challenges.

Requirements for a Climate Change Act

1. Is based on systemic approach

Laws have become compartmentalised dealing with partial and sectoral problems, thus harmonizing them has become impossible beyond a certain point. In addition, it often happens that in order to solve one problem, the legislation shifts the problem to another area. The example of biofuels proves this point well. In this case the pressure on climate was aimed to be reduced through decreasing greenhouse gas emissions from fossil fuels in transport, but pressure was largely shifted to land use. As more and more scientific results suggest, even the climate impacts of direct and indirect land use changes caused by biofuels exceed the gains from decreased fossil fuel consumption. Let alone to speak about other negative impacts, such as on biodiversity.

Therefore a holistic act is needed, a system of rules, which will not lead to shifting negative effects to other areas. The climate regulation should thus contribute to solving social, economic, and, furthermore, environmental problems at the same time.

2. Has a comprehensive set of instruments

The need for a comprehensive set of regulatory instruments was already raised in the National Strategy of Sustainable Development as well as in the National Climate Strategy of Hungary. Nevertheless, true reform has always been postponed. Either it has not been discussed and developed, or its ambition has been broken down referring to that Hungary would not be able to introduce such a system alone in the global scene. At the same time, it has become clear that the market cannot solve the issues of future in its current functioning. Responses to the depletion of fossil fuels or climate change need to be formulated at least ten or even twenty years in advance.

However, these efforts are still being criticized for not being productive and not serving economic growth. If we wait for the market to solve our problems, then we suddenly find ourselves in the middle of a crisis, when there is no chance to turn back anymore.

3. *Fulfils several tasks at the same time*

- The regulatory system must be preventive and responsive. The measures should help adapting to future changes and restore the use of natural resources at sustainable levels. To this end, the regulatory instruments should take into account the carrying capacity of the environment and the necessary conditions for the renewal of resources.
- In order to foster sustainable use of resources, it should restructure the production and consumption patterns towards using less input and generating less waste and pollution. For transforming the economy, it should ensure the flow of knowledge and information, and the access to them.
- It should optimize the proportion of human labour and machinery in order to increase employment and to provide working opportunities for the greatest number of people.
- It should provide favourable loans for innovation,and changing production and consumption, and it should determine a payback period that is appropriate for realising investments that are socially and environmentally beneficial, even if the payback time is long.
- It should contribute to the production of domestically manufactured, local goods with added value and less environmental burden from transport and thus stimulate domestic economy.
- It should introduce incentives to facilitate the substitution of environmentally harmful goods and services with environmentally friendly ones, and thus encourage innovation.
- It should provide signals to environmentally correct, conscious consumer and producer behaviour through accurate economic evaluation of natural resources.
- It should contribute to the elimination of mechanisms causing social injustice and inequality in the distribution of goods and services.
- It should encourage efficient use and proper management of resources, and create a framework for the rational use of renewable resources, while ensuring that the substitution will not cause the dislocation of negative environmental impacts. It should contribute to mitigating and eliminating national energy dependency.
- It should ensure meeting international commitments in the fields of emissions reduction, increasing energy efficiency and substitution of non-renewable energy resources with alternative energy sources.

Reducing emissions is inevitable

In order to understand how the Act will meet the various economic, social and environmental aims, first it needs to be understood how it can contribute to the reduction of the greenhouse gases.

In order to avoid dangerous climate change, (i.e. more than 2°C increase) with a probability of at least 75%, the amount of global greenhouse gas emissions must not exceed 1500 Gt of carbon dioxide equivalent for the period 2000 to 2050. In particular, the carbon dioxide content shall not exceed the 1000 Gt. About one third of this quantity has already been issued by mankind between 2000 and 2009.

Considering these data of the last report of the Intergovernmental Panel on Climate Change, there is an urgent need to ensure that global emissions are not increased further in the next 10-15 years, but on the contrary they are significantly reduced. Due to their greater historical responsibility for emissions so far, developed states should contribute to global efforts by a 25-40% reduction until 2020 compared to 1990 levels.

According to a consensus on 2050 emission reduction targets, which takes into account the projected population by that time, the per capita emissions could not exceed two tonnes per year. Both developed or underdeveloped countries should reach this level by 2050, including Hungary as well. The Hungarian per capita greenhouse gas (GHG) emissions, expressed in carbon dioxide equivalent, amounted to precisely ten tonnes in 1990, while to approximately eight tonnes in 2005. Within the bounds of the two tonnes/year per capita target, by 2050 our country should realize reductions of 75% or 80% compared to 2005 or 1990 base years respectively. In the context of a global, 1500 Gt carbon dioxide equivalent GHG emission opportunity, Hungary's 2000 to 2050 GHG budget is 2.463 million tonnes of CO2 equivalent, calculating with population base rates for 2000. Namely, this is the amount Hungary could emit in the 2000 to 2050 period. A quarter of this has already been emitted between 2000 and 2007. Taking 2007 emission levels as the benchmark, the remaining quantity would be enough for us until 2032.

It is clearly visible that if we keep consuming our available carbon dioxide quota at the pace indicated above, we will be abruptly confronted with strict international commitments that we will not be able to meet. Not to mention that we would be wasting the relative advantage that Hungary has acquired during the economic transition in the wake of the regime change in 1989, when the amount of GHG emissions suddenly decreased due to economic reasons. Continuing the current pattern of national GHG emission, our country shall have to even buy emission rights from underdeveloped countries with low emissions.

Selling Hungarian emission savings achieved during the economic transition or providing excessive emission rights to economic players in the emissions trading system (over-allocation) can provide economic advantages in the short term, but will make meeting long-term reduction goals more difficult. In order to reach the 2050 target, the required rate of the interim reduction by 2020 can be achieved if we distribute the needed reduction, possibly in a scheduled and relatively balanced manner over each year.

Potentials for emission reduction in Hungary

The draft Climate Change Act formulated a target of 40% emission reduction by 2020 compared to the 1990 base. Some interested parties judged the target too high and unnecessary, though lower targets would not mean more than a programme of idleness. (According to the official 2009 inventory data published the following year, Hungary has already achieved 31,1% reduction.)

In Hungary due to the economic transition certain kinds of environmental impacts, including GHG emissions decreased substantially. In 2009 this was followed by a second wave of significant reduction due to the economic downturn. While the Kyoto Protocol counted an average amount of 114 million tonnes for each year between 1985 and 1987, the Hungarian 1990 base was only 97 million tonnes (the calculated values here and below all exclude carbon sinks)[2]. Emissions reached 79,5 million tonnes in 2005 and 66,7 million tonnes in 2009. Compared to 1990 base, the decrease by 2009 was 31,1%. This means that the real reduction target for Hungary would be only 8,9% till 2020 compared to 2009 levels (on 1990 base, even excluding carbon sinks). Therefore, the 60 million tonnes emissions scheduled for the period until 2020, namely the 40 % reduction target can easily be met.

This also means that the 20% reduction compared to 1990 levels required by the EU currently offers even a growth opportunity of 11,1%. So, why this ‘gift’ should be wasted when the setting of further international and/or EU reduction targets can be expected in the future? This means that the real target of reduction is minimal. Therefore, the real question is in fact whether such a low reduction ambition is capable of changing society’s values, and initiating deep going structural changes in the system of production and consumption. Even if we regard the emission levels shaped by the current recession low, and believe that the end of the recession will bring back the previous production and consumption patterns, the Act only proposes an actual reduction obligation of around 10% by 2020.

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[2] *All Hungarian emissions data are calculated from National Inventory Report Hungary 1985-2009 (NIR): http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/5888.php*

The draft Act did not specify the respective share of each ETS (European Emissions Trading Scheme) sector and non-ETS sector in meeting the 10% reduction target.[3] But it is important to point out that extra commitments place extra burdens not only on businesses within the EU ETS system, which have to meet already reduction obligations of the EU climate-energy package.

Domestic emission reduction has much more potential considering different types of consumption, including primarily transportation, households and institutions. In 2007, 40,6% of the total energy use in Hungary was connected to households, 21,3% to the communal sector, and 27,5% to traffic and transport. More than half of the energy use in households is for heating and a further third is for vehicle use. At the same time, households are responsible for around one third of the emissions. These data show that our reduction potential thus primarily resides in the non-ETS sector. The potential savings can be marketed on the "carbon market" according to the EU's "energy-climate package".

It should be pointed out, however, that the EU has changed its regulation for the ETS sector. From 2013 on, allocations will be determined at Community level, and 2005 will be designated as the base year. Compared to this base year, the Union specified on one hand a 21% reduction target for the ETS by 2020, which means 25,7 million tonnes of emissions reduction for the domestic ETS market. On the other hand, for the non-ETS sectors, the expected degree of reduction has been adjusted to the level of development of each Member State, which means that Hungary has been given the opportunity to issue a 10% emission increase in its non-ETS sectors.

It is now obvious that the reduction potential is significantly greater in the non-ETS than in the ETS sectors. On one hand domestic regulation should thus ensure that most of the reductions are implemented by that sector, for which emission reductions are not only possible but in fact desirable. On the other hand regulations (e.g. of the Climate Change Act) must ensure that no additional burden are imposed on the ETS sector, since they would be unnecessary due to the anyway strict expectations of EU's "energy-climate package".

The difference between Hungary and other EU Member States in potential burden-sharing is reflected by the fact that in 2005 the ETS sector was responsible for 32% of domestic emissions in Hungary; the same figure was 41% for the whole EU. Consequently, the non-ETS sector was responsible for 68% in Hungary and 59% in the EU. This clearly shows that primarily the non-ETS sector should contribute to achieving reduction targets what is also in line with the purpose of the Act.

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[3] ETS sectors: energy, industry, see further on http://ec.europa.eu/clima/policies/ets/index_en.htm, Non-ETS sectors: buildings, agriculture, transport and waste management, see further on http://ec.europa.eu/clima/policies/effort/index_en.htm

Reducing consumption and climate justice in Hungary

With respect to GHG, the global annual per capita carbon dioxide equivalent amounted to 5,6 tonnes in average. This is distributed in 3,4 tonnes in Asia, 10,5 tonnes in Europe, 24,1 tonnes in North America. In 2005, Hungary was the 51st on the global per capita GHG emission list out of 210 countries with its 8.3 tonnes, while China was at 72nd place with 5,5 tonnes per capita emissions. Qatar was at the top of the list with 55,5 tonnes, while the US ranked 7th with 23,5 tonnes per capita.

In terms of energy consumption the world average was 1,82 TOE (tonnes of oil equivalent) per capita in 2007. The figure for Hungary was 2,66, 4,64 for the OECD countries in average, and 1,48 for China. An average Hungarian citizen consumes about one and a half of the average global per capita energy consumption. This figure is lower in comparison with the ratio of an Americans (4,1 times more than the global average consumption) and for an average EU citizen (2,2 times). These figures for South-Asia and Africa are 0,21 and 0,11 respectively.

These data clearly show that per capita energy use and emissions in Hungary already exceed the average global per capita figures. However, these data are misleading as far as they do not include external environmental burdens caused by the Hungarian society. Although such calculations are not yet available, we can state that every country that obtains its resources largely from external sources or its economy depends on imported resources puts pressure on the global environment. Hungary is causing environmental pressures outside its borders due to two reasons. One is its high dependence on non-renewable, especially fossil resources; the other is the high import content of the machine industry in domestic exports.

All in all, reducing energy consumption and GHG emissions in Hungary is a moral obligation of achieving climate justice.

The need for capping natural resource use

Although focusing on reducing GHG emissions, current climate policy does not provide specific guidance on how to reduce emissions in practice and there is no political interest for providing that either. This approach has already resulted in many environmental problems. For instance the attempt to substitute non-renewable fuels by agro-fuels has contributed to rising food prices, while it has also exerted pressure on developing countries through converting their natural ecosystems to fields for agrofuel production.

The Act therefore aims to reach the wide acceptance of the fact that environmental pressures are always related to the use of natural resources. Practically, if we reduce the overall use of natural resources, we will definitely prevent large amount of emissions putting pressure on the environment. Of course the proposal aiming to limit non-renewable energy use automatically causes reductions in GHG emissions.

Hungary depends on imports in 86% of crude oil, 82% of natural gas, and 40% of coal use. At the same time, our domestic oil and natural gas resources would be sufficient to cover our current consumption levels for three years and for nine years respectively. Besides natural gas amounts to 44,3% and oil amounts to 24,2% of the domestic primary energy consumption, reaching almost 70% together. Such a level of demand may put the country in a position of absolute dependency, and investing billions in alternative gas pipelines will not help that either.

Deliberate reduction in non-renewable energy use is essential also due to the fact that the economically viable alternative sources, such as renewables are not up to the scale of satisfying all the current energy demand. If we mean to substitute non-renewable fuels according to our current technical knowledge, one GW (gigawatt), i.e. one thousand megawatts of renewable capacity should be transmitted daily in order to substitute half of the non-renewable energy resources by 2050.

It is worth noting that the smaller a country's total energy consumption, the lower its demand for substitution as well. During the economic downturn of 2009, the domestic primary energy consumption decreased by 6%. As a result, the dependence on hydrocarbons decreased to 75%, which is admittedly still very high, but is less than the rate of previous years.

Reducing energy dependence is urgent also from competitiveness perspective, where we must distinguish the efficiency of individual economic actors from the country itself. It has been already proven that the current economic structure lacks even the potential of real competitiveness thus systemic change towards a low-energy, more economical and efficient structure cannot be delayed. Competitiveness of a country can be improved if structural change in its production and consumption resulting in less energy use happens as quickly as possible, due to which also the carbon dependence of the society is rapidly reduced. Acting fast and getting prepared for the anticipated trends shall mean a competitive advantage for the country. There is no doubt that those economic actors, who rigidly defend their current interests and do not realize potential business opportunity lying in the upcoming necessary transition, will lose their competitive advantage. Considering these the Act helps to establish a regulatory system, which will compensate for the temporary competitive disadvantage resulting from the transition.

To sum it up, reducing non-renewable energy use is necessary for Hungary, as our external energy dependency is unsustainable, and the expected energy price rise due to peak oil will jeopardize livelihoods at all societal levels. The fact that this goal meets international commitments related to GHG emissions reduction is a lucky

coincidence. The overall goal of the Climate Protection Act is thus nothing else than to respond to a problem sooner than it peaks.

Consequences of implementing such regulation with holistic instruments

Regulations of the Act are based on putting constraints for opportunities of using non-renewable energy sources. From environmental point of view, this ensures that while GHG emission reduction targets are met, the full range of environmental pressures is also eliminated. Besides, the decreasing non-renewable resource use can enforce to reshape the current energy production and consumption patterns towards using substantially less materials and energy. While reducing natural resource input and flow in the system, information flow will need to increase in the economy and society. The information is intertwined with the necessity of sustainable natural resource use, which also determines the direction of innovation. Strong innovation base will result in sound knowledge base on sustainable resource use. This knowledge base will boost technical revolution that is necessary to overcome the economic recession. Changing the current pattern of access to and distribution of resources will contribute to social justice, and through personal interest, to the improvement of environmental consciousness. Transition difficulties and potential competitive disadvantages shall be addressed by a system of incentives. Favourable loans would be available to ensure that investments in environmentally friendly production and consumption are realized.

Input and output side regulations shall reinforce each other. Regulation on the input side such as economic regulatory instruments will reduce emissions at the output side, while legal output side regulation will eliminate toxic emissions, which cannot be tackled through other means.

Proposed set of instruments: the Energy Quota System

The idea of using quotas as economic regulatory instruments has precedent in international practice in fostering sustainable management of natural resources. Examples are national and international regulations put in place to determine and allow the allocation of, the trade in, as well as the transfer of fishing quotas. Moreover, international and interstate co-operation agreements on the use of water reserves can go back far in time. Furthermore bilateral and multilateral agreements regulate, and sometimes limit the exploitation of resources in no man's land. Though not implemented in practice, a number of schemes designed to limit non-renewable energy can also provide food for thought.

The idea of a carbon currency was formulated already in the 1930s in the context of American Technocracy. It was designed by King Hubbert, also known as the author of the Peak Oil Theory (1948-56). Based on the law of entropy, he argued that a balance must be found between man and nature, and consequently proposed that energy credit allotted to people should be limited to the amount maintaining this balance.

The reduction of GHG emissions was first linked to the reduction of non-renewable resource use by David Fleming in 1996. He drafted a trading system based on energy units, in which he proposed to regularly decrease the limits of energy use similar to the currently applied emissions trading schemes. The idea was that each adult would receive an energy quota, while all other energy consumers could get usage rights at weekly auctions. The price of individual products would be determined according to the amount of energy consumed during their lifecycle. Individuals using less energy would accumulate quotas, which would mean that people with limited means as well as environmentally conscious consumers would benefit financially, while the emerging price competition would encourage the creation of products with less energy demand. See this UK initiative at http://www.teqs.net/

The National Society of Conservationists has been urging for the creation of a comprehensive regulatory system for nearly a decade. The development of an energy quota system has taken into account the international environment, the country's special dependence, the new situation created by the economic recession and the credit crisis, as well as the social needs resulting from growing social injustice.

The proposed regulatory system is based on four pillars.

Pillar 1: The non-renewable Energy Quota

The non-renewable energy quota means a yearly usable consumption entitlement/ allowance/right for the entire society and for each consumer. Its objective is to foster the scheduled reduction of natural resource use and thus environmental emissions, including GHG emissions, as well as to alleviate the country's external energy dependency through energy conservation, energy efficiency and substitution of non-renewable energy with renewable energy resources.

Every year, the use of non-renewable energy resources shall be reduced by a rate defined in comparison to the use of the previous year. While the provisional emission reduction target may not limit the non-renewable energy demand of society, the Act imposes sanctions on over-consumers in the form of progressive consumption charges. The Parliament defines a provisional energy reduction target for the next ten years in accordance with domestic and international expectations and opportunities. The rate of reduction is stipulated by government decree, which should be promulgated 30 days before the start of the financial year, whereas the final regulatory rate about the reduction needs to be published by 15th January.

The decree includes the total amount of non-renewable energy quota in PJ (petajoules) that can be used in that financial year. All available user rights shall be distributed among different consumers of society as determined in the decree. In order to achieve this aim, the government defines consumer groups. Except for the general population, each consumer group will distribute consumer rights among its consumer units based on their own decision making principles until 31st January each year. However, consumer rights for the population shall be determined differently. All adults over 18 shall be granted equal consumer rights. In the case of complete families, the father and the mother shall be granted the consumption entitlements of children under 18 in the household. Otherwise, the guardian shall be granted the entitlements of the children. The entitlement granted in the case of the first child shall weigh 100%, the second 75%, while the entitlement granted in the case of the third child and all further children shall weigh 50% of the total entitlement. In the case of people constrained in their decision-making abilities, it is the appointed guardian who shall bear the consumption entitlement, but the quota can only be used in harmony with the needs of the entitled person. The yearly consumption entitlement shall be defined in mega joules (MJ), and it shall cover the sum of the consumption of households in terms of primary heating energy (gas, coal), electricity from non-renewable sources, as well as fuel used for individual transportation.

A quota managing authority will mark the consumption entitlements on an individual electronic energy allocation card with a personalised PIN code by 31st January of the respected year. The energy allocation card is a running account, which indicates the available amount of non-renewable energy for the consumer for yearly use. Furthermore, the energy providers register the consumed non-renewable energy quantity on the card at the time of accounting the service in the books. However, this does not affect the payment obligations between the contractual partners. The card shall allow the individual to check the account balance at any time. Besides, the card shall be designed in a way that it registers consumption at fuelling stations and settles the account at the same time. Specific regulation shall govern opportunities and limitations for buying fuel abroad, as well as energy and fuel allocations for foreign individuals.

The Act shall establish a quota managing organization for the allocation and monitoring of energy consumption entitlements. This organization keeps parallel accounts for both customers and providers. Thus all computer terminals at non-renewable energy providers shall be linked to the quota manager organization and the personal consumption will be also registered there. Parallel accounting is designed to insure data security, to allow the replacement of lost cards and the day-to-day traceability of all the accounts. The quota manager organization shall observe confidentiality regulations related to personal data management, and shall not divulge individual consumption data.

The quota manager and the electronic account holder shall prepare a balance sheet about the energy used at the end of the year, the level of which will be identical with

the account balance when all consumption have been booked.

In principle, consumer rights distributed at the beginning of the year shall be identical to the services used during that year. If a deficit occurs in the accounts settled, the consumer shall purchase its missing consumer rights. The prevention of unauthorized consumption is ensured by the fact that the balance of the account is indicated continuously. Furthermore, unauthorized consumption can also be blocked by the energy supplier refusing the service. Should unused consumer entitlements remain when settling the accounts, the quota manager shall write credit to the owner's account in the form of quota currency. In this way, the quota manager trades the consumption entitlements between over-consumers and under-consumers. The trade in consumption rights shall be conducted among all consumer groups, e.g. not limited to the population. Over-consumers are obliged to purchase quotas for their extra consumer rights in the national currency, which shall serve as collateral for the quota currency, managed by the quota manager based on specific legislation.

The quota shall be pegged to the prevailing energy prices to ensure that the fluctuations of the latter shall not put the actors on the quota market at disadvantage. Still, the price of the quota shall be determined by the quota manager, according to whether the whole community of consumers has met the nationally determined non-renewable energy consumption reduction target.

If the total non-renewable energy consumption exceeds the national target originally defined, the over-consumers consuming above the national quota shall pay a premium over the current quota price. The premium shall be imposed only for the excess consumption above the national target and it shall be established progressively: the greater the degree of excess, the higher the premium. This means that over-consumers shall pay a premium proportionate to the excess consumption, with higher excesses implying progressively greater costs. This ensures the fair sharing of burden within the society, where those need to pay proportionately more, who most contributed to not being able to meet the national reductions. The premium rate shall be set flexibly, taking into account objective circumstances. This progressive pricing shall ensure that excessive over-consumers change their consumption habits and thus contribute to meeting national targets in the next year.

The operating costs of the whole system, including costs of the quota manager shall be covered by 0,5% of the amount of each purchase transaction.

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. The principle determining these ethical rules is that economic activities on the market serve common good through providing products and services with less negative externalities to the society. The market is also regulated by government decree stipulating market conditions based on sustainability aspects.

Environmental requirements include that less material and energy are consumed and thus less waste is produced, moreover toxicity is excluded over the entire lifetime of the concerned goods and services. Besides, environmental aspects entail preferring products manufactured with the use of renewable resources resulting in a minimum amount of non-toxic waste, which the system can eliminate. Shipping distance and the method of shipping are also considered, which therefore shift the preference towards local production, consumption and sales. Among social aspects, priority shall be given to a high rate of labour force used, especially in cases where people with disadvantages are involved in the activities.

A code of ethics will be developed to foster proper business conduct. Compliance with these conditions shall be verified by a product certification council, issuing a trade mark for products and services on the market. Specific regulation will establish this council and lay down the product certification and branding rules.

The market of environmental goods and services is open to any market actor who fulfils the conditions imposed on the market and acquires the trade mark.

The currency of the market is the quota currency. The right to purchase is based on having earned quota currency entitlements by saving non-renewable energy or having received quota currency in exchange for work, goods or services on the certified market. The quota currency is substitute money. Its coverage is secured in national currency by revenues from selling quota. The quota currency produces no interest.

The quota currency exists only in the form of electronic signs. Payment in quota currency happens by means of cards, owned by all consumers. In the transaction the customer pays via electronic card. The payment appears in the account registration system of the quota manager who books it on the electronic account of the service provider.

The quota currency can be converted to national currency, its price is pegged to the respective value of non-renewable energy. A 20% commission shall be paid at the exchange, which will be used by the quota manager.

The system also allows paying taxes and contributions in quota currency.

Pillar 3: The Revolving fund

The Act establishes a revolving fund. The fund is designed to provide loans to market actors offering environmentally friendly products and services, and thus serves the spread of production and consumption patterns with less material and energy use. Besides, the fund stimulates the market for environmental goods and services through promoting investments for the introduction of alternative energy sources and for energy efficiency on the market. Furthermore, it provides benefit for socially disadvantaged people who live energy efficient lifestyle with low energy demand.

The fund provides interest free loans for anyone, whose investments target less energy and material input and whose goods and services are in line with the rules of the market for environmental goods and services. The fund may provide loans up to the total investment costs depending on how much the entire project promotes the common good.

The basic accounting instrument of the fund is the quota currency. The repayment rate of the financial support received from the fund may follow the rate of income generation from the investment (e.g. through selling certified goods and services on the green market).

If the revolving fund finances an investment in relation to energy saving, energy efficiency or switching to renewable energy sources, the allocated annual non-renewable energy quota for the natural or legal person is not decreasing annually as usual, but it is fixed to the level of the baseline year – when the investment related activity started – until the refund is made.

Operational costs of the fund are covered by a transaction charge amounting to 0,5% of credit transactions, which is paid back by the debtors from their savings as part of the loan.

The state ensures the assets of the fund from public funds set aside for the purposes of the energy sector, but the state also contributes to carbon-trade revenues as well. The funds provided by the state secure the collateral for the quota currency in national currency. However, the state may capitalize on that collateral, p.eg. by depositing it in a central bank under a certain interest rate.

Pillar 4: Advisory service

To facilitate the rational decisions of citizens and market actors in general, the Act establishes a advisory service. The advisory service operates on a not-for-profit basis.

The financial basis for the functioning of the service is based on the payments of the clients using the revolving fund, who pay 1,5% of the total amount of their credit over and beyond the 0,5% transaction fee charged.

The advisory service provides planning, lifestyle, social and environmental consultancy to consumers. Specific regulation governs the knowledge and qualifications of the staff, the establishment and operations of the service.

Energy saving, efficiency and substitution

Continuous reduction of non-renewable energy can be achieved through energy saving, increasing efficiency and substitution to renewable energy sources – and that is also the preferred sequence for using those tools. Saving in this case means saving over and beyond technical and technological efficiency solutions – or to put it simple: it is the energy saved by not using it at all. These occur when someone uses less energy (e.g. reduces car use) either due to conviction or enforced by the regulatory system. Wasting energy is not an inherent characteristic of people, but it is embedded in their habits when they buy goods, or when they use services. For this reason, it is important to have a regulatory instrument that clearly indicates the right set and weight of values, and which ensures that the proper consumer behaviour is rewarded.

When the full potential of energy saving has been used, further opportunity is given by energy efficiency. The potential of efficiency is huge. Efficiency needs to be improved over the entire lifespan of energy resources, beginning with the exploitation of primary energy resources through burning or transforming, transporting, as well as the end use. The rate of efficiency can be improved by developing more efficient tools for the whole lifespan or by enhancing the grid itself, including right setup, control and distribution of grid elements, as well as by creating smart grids.

While a majority of the Hungarian society lives in energy poverty (meaning that they spend more than 10% of their income on energy bills), energy wasting contributes significantly to their expenses. In some cases, only the knowledge required for energy saving is missing; whereas in many cases also the capital for energy saving investments. For this reason, it is crucially important to establish a revolving fund (Pillar 3) that enables also low income people with energy wasting households to invest in energy saving and prevent lock-in effect.

Passive house

Potentials for substitution

Improving efficiency shall be followed by the substitution of non-renewable energy resource with renewables, but the knowledge for fully replacing non-renewable energy resources is still insufficient. Due to the availability of cheap non-renewable energy in the market, enhancing this knowledge has not been forced and due to the lack of high demand, the techniques of full substitution have not been developed either. However, as mentioned above, lower energy use will create better conditions for substitution. On the other hand using renewable, but depletable energy sources can be sustainable only with applying them with great precaution and respecting their regeneration time and needs. Therefore we do not recommend including industrial biomass utilization in the range of preferred energy resources.

The presently known substitution options are definitely inseparable from fossil energy use, since raw materials, their transportation, and most of energy generation related activities require their use. This situation will persist until sufficient amount of alternative energy is available, which is a strange paradox. When the cost of non-renewable energy is low, alternative resources are not competitive and thus not exploited. When non-renewable energy becomes expensive, alternative resources become competitive, but we will not be able to finance their exploitation.

In its renewable energy action plan, Hungary agreed upon a 14% share of renewables by 2020. Although the theoretical potential of renewable energy sources would provide ample opportunity for substitution, the technical potential is low. The Act should therefore make efforts to increase technical potential, and to ensure resources for innovation. Until this is achieved, energy reduction and efficiency potentials should be exploited in order to meet the reduction targets.

Though the search for and deployment of substituting resources and making them part of the system is inevitable, it would not be up to the law to define which resources should be preferred. The law should be neutral and independent in this respect. A set of sustainability criteria should determine what kinds of resources are reasonable to use. The certification system for environmentally friendly products and services referred to in our proposal could provide the basis of these criteria, while the revolving fund would support technologies in line with them.

It is important to draw attention to the fact that the established National Renewable Energy Action Plan failed to set up sustainability criteria. It did not even take into account the different renewable energy source potential calculations in formulating priorities. Furthermore, it preceded the National Energy Strategy, which in turn preceded the climate protection Act; what means that the “construction” of policies is carried out in the wrong order.

Sustainable land use and climate change adaptation

The proposal could rely on already existing national initiatives, such as the Hungarian VAHAVA ('Change-Impact-Response') programme that carefully analyzed the tasks required for climate change adaptation. It is important to keep, and possibly to even strengthen these points in the new Act proposal. In addition, the law must be holistic and forward-looking, and thus avoid conflict of interest between adaptation, and energy use / emissions reduction targets, since adaptation may require the consumption of materials and energy. The fluvial and inland flood events of 2010 fundamentally drew attention to this, and clearly demonstrated the need for preventive measures. The difficulty is that one does not know what to prepare for.

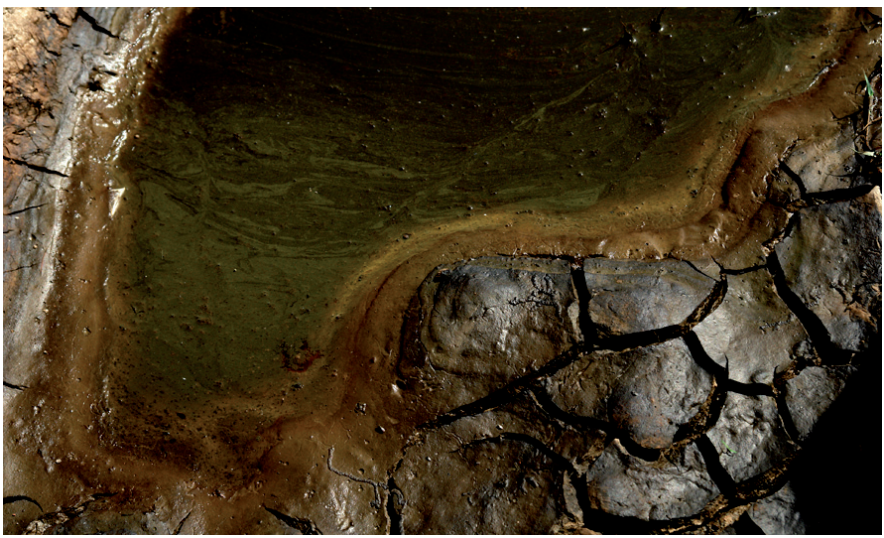
We also need to harmonize the conditions of climate change adaptation of the society with the conditions of the natural world. One of the key areas of the previous Act proposal was thus to increase the extent of natural vegetation cover and improving its ecological conditions. Covering the surface with natural vegetation is essential for shaping the micro and mesoclimate, for preserving and expanding the soil as a natural resource, for securing air quality, for maintaining the water balance, and for preserving biodiversity. However, the country's natural capital index varies, according to different assessment methodologies, within the range of only 3,2 to 9,9. The value of this index indicates to what extent natural vegetation is found, according to which close to natural conditions is 19% of the country's territory, while 20,3% is forested and 38% can be described as agro-industrial-urban land.

Preparing for the expected rise in food prices should be part of the adaptation strategy as well. Reaching self-sufficiency (even if society is not self-sufficient today) and food sovereignty are the most fundamental interests of society due to the fact that the expected energy price rise, resource scarcity and the worldwide deteriorating agro-ecological conditions put sufficient and affordable food production at risk. Overall, a less environmentally harmful agriculture is needed, which is adopted to the landscape, generates income for more local people and is capable of ensuring safe food supplies in good quality for the country's whole population.

The Act, therefore, aims to defend remaining natural, as well as arable areas, for which systemic approach and coordination of actions are necessary. Similarly to reducing non-renewable energy resources, a set of instruments is needed also in this area; otherwise the expectations towards climate change adaptation measures will remain nothing more than desires.

- The moratorium on land use is the most important measure in the Act for conserving natural vegetation and protecting arable land. The moratorium would declare that no more land can be irreversibly converted, which are covered with natural vegetation and agricultural land.
- New investment demands can only be satisfied in a way that does not impact the overall vegetation surface cover, e.g. through brown-field investments or substitution. They can be only realised as greenfield investments when this is unavoidable; but even then an area with the same ecosystem service must be developed in exchange of the lost land. This requirement is in line with the EU's ongoing No Net Loss initiative.
- Each activity implying land use change needs to be licensed, while only those changes shall be allowed, where there is evidence that the new activity creates better ecosystem services than the previous activity.

Any public funds financing the destruction of ecosystems or land degradation should be phased out, since they act against public interest. Public funds should only be used to promote land use providing better ecosystem services, technology change implying greater labour demand, landscape reconstruction and rehabilitation. Therefore, public funds would contribute to decreasing the competitive disadvantages of organic farming, enhancing human labour, supporting local communities and lowering production volumes, while providing products with improved environmental quality.



Oil spilling at Hortobagy (Great Plains, Hungary)

The previous draft bill did not specify new regulation measures related to continuous surface coverage and the protection of green surfaces, although it did formulate some specific targets. (“The rehabilitation of land coverage shall be implemented step by step. By 2020, 10% of the territory of the country shall be brought to a state not directly impacted by humans”).
The impact assessment prepared by Öko Zrt. (Eco Ltd.) has pointed out that it is possible to apply the quota system formulated for non-renewable fuels to land use. Therefore, we propose the following:

The various modes of land use must be classified according to their ecosystem services. The greatest service is obviously provided by the most natural areas, where the quality of the land cover is the best and the duration of ecosystem services they provide is the longest. Based on these conditions, farmers working on different areas could benefit from their land differently. Those, who use the land with the best land use mode (with the highest natural condition), shall receive the greatest land use right, and those, who use the land with the worst land use mode (with the lowest natural condition), shall receive the lowest land use right. The quotas in this case thus represent land use entitlements, where the more sustainable a land is managed the more rights its user receives.

The starting point of the system is characterized by the actual situation, where the current entire set of ecosystem services of the land is assessed. The goal is to raise quality and quantity of ecosystem services up to the ideal level; according to this the overall sum of the land use entitlement needs to be continually decreased until it reaches the ideal level. In other words, the goal is to achieve sustainable land use management of the whole country.

Individual owners or users can engage in land use up to the quotas they receive. If they do no have the appropriate amount of quota for the activity they are engaged in, they will reduce the dimensions or intensity of land use, and shift towards more sustainable land-use that is in line with their capacities. The only way to continue with their previous activities is to acquire the needed entitlement. They can get these entitlement through quotas purchased from the manager of the use rights (i.e. the state). The total amount of entitlements to be allocated, however, increases year-by- year, making the transition towards sustainable land use sooner or later guaranteed. From the income, the manager supports the transition to sustainable land use management through promoting e.g. training on sustainable land management. In this system, on one hand, farmers already engaged in sustainable agriculture do not need to purchase any quotas. On the other hand, the continuous increase of the absolute level of the entitlements ensure the total transition. Such a system differs from a tax system or from the collection of an environmental impact fee, since it will become obsolete as soon as the sustainable land use is implemented and thus the whole system is terminated.

Identifying land use categories is also appropriate according to the types of land use similarly to the case of the energy quota system. It is important that all land use modes are registered in the system, including municipal, industrial, forestry and agricultural modes. Within different groups, different criteria can be formulated. The system can be handled very flexibly and can be implemented in several phases. The difference between the phases is the varying level of expectations. Accordingly, the regulation initially calls for moderate expectations that can be easily met, while later on the expectations become stricter.

Higher level of sustainable resource and land use and thus better quality of ecosystem services would increase the adaptation capacity of domestic ecosystems, it would automatically reduce emissions, and it would also give space for technological transition. Moreover, this system would put priority on quality rather than quantity; thus it would increase the role of human labour, and allow the adoption of activities resulting in higher added value. Moreover, it would also reduce national exposure to the external economic environment due to the increased self-sufficiency.

Awareness raising and education

Contrary to other initiatives, our proposal does not consider environmental awareness and targeted campaigns as the basis of climate protection. We expect that the proposed regulatory system automatically spreads the patterns of sustainable production and consumption, and puts the appropriate attitude and the required knowledge at the heart of everyday life. The prices and informative labels give clear signals to the consumers, while the personal electronic quota(-based) running balance reminds one of overspending. Therefore, being familiar with sustainable lifestyle and its ethics would become fundamental, which generates demand for it to appear at all levels of education.

In order to provide adequate information to consumers, following the whole path of the energy is necessary. In practice, this means that all economic actors pass on the goods produced with an energy footprint certificate, to which the next actor of the process will also attach its own certificate. At the end of the use chain, the energy content over the entire lifespan would be calculated and reflected in the form of an energy footprint format. Thus the proposed regulation places economic actors under the obligation to calculate, to certify and to indicate the energy footprint of their products and services.

Calculating the energy footprint is more logical than applying the carbon footprint, since the regulatory instrument is designed to reduce non-renewable energy use, due to which one should really focus on the non-renewable energy content built in certain goods and services. As the embedded energy is accumulated over the total lifespan of each product or service, everyone would get very precise information on the energy used for individual goods due to the data available. This would give sound basis for efficient and realistic lifecycle analyses, as well as for proper decisions.

The energy footprint calculation shows the environmental performance of a certain product or service, and thus it is a perfect tool for shaping behaviour. Businesses can carry out energy footprint calculations on a voluntary basis, but it would be worthwhile to foster their realization through incentives. Consequently, consumers could learn about their direct non-renewable energy consumption through their quota balance, while they could get information on their indirect use through the certificates of goods and services.

Questions & Answers

1. Is the free flow of goods and capital restricted by the quota system?

It is worth comparing this scheme to the emissions trading scheme, since that also poses limitations for certain activities. Energy consumption right is the other side of emissions right, since it implements the same thing, just from the aspect of the cause, the input and not from the aspect of the effect, the output. In reality, we are talking about penalizing activities harmful for the environment and society in both cases. On the pollution side we are already used to this, we have accepted that as part of the norms. However, this end-of-pipe approach is wrong; because we allow the causes to regenerate, while we wish for the effects to cease. In the case of the energy quota system we penalize behaviour harmful for the environment (i.e. excess consumption above the quota) by a higher energy purchase cost (quota price and the market price of the energy source).

If someone wishes to purchase more non-renewable energy quotas in addition to the given allocated quotas, e.g. from abroad, then they may do so, if they buy the needed amount of right similarly to buying the right to additional emissions. Therefore, the quota system would not contradict the principle of free flow.

2. Why is it necessary to interfere with market processes? If oil prices go up, alternative energy resources will gain advantage, and if oil prices go down, these kinds of efforts could become unreasonable.

Indeed the position of classical economists is that environmental problems will be resolved automatically by the market, because if they develop into cost factors, then they shall be eliminated. This is a justifiable argument, but the approach is still wrong, since the market will remedy the problem too late, and by then damages will happen, which cannot be fixed and reversed. This phenomenon is best demonstrated by climate change. The start of this problem dates back to the industrial revolution, but since then no market solution has been created for eliminating climate related issues. The current trend may be perhaps normalised within hundred years, but for this significant financial resources would have to be mobilized. The right attitude is to create an economic situation, where the price of non-renewable energy is maintained artificially high. Otherwise this will be achieved by the market only by lagging behind the events, when it is already late for action from ecological and social point of view. This may be achieved through taxation or through making resources scarce.

3. Does the quota system restrict consumption?

The system does not restrict individual consumption, it just transforms it. Anyone is allowed to consume more than the allocated individual consumption right, but in that case she/he shall purchase the additional right from those who have saved theirs. But the system will not be restrictive in an absolute sense even in the case if the total consumption rights allocated for the year concerned are utilized. In such case the envisaged target may be exceeded, the excess consumption rights may be purchased through paying progressive premium at the price set by the quota manager. However, consumers are greatly encouraged to decrease their excessive consumption (voluntarily) through economic instruments. It is important to emphasize that this system is flexible, thus reasonable decisions can be made.

Cooperating with the Hungarian social sector

NSC-FoE Hungary contacted the Hungarian Anti-Poverty Network that was supporting the climate law campaign. The campaign has benefited a lot from this cooperation, since social aspects have become more clearly articulated in the campaign. The Network's recommendations were also built into the concept considering its fine-tuning nature (see Pillar 4). The co-operation has led to a thorough social study about the social impacts of the proposed quota system.

National Climate Change Act campaigns (Big Ask)

1. Climate law policy seminar in Hungary

Organized by FoE Hungary (MTVSZ) in co-operation with FoE Europe the two-day seminar held between 16-17 June 2011 aimed to build capacity of the participants through sharing experiences about climate policies both in campaigning and lobbying. FoE EWNI (England, Wales and Northern Ireland) and FoE Scotland were invited as international experts, and Hungarian decision-makers, social, development and green NGOs, green industry representatives and other national allies of the Hungarian Big Ask campaign also attended.

2. UK - The Climate Change Act

A hundred-page law was finally agreed in England in November 2008 with the support of all three main political parties and businesses, in which 80% CO2 cut by 2050 (compared to 1990) was determined. The law includes a series of five-year carbon budgets with limited borrowing (1%) as well as the need for establishing an independent Advisory Body that reports to the Parliament on the progress and gives

advice on the size of carbon budgets and offsetting. Meanwhile, the Government reports on progress to the Parliament and responds to the Advisory Body. However, no sectoral targets are set in the law, neither there are formal sanctions if Government fails.

Lessons learnt and recommendations from the campaign:

- Well respected Advisory Body is critical.
- Cross-party political support for the Climate Change Act at the highest level is necessary when making tough decisions is needed.
- Regular authoritative reports to the Parliament create political moments and political pressure for compliance.
- NGO leadership, with progressive business, is critical in creating media and public pressure.
- Climate Change Act has set clear direction for the different sectors. It was welcomed by business and investors.

More information: http://href.hu/x/gvpy

3. Scotland - Climate Change Act

The Scottish emissions reductions targets include at least 80% reduction by 2050 (from 1990) and at least 42% by 2020. Annual targets are set in secondary legislation (as a total amount of carbon budget). Limits on carbon credits are set, according to which the amount of credits is limited that Government can purchase (20%). Between 2010 and 2012 they have committed not to use any credits, while secondary legislation will be announced later for the period of 2013-2017. The limitation only applies to Government purchase since the 'Domestic Effort Target' was unsuccessful.

The following bodies and mechanisms support the implementation of the target:

- Advisory Body
    - Gives advices for the Government about annual targets and actions to meet them
    - Provides provisions for establishing a Scottish body, but until then the UK Committee on Climate Change (CCC) shall play this role
- Reporting duties
    - Annual progress reports by the Advisory Body
    - Annual report on whether target is met (two year data lag)
    - Annual consumptions report
    - Report on Proposals and Policies (RPP)
- Duties of Public Bodies
    - "A public body must, in exercising its functions, act in the way best calculated to contribute to the delivery of the targets set… in this Act" Government has since provided guidance on ways to do this, showed board level of leadership, identified targets, compiled action plan and specific strategies e.g. for adaptation, as well as carried out annual reporting and carbon assessment.

Lessons learnt and recommendations:

- The broad Coalition of stakeholders was essential in the success. A strong lobby force was created involving business, NGOs, trade unions, which brought the topic up to national level. A big energy company also supported the campaign.
- Open and receptive Parliament helped the process and thus tailored lobbying.

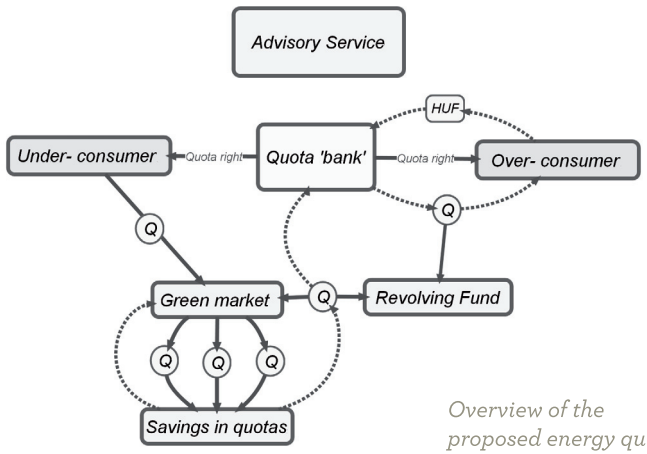
More information: http://href.hu/x/hgn4

Extending the national initiative to international level

The Resource Cap Coalition (RCC) is an open platform for organisations advocating for a global resource cap. The RCC was initiated by ANPED, CEEweb for Biodiversity and Ecologistas en Acción in 2010. It lobbies for introducing a resource cap with a view to ensure social justice and staying within the earth's carrying capacity. It also provides a discussion platform for elaborating appropriate tools to realise its aims. The RCC has been considering the non-renewable energy quota system as a possible tool to be adapted to its proposed international Resource Cap.

More information: www.ceeweb.org/rcc ,
www.gci.org.uk/Documents/Poster_RCC_2011.pdf

Further reading about the European Big Ask campaign for national climate laws in 18 countries:
http://www.thebigask.eu/
http://www.foeeurope.org/climate/index.htm



Overview of the proposed energy quota system

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