

GreenBudgetEurope

GREEN BUDGET EUROPE'S RESPONSE TO THE EU CONSULTATION ON THE FUTURE EU 2020 STRATEGY

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A. INTRODUCTION

Green Budget Europe (GBE) is a Europe-wide umbrella organisation founded in September 2008 in Brussels. GBE's main object is to promote the use of **Market Based Instruments (MBI)** in environmental policy. GBE brings representatives of business, international organisations, ministries, political decision-makers, the research community and civil society together in one movement in favour of MBI to protect climate and environment. GBE is at present being run as a project of the NGO Green Budget Germany, using its infrastructure and office facilities. Our website: <http://www.foes.de/internationales/green-budget-europe/>.

To meet the global challenge of climate change and the threat it poses to our natural environment, governments have no choice but to use all the instruments they have at their disposal. After more than thirty years' experience with numerous instruments one thing is certain:

Nothing is so effective and efficient, nor stimulates innovation as well as market-based instruments (MBI) for environmental policy. No other instrument unites the two goals of sustainable development and economic competitiveness.

In principle, GBE welcomes the EU2020 initiative and regards it as a positive shift of emphasis. It is important that the primary focus of EU economic policy on competitiveness and growth moves towards other, more important indicators of social, economic and environmental welfare. GBE concurs with the Commission's statement that the way out of the economic crisis should be an entry to

a new sustainable social market economy. GBE regards the economic and climate crises as providing conclusive evidence that the world economy is unsustainable: Change is imperative if we are to avoid more serious crises in the future.

A 'greener economy' is one of the Commission's three priorities. For us, green economy means an integrated model which includes the other priorities. A green economy must be the EU's main priority, and the starting point of EU 2020 strategy. In the Commission's paper, the concept of a 'greener economy' was mentioned many times, but the paper does not offer a clear definition of what this greener economy actually means in practice. For this reason, **this response focuses on providing a sound and rather more concrete definition of green economy, including policy tools to create a green economy in practice.**

B. WHAT IS THE "GREEN ECONOMY"

Green economy has suddenly become a catchword, but as a concept it is far from clear. Many mistake it for the sum total of the *green industries*, such as renewable energy, environmental vehicles, waste treatment and water management services. Others confuse it with *green purchasing*, or *eco-labelling* or *green taxes*. But these are either sub sectors or tools of the green economy.

In fact, what the Green economy represents is a kind of 'green new deal', which can be defined as the conversion of the current economy into a new system that incorporates environmental and other social values. Very importantly, it recognises that both economy and society are embedded in nature, and as such dependent on nature rather than isolated from it. In conventional economic theory, the exclusion of these values from the economic system is considered a *market failure*, which results in significant environmental and social external costs, and which must be corrected *ex post* by regulatory or other administrative measures. Obviously, attempts to correct such market failures have thus far neither been sufficient nor efficient; otherwise we would not be faced with the spectre of devastating climate change, degradation of ecosystems, depletion of natural resources and growing inequality nationally and globally.

Environmental economists have long argued that the appropriate solution to this problem is the integration of environmental and social costs into the market, either through *green taxes* or environmental markets, such as ETS (the European Trading System for CO₂ emissions), or other economic and market based instruments (MBIs). The rationale behind this argument is: First, using the market *ex ante* to protect environmental and social values, rather than "correcting" it *ex post*. Secondly, increasing resource-use productivity and competitiveness. Thirdly, encouraging green technology and green industries. Fourthly, reducing the frictional losses associated with regulative measures which are not sufficient to deliver green economy alone.

This radical transformation of the market presumes and leads to an equally radical facelift of the institutional setup of our socio-economic system, such as company law, accounting and auditing, central banks and other regulators, basic to the operation of the economy, as well as the broad range of political, educational, technological etc. institutions, necessary for the functioning of society. They have been designed and have evolved to their present form, as part of the existing development model, which is anchored in the industrial revolution. They must be transformed to suit the knowledge society, which now evolves into something *greener*.

This specific, basic transformation of the economic system into a more integrated model that incorporates social and environmental costs and values is what we call the green economy. In view of the holistic character of the model, perhaps green society is a more appropriate term.

Basic to the green economy is the principle of equity between the three factors of production, namely, **man, nature** and **capital**. If this is enforced, economic activities will develop in a mode that respects the environment and the delicate balances of eco-systems and safeguards social solidarity and justice. The environment is no longer considered a ‘free’ good to be used or abused at will, while human well-being is restored to its central place as the main objective of society, instead of growth, market share or profit.

C. IS THERE AN ALTERNATIVE?

Despite the current economic crisis and the constantly deteriorating environmental and climate situation, there are many who maintain that the economy is about to recover from recession and that climate change is not all that serious. In any case, they argue that it does not warrant the risk of applying measures that would (in their opinion) jeopardize future growth and jobs. They fail to see that getting on with the “business-as-usual” scenario is an impossibility on two counts:

First, the economic and financial crisis is structural. The *virtual speculative economy*, far outdistancing the real one, burst out in a big bubble which was unavoidable in view of the very nature of the *virtual economy*. Attempts to resolve this structural crisis took the form of a short-term injection of taxpayer’s money into the financial system, to rescue it from further bubble-bursting, but nothing was done to put the underlying structural problems right.

Second, climate change, degradation of ecosystems and depletion of natural resources, are occurring at a pace and scale that leaves little room for inaction. After the failure of COP15 to produce a binding agreement on the effective reduction of emissions worldwide, we need to find ways to stop climate change before it has dangerous, large-scale and irreversible consequences – which would mean, in economic terms, infinitely high costs. We also need to find ways to preserve ecosystems and natural resources. This should be focussed on much more in the EU 2020 Strategy.

In view of the above, it is imperative that the economic system should be put right by taking structural measures to put the *virtual economy* to the service of the real economy and not vice versa. A general financial transactions tax would make an important contribution in this regard. But at the moment, we see no serious moves in this direction on the part of national or international financial authorities. On the contrary, the very banks that caused the crisis are about to produce new derivatives based on ‘futures’ of CO₂ emissions and green certificates. This is unbridled speculation, in the most volatile and shallow market, dealing literally in ‘hot air’. If allowed to proceed, it will produce a super bubble of incomparable toxicity, as Professor James Hansen of Columbia University has warned. The need for a radical reform of the economy is urgent, even if the spectre of climate change is ignored.

On the other hand, climate change is quite literally a matter of life or death: ignoring it is simply not a valid way to proceed. As documented in the Stern Report, if no mitigation measures are taken, the economic cost to the world amounts to 5-20% of the global GDP per annum, while the social cost includes inter alia the migration of 1.5 billion climate refugees, mostly from Bangladesh and other low-lying regions of South East Asia.

Therefore, the green economy is not a slogan, but an absolute necessity, as its realisation represents the only way of resolving the current triple crises we face: the structural economic crisis, the ecological crisis and the ensuing social crisis.

D. THE TOOLS OF THE GREEN ECONOMY

The green economy, as described above, can be attained step by step. It entails a transition from long-established infrastructures and methods of mass production and mass consumption and the wasteful customs of consumerism to an entirely new mentality of moderation, preserving natural resources and the environment. Habits that have been long-entrenched as societal values need to be transformed gradually, which calls for an arsenal of long, as well as medium and short-term measures at all levels.

Education is obviously the main long-term instrument, as it may instill a new set of environmental and social values in the young. For few decades now, environmental education forms part of the standard curriculum at European nurseries and schools, and Universities offer degrees in various environmental subjects. But its emphasis should shift to the philosophy and principles of a *moderate society* and a *green economy*.

The Commission working document rightly states: „Strengthening **education** is one of the most effective ways of fighting inequality and poverty.” At the same time it is also essential for eliminating environmentally unsustainable practices. It is especially important to disseminate knowledge about green economy, sustainable production and consumption.

Research and technology are closely associated with the educational system, but their direction is substantially influenced by funding, such as that of the European research and development programmes. Again, the direction of environmental R&D should be shifted towards the *green economy*.

Two further groups of medium-term measures are: *green purchasing*, usually related to government spending, and the adaptation of building regulations and infrastructure specifications to bioclimatic architecture and sustainable engineering.

The last and most important category of medium to short term measures are those aimed at sustainable consumption, production and investment patterns. In fact, measures in this category cover the entire span from long to short term action. Education is instrumental in producing long-term changes in mentalities and society. But consumption, production and investment patterns are formulated mostly on the basis of relative costs and prices. Hence, market based instruments are extremely relevant here as they directly affect prices.

Environmental or *green taxes* are the instrument that immediately springs to mind. They are used as tools to incorporate environmental costs into prices, so that all true costs including external environmental costs, currently borne by society, are charged to the specific users or abusers (polluters) of natural resources. In other words: green taxes are a means of implementing the polluter pays principle. They result in higher prices of energy, raw materials and other resources, which in turn lead to reductions in resource use and waste. Charging pollution costs to the polluter similarly leads to a reduction in emissions.

Setting up special markets for trading pollution permits, or *green certificates* (for investments in pollution reduction) is another method of bringing environmental costs home to those that generate them. Setting up such systems is a highly complex operation involving the initial allocation of pollution permits or green certificates, the monitoring of emissions and the administration of the markets (one for each emission or polluting substance).

There are many more MBIs, as documented in the European Commission’s Green Paper. Their common feature is that they operate through markets, by influencing costs and prices, directly or indirectly. It should be noted, in this respect, that many regulations (e.g. the rule of the use of the return bottle) have an equivalent effect. Their main difference is they are mandatory; moreover, they

do not constitute a continuous incentive for improved environmental performance, but a one-shot-push, up to the level specified by the regulation.

The introduction of environmental taxes should be accompanied by the dismantling of environmentally harmful subsidies in order to ensure the coherence of political instruments and to avoid conflicts between them. Price signals throughout the economy should be consistent, reinforcing the polluter pays principle and incentivising environmentally sound behaviours.

The great advantage of *green taxes* or other MBIs is first, that they work fast in changing relative prices and therefore consumption and production patterns and, second, that they work **with** rather than **against** market signals. Third, as in the case of taxation, they are significant revenue raisers for public budgets, including for environmental and social purposes.

E. THE OUTCOME OF THE GREEN ECONOMY

What is the combined impact of all these tools and measures on infrastructures, social habits and attitudes or on the *modus operandi* of the economy? How do they bring about the radical transformation of the current economic system into the new holistic model that we defined as *the green economy*?

Education and training, together with the active intervention of civil society, produce the necessary long-term changes in social thinking and economic attitudes, restoring environmental and social values to their rightful central place, in the accepted scale of values of each society.

But the same objective can be forcefully promoted by the market itself, as already outlined in the previous section. The integration of environmental and social costs into prices drastically changes the economic behaviour of individuals, companies, organisations and other entities, public and private, as well as the direction of technological research and development.

Green taxes, in particular, as applied in a neutral environmental fiscal reform (applying extra revenues from environmental taxes to equal reductions of social security contributions and income taxes), generate multiple dividends:

- They contribute to sustainable consumption and production patterns.
- They contribute to competitiveness and sustainable growth by improving eco-efficiency.
- They have positive effects on employment through the reduction of labour taxation and by creating new green technology and green industries.

The emphasis now is on energy and resource saving, as well as creation of employment. The new target is higher resource use productivity with and an absolute reduction in resource use – or eco-efficiency. The result is not only the creation of many new green industries and jobs but also the transformation of existing, or traditional, ones, as well as a move from owning to renting or sharing and from built-in obsolescence to durability and reparability. Such shifts increase the productivity of capital goods vertically and experts have documented its possible growth by a factor of 5, in one generation.¹

Another basic feature of the *green economy* is the enormous gains in energy and resource use efficiency made possible by the radical transformation of urban areas, through sustainable town and transport planning, as well as bioclimatic architecture. This is achieved by drastic changes in the process of urban planning and operation, in building regulations and specifications of infrastructure works, as well as real estate taxation designed to strengthen town planning policies. An example in

¹ For more information see Ernst von Weizsäcker et al, *Factor Five; Transforming the Global Economy through 80% Improvements in Resource Productivity*, Earthscan Publications Ltd., 2010.

point is adding to the building code the obligation to fit photovoltaic panels on the free surfaces of new structures. The obligation may be extended to existing buildings by a tax free allowance on the relative investment.

Last, but not least, there are an impressive array of win-win situations that come with climate change and conservation actions. Carbon and other climate markets, nature and habitat protection areas, water conservation and management industries, as well as the new industry of climate change mitigation, that includes the adaptation of various categories of infrastructure e.g. ports, sections of road networks, coastal cities and farmland, in order to avoid flooding.

Before closing, we should briefly revisit the chapter of the *green industries*, which are almost exclusively associated with renewable energy by the general public. It is true that the booming wind turbine industry, the fast developing solar and geothermal energy generators, and the emerging tidal and wave installations are an impressive group. But the drive towards eco-efficiency aside from the renewable energy and climate change industries mentioned above creates many more: Eco-efficiency in agriculture, extraction, manufacturing, transport and other sectors of services, calls for a broad range of bio-industries, sensing, automation, informatics, logistics even satellite technology. As well, a change in mobility thinking and environmental pricing of transport will transform this industry. Coastal shipping and cycling will make a strong comeback; we shall see new railway services, environmental vehicles, auto-driving on motorways. A similar revolution is occurring in construction, in packaging and waste, with new industries dealing with reuse, recovery, recycling, as well as waste prevention systems.

F. ACHIEVING THE GREEN ECONOMY: EFR IN THE EU

Several recent research projects have investigated the potential of EFR to bring about a transformation to a green economy. Two of them – the measures they suggest and their results – are described in brief below.

1. The petrE project: Resource Productivity, ETR and Sustainable Growth in Europe

This research project, funded by the Anglo-German Foundation, set out to explore the economic, environmental and resource implications, for Europe and the rest of the world, of a large-scale ETR in Europe that could achieve the EU's greenhouse gas (GHG) reduction targets by 2020.²

The large-scale ETR in the modelling consisted of the following:

- a carbon tax for all non-EU ETS sectors
- aviation to be included in the EU ETS at the end of Phase 2 in 2012
- power generation sector EU ETS allowances are 100% auctioned in Phase 3 of the EU ETS (from 2013)
- all other EU ETS allowances are 50% auctioned in 2013 increasing to 100% in 2020
- taxes on materials are introduced at 5% of total price in 2010 increasing to 15% by 2020.

The most important conclusions of the research were:

- Relative price changes, whatever their cause (taxes, subsidies, or market dynamics), have the strongest steering effects. Environmental tax reform complemented by regulation seems the best general mechanism to stimulate a broader range of innovations.
- Overall, the results suggest that ETR is an effective environmental instrument that can reduce the EU's CO₂ emissions to the extent required by the targets.

² The petrE project research report can be downloaded at: <http://www.petre.org.uk/> (accessed on 12.01.2010).

- Modelling of labour and resource productivity indicated that an environmental tax reform that meets the 20% GHG emissions reduction target will raise employment and lower resource consumption, and will have only a small effect on GDP.
- The carbon prices needed to reach the GHG targets are in the order of €53–€68 when MBI are used without investment in low-carbon technologies, but this price is lower when some of the revenues from the taxes are invested in low-carbon technologies.
- With stimulation through public policy, these industries are likely to be a major source of economic growth and employment in the future.
- The research suggests that a broadly based ETR across Europe could play a very important and cost-effective role in meeting the EU's emission reduction targets for 2020.

2. THE UK GREEN FISCAL COMMISSION

The Green Fiscal Commission (GFC) is an independent body convened in 2007 which set out to assess the *social, environmental and economic implications of a substantial green tax shift* in the UK within the framework of the 2020 GHG emission reduction target.

The GFC showed that EFR is a policy instrument that can reduce GHG emissions sufficiently to meet the 2020 targets, with practically no cost to the economy overall and an increase in employment. There is no other single policy that can achieve this.³

Modelling of the possible economic and environmental effects of a large-scale environmental fiscal reform (EFR) in the UK showed that the UK could meet its GHG emissions reduction targets by implementing broad-based EFR. Employment was predicted to increase by as much as 1.7% due to the reduced cost of labour, while GDP was predicted to fall by only 0.6% by 2020. In the business-as-usual scenario, or even a scenario with higher oil prices, the UK would miss emissions reduction targets by a significant margin, and the impact on GDP would be far greater.⁴

In the eco-innovation scenarios, 10% of environmental tax revenues were invested in making homes more energy efficient, in fuel-efficient cars and in offshore wind electricity. This increased the generation of electricity from renewables to 26-29% by 2020; more efficient cars reduce CO₂ emissions from road transport by around 5%; increased efficiency of homes reduces CO₂ emissions by around 9%. These eco-innovation scenarios reduce CO₂ emissions by a further 3.5%.

G. CONCLUSIONS

Whether or not we require a *green economy* is not a matter of debate – the green economy is not a slogan, but a dire necessity, if humanity is to survive on planet earth. Even though the fiasco of Copenhagen clearly shows how strenuous the road is towards this goal, we must precipitate the *green revolution*.

The industrial revolution was not the product of international conferences or global agreement. It was the inexorable outcome of a set of circumstances and scientific and technological advances in the 18th century. It started in one country and quickly spread to the rest of Europe and the rest of the world, because the industrial model was new, vibrant and profitable.

Today, we face circumstances that are much more compelling than those of the 18th century, because the future of life on Earth is at stake. The threat of climate change and increasing resource

³ Modelling predicted an increase in employment of as much as 1.7% due to reduced income taxes and social security contributions and a small reduction in GDP of 0.6% in 2020.

⁴ Modelling indicated that a high oil price would reduce UK carbon emissions, although not enough to meet the 2020 target, but would also reduce GDP by 6.3% in 2020 in comparison to the medium-price scenario.

scarcity mean that our “*growth at all costs*” model must be replaced by a low energy economy and a moderate society **doing more with less**. The science is clear, and we have technological, economic and social solutions at our fingertips. Civil society is also playing a part – but what we lack is brave political and business leadership. Is it too much to hope for that Europe may finally rise to the circumstances and lead the change?

In this paper we have shown that the most effective tools to transform our economy are those tools that affect prices. Environmental and social costs must be reflected in price – this is the most effective way to change the behaviour of individuals. GBE recommends market-based instruments; green taxes, green certificates. As recent research has shown, MBI are absolutely necessary for the EU to meet its 20-20-20 targets.

In this context, we support the Spring Alliance manifesto demand for all Member States to shift at least 10% of their tax base away from labour to environmental pressures, resource use and capital over the next 10 years. Alongside this, we also call for a substantial revision of the Energy Tax Directive, taking into account recent research that shows a high carbon price is essential if EU GHG emissions reduction targets are to be met.

Economic growth and profit should not be awarded the highest priority in any society. GBE appreciates many points of Commission’s paper, but feels it is still too focussed on growth. We would be delighted to see the EU taking the lead on the way to a more sustainable society and a green economy.

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