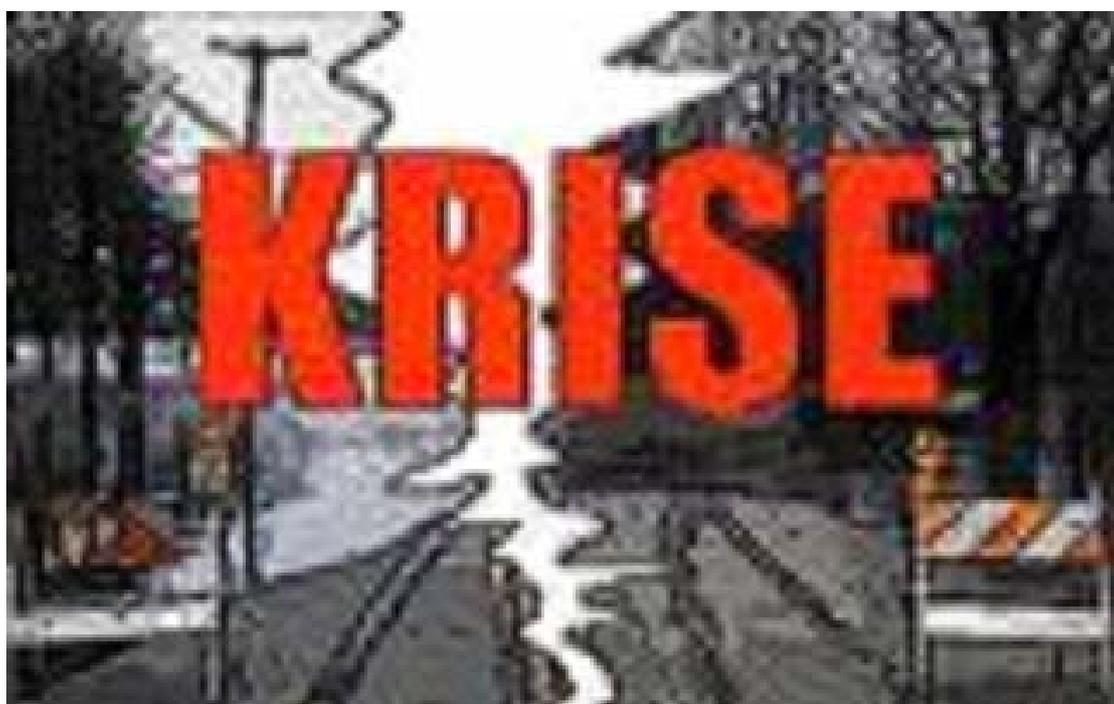




GREEN BUDGET GERMANY
FORUM ÖKOLOGISCH-SOZIALE MARKTWIRTSCHAFT

FÖS-DISKUSSIONSPAPIER 2000/06 GREEN BUDGET PAPER 2006/06



Long Version of Green Budget Europe Policy Paper N° 001

STRENGTHENING A GREEN RECOVERY WITH MARKET BASED INSTRUMENTS

In the face of a severe economic downturn and unprecedented deficit spending, we must proceed to Green Deficit Spending and a Greener Capitalism, and open a new chapter in the MBI-debate

By Dr. Anselm Görres, Green Budget Germany (GBG/ FÖS)

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Green Budget Germany (GBG) is a nonprofit organisation, founded in 1994, with membership open to everyone. Our German name is **Forum Ökologisch-Soziale Marktwirtschaft e.V. (FÖS)**. We specialize in **Market-Based Instruments of Environment Policy (MBI)** and participate in the German and European Eco-tax and Emission Trading Reform with own contributions and through communication with the business, scientific and political communities.

Green Budget Europe (GBE) was launched by GBG with a number of partners as European Platform to promote MBI on September 25th, 2008 in Brussels. We seek dialogue with the business, scientific and political communities and publish newsletters in German and English: **ÖkoSteuerNews** and **GreenBudgetNews**.

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The paper sketches out opportunities to use Green Keynesianism (i.e. ecologically targeted deficit spending) for better protection of the environment and MBI (i.e. market based instruments like eco-taxes, emission trading or a reduction of perverse subsidies) to provide future financing for paying back the exploding government debts.

It also proposes to open a new chapter in the evolution of MBI; namely going beyond the mainly eco-tax-centred debate of the 70ies to 90ies (“double dividend”) and the larger concept of Environmental Fiscal Reform of the early 2000s to have more impact on the shaping of Green deficit programs, on both sides of the public budget.

Never waste a good crisis! (Hillary Clinton)

SUMMARY: OVERCOMING THE CRISIS THROUGH GREEN KEYNESIANISM, A RERANKING OF MBI PRIORITIES, AND A GREENER CAPITALISM

We can only hope it doesn't get as bad as it already is.

Munich comedian Karl Valentin.

Introduction

In the whole world, we painfully observe strong tendencies to sacrifice environmental protection on the altar of economic recovery. Eco-taxes are reduced, not increased, progress of emission trading is slowed, not accelerated, and many countries make short-sighted compromises on existing or planned ecological regulation. With Obama as new president, the chances for a progressive turn towards more sustainable policies have risen considerably, but the forces of the past are still strong.

Their underlying paradigm is that environmental progress is economically costly, if not harmful, and that therefore in the interest of a fast recovery, environmental objectives have to stand back in order to save jobs and industries first. The current crisis reinforces this old thinking and leads to a backlash for urgent environmental progress even in countries where leading politicians have overcome the old paradigm and publicly declared the need to protect both the economy and the environment.

With few exceptions, e.g. Sweden and Denmark, MBI are presently not making much progress in Europe. Even our allies tell us politely: *Your ideas may be great, we know you have good arguments and excellent evidence, but this is certainly not the best moment for them. Please come back later! When we have solved the economic crisis, we will have time to care for the climate again!*

Yet this is not the right moment for us to go back to our study chambers or NGO-desks and wait for better times and a friendlier reception for our thinking. **We have many solutions to offer to the current crisis, much more and better ones than the world is ready to assume.** But to present our solutions in the radically new conditions of the world crisis, we must find new and better arguments than in the past, or more precisely, we must adapt our arguments to the new conditions, and we must **open a new chapter in the debate of Market Based Instruments.**

This paper is primarily meant to open a dialogue among friends. We want to convince fellow MBI-advocates of the need to change and re-adapt our thinking and talking to the new situation. These days, everybody has to adapt. So why not we?

Part I of this paper pleads for new principles and priorities in the design of greener deficit programs. In Part II, we summarize or recommendations to policy makers within a framework of Green Keynesianism. We also argue for more tolerance towards second best compromises and show new interpretations of double dividend.

In Part III, we sketch the past evolution of the MBI-debate (perhaps from a primarily German and EU perspective) and plead for the opening of a new chapter in this debate. This part ends with an outlook on the possible relationship between ETR and ETS.

Part IV argues for a fast good-bye to Cowboy-Capitalism and proposes a new paradigm of eco-social capitalism as a possible solution (*Ökosoziale Marktwirtschaft*).

Abbreviations used in this paper

DD	Double Dividend
EFR	Environmental Fiscal Reform
ETR	Environmental Tax Reform
ETS	Emission Trading System
GBG	Green Budget Germany
GBE	Green Budget Europe
GDR	Green Debt-Repayment
GFR	Green Fiscal Reform (=EFR)
GPP	Green Public Purchasing
GSS	Green Switching Subsidies
JCR	Job-Creating Regulation
MBI	Market-Based Instruments
REN	Renewable Energies

GBE Policy Paper vs. GBG Discussion Paper

This long version holds many personal opinions of the author. The short version is a GBE policy paper and represents a large consensus within the GBE Steering Committee.

Summary Part I: The global crisis offers new principles but also new opportunities

As advocates of MBI and a rational choice of first-best policy instruments, we probably must prepare ourselves for a period of second-, if not third-best policies. **We may even have to prepare ourselves to defend second-best environmental policies against those who would prefer no environmental policy at all, or even anti-environmental policies.** The use of differentiated VAT-rates may be a good case in point.

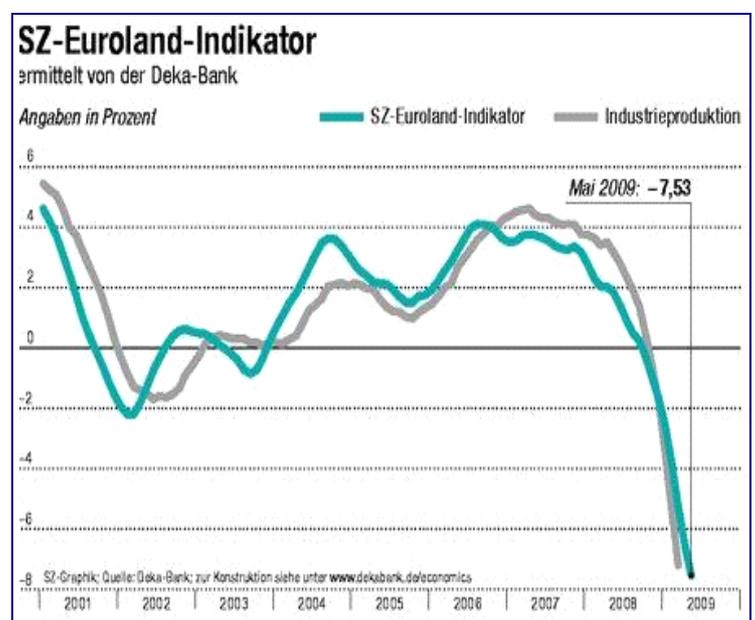
But if we want to step forward and get beyond a role where we can only fight for second and third best options, we must shift our focus and exploit the new opportunities offered by the gigantic deficit spending programs most countries are now competing to implement.

Never in the history of the world could governments spend so much money in such a short time as today. The total sum of world deficit programs will soon amount to somewhere between five and seven percent of world GDP. **So we are talking about unimaginable sums of up 3 trillion dollars or more.**¹ The way these millions of millions are spent will decide about our future fate. If we spend them without discrimination and with no strings attached, we will create incredible damage to the environment, perhaps also hurting the poorest people and countries instead of helping them.

Yet if we spend these enormous sums wisely and with discretion, we will be able to give an enormous boost to both the economy and the environment. It is paramount for all advocates of a greener future to fight for spending the money without creating collateral damage to the environment. Indiscriminate tax cuts – whether through reductions of taxes for income payer or taxes for consumers – forsake any control about how and what for the money will be spent. No penny of public money should be spent in a way that increases environmental damage or would hurt the poor. Every penny of public money should be spent to give the right signals for a sustainable economy of the future.

Obviously, our plead for greener deficit spending applies only to stimulus measures that are still in the making and have not already been spent. Looking at the economic forecasts and political debates, we are quite certain that we haven't seen the end of such measures. Up to now, stimulus programs in the EU have not shown large green elements.²

Exhibit 1) The present, not very encouraging outlook makes additional stimulus programs rather likely



¹ In this paper, we are using the US term for trillions, i.e. a million millions. The World GDP was 54 trillion (54 million millions) of US-Dollar in 2007: <http://siteresources.worldbank.org/DATASTATISTICS/Resources/GDP.pdf>. It may be interesting to note that the total amount of write-offs by banks is estimated at 1,5 to 2 billion US dollars.

² See Green Budget analysis of German and selected EU deficit spending, forthcoming.

Before the present crisis, Green Public Purchasing (GPP) was a rather rarely debated instrument in the MBI toolkit. The basic idea is for governments to use their purchasing power to buy greener than necessary goods and services and thereby not only give a good example but shape the market. **In the context of unprecedented public spending, GPP can become a much stronger and dramatically more important weapon.**

The downside of the enormous spending of today – justified as it may be – are the debts we are accumulating for our children. **One day, these debts will have to be paid back.** But how? Announcing future tax increases for consumers or income earners would be a perverse signal. Indeed, by using wrong ways in refinancing the future debt, we risk to stifle the very recovery we try so urgently to achieve. Instead, governments should send the right tax signals. **These signals should be signals in favour of the environment, not signals that encourage further environmental destruction.**

The present amount of deficit spending calls for courageous counter-financing measures. These should be measures that do not hurt the economy while at the same time helping the environment. We need to compensate the fall in energy prices and in the cost of emission rights. **Accepting lower costs of energy and emissions is equivalent to sending dreadfully misleading signals to consumers and investors alike.**

Summary Part II: Key Elements of Green Keynesianism

Applying the principles developed in Part I, we should set new priorities and define the new “products” within our portfolio that will help us **move from untargeted deficit spending to a balanced program of Green Keynesianism.** We see the following main elements:

- 1. Green Deficit Spending** to create jobs while benefiting the environment, integrating both old and new green instruments or principles:
 - **Green Public Purchasing (GPP)** to apply high environmental standards in the context of Green Deficit Spending, both for direct State programs as for indirect spending by others.
 - **Green Switching Subsidies (GSS)** to stimulate the economy through conversions from less efficient usages/ products to greener usages/ products.³
 - **Job-creating regulation (JCR):** Giving preference to green regulations that will also create jobs by induced spending effects.
- 2. Green Debt-Repayment (GDR)** through the fiscal revenues from MBIs, again combining older instruments and newer approaches:
 - Older tools include new or higher eco-taxes, cutting of perverse subsidies, introductions of toll systems or more auctioning of ETS.
 - A new tool could exist in pre-announcing ecotaxes to become effective with some delay.

If we want to give “ecologically correct” signals without stifling a beginning recovery, pre-announced eco-tax measures, with a delay of one or two years, could be a clever way out. The economic burden would be postponed, while the desired signal effect would set in immediately.

³ GBG recently presented a proposal to modify the so-called “Umweltprämie” into a subsidy for car buyers under condition that the new car’s consumption is at least 25 percent less than the previous car. This would really make for a green subsidy: www.foes.de/pdf/2009-04%20Umbaupraemie-SZ.pdf

We also should take a new look at regulation. **We have just seen millions of jobs destroyed by neo-liberal deregulation!** Clever green regulation can enforce additional spending by businesses and/or consumers. The Eco-design directive may be an excellent example. When consumers and producers have to invest in order to meet, say, higher energy standards for new buildings, this may raise costs and endanger some jobs, but as a rule should create more new ones.

Given the necessity to create jobs, and quickly, we should not be too prudish about pure theory requirements as long as there is a positive effect on jobs and on the environment.

If we want to progress, we must open a new chapter in the MBI and double dividend debate. In the last decades, we advocated environmental policies that, for the first time, offered fiscal receipts. So we could ask nice questions: What to do with all this money? What are the nice things we want to spend the MBI-receipts for? **In the present crisis, the money has already been spent, at the expense of billions and trillions of government debt. So the new question is: How can we repay this debt in the most intelligent way?**

It is our conviction that green fiscal revenues are the most intelligent way to counter-finance the debts from deficit spending. So the new double dividend comes from eco-fiscal instruments that create the right signals for the economy while helping at the same time to repay our gigantic debts.

Exhibit 2) Evolution of Double Dividend: From Tax bads not goods to Greener spending, greener financing

	Ecological Tax Reform (ETR – 70ies to 90ies)	Green Fiscal Reform (GFR – early 2000s)	Green Keynesianism Green Debt-Repayment
Background	Since 1970ies: Enthusiasm of eco tax rediscovery, long before introduction of ETS	Early 2000s: Realities of European politics under unanimity vote, with switch to ETS	Since 2008: Radically changed conditions of world economic crisis
Philosophy/ Battle Cry	„Tax bads, not goods“	“Use full portfolio of economic instruments for variety of fiscal objectives”	“Greener spending, greener financing”
Dominating Instrument(s)	<ul style="list-style-type: none"> - Ecotaxes (ETR) - Emission trading (ETS) only debated, most other tools neglected/ ignored 	<ul style="list-style-type: none"> - ETS and ETR - Slashing of perverse subsidies - Road and city tolls - Limited green subsidies, e.g. for REN 	<ul style="list-style-type: none"> - Green Public Purchasing (GPP – NEW) applied on Deficit Programs - Green Switching Subsidies (GSS – NEW) - Pre-announced ETR - Cutting perverse subsidies - Job creating green regulation (JCR – NEW)
Priority use of revenues	<ul style="list-style-type: none"> - Reducing taxes on labour (from payroll taxes to social security levies) 	<ul style="list-style-type: none"> - Reducing taxes on labour - Reducing national debt (to meet Maastricht criteria) - Financing Green Projects 	<ul style="list-style-type: none"> - Green Debt-Repayment (GDR – NEW)
Evolution of Double dividend	<ul style="list-style-type: none"> - Benefits from ecotaxes - Benefits from lower labour taxes 	<ul style="list-style-type: none"> - Variety of green revenues - Variety of green signals - Variety of usages for new revenue/ reduced expenses 	<ul style="list-style-type: none"> - Greener spending precedes counter-financing - Greener financing sold to public mainly on fiscal virtues
Typical alliances	Labour unions, Greens, other progressive parties	Also some liberals and fiscal conservatives	All responsible and progressive forces of society?
Example	GBG until 2003/2004	GBG 2005-2008	GBG since 2008

The old double dividend argument for energy taxes to relieve labour costs may still be valid. **A shift from labour taxes to energy taxes may well lead to increased demand for domestic labour at the expense of energy imports. The bottom line from such a tax shift would be higher domestic demand and more jobs.** All we need to overcome for such a move is old thinking and the strong energy lobby.

Summary Part III: The necessity of reordering our MBI-Priorities

The success of MBI-policies since their beginning in the 70ies and 80ies is overwhelming – not only in economic theory and research, but also through extensive empirical evidence. **All MBI instruments – from eco-taxes over emission trading to green subsidies for renewable energies and to slashing perverse subsidies – have proven that they work well and at very little, if negative cost to society as a whole.**

Notwithstanding this overwhelming evidence in favour of MBI, **we need to take account of political realities.** With few exceptions, MBI-policies have advanced not because of their popularity with the general public, but because of courageous and enlightened political leadership, particularly in Europe, usually coming to bear only at rare political moments and under favourable political and economic conditions.

But these conditions now no longer prevail. The public doesn't want higher energy prices and hopes for relief from lowering taxes. The unpopularity of eco-taxes in many countries, not only with lobbies but also with ordinary citizens, is heightened. The European ETS became a great success, perhaps to be copied by other countries. But it did not succeed because of its popularity with the average European citizen. It is now facing political opposition from national governments and its price effects are doubly weakened: by the fall in energy prices as well as by the reduced demand for emission rights.

In retrospect, we may soon come to distinguish three phases of the MBI-debate. In the early years, it was all about ecotaxes. Academics of course debate everything. **But it is probably fair to say that in these years, eco-taxes got more public attention than all other MBI instruments in combination.** In the early 2000s, the focus was expanded to include all MBI instruments. **Now we have to open a third chapter: Economic instruments under the conditions of an economic crisis** (Exhibit 1, page 8).

All this may force us to reorder our priorities and our arguments. For those of us who have a strong preference for ETR, we may have to admit that for a number of political and institutional factors, it seems easier to expand ETS than ETR. Due to the economic crisis, we may also see better opportunities for cutting down perverse subsidies than for expanding ETR. We also should give more consideration to a strengthening of regulation, i.e. through eco-design. **If all this is true, we should not fight for a restoration of the priorities of the last decades, but adapt to the new conditions.**

In the medium and long term, however, the very success of ETS may create new chances for ETR. The more ETS becomes a world wide system, the more we will come to see the same payoff we know from the evolution of the EU: Deepening versus widening. A wider ETS will make it more difficult to deepen and reinforce the system. **So progressive countries that want to move faster might have to use more ETR on a national or regional level.**

Summary Part IV: Moving from Green Keynesianism to a Greener Capitalism

Many politicians and business people seem to be dreaming of a fast return to the status quo ante as an issue to the current crisis. They have not realized that the world will not and cannot return to the failed ways of the last thirty or forty years. There will be no way out of this crisis unless we recognize the close connections between the financial-economic crisis and the climate crisis. Both are the result of unsustainable behaviour.

Capitalism has been hurt most by capitalists themselves, not by labour unions, communists, green radicals or NGOs. What seemed so good for General Motors or Wall Street, was good for neither one. It was very bad for them, for the United States, and the entire world.

Contrary to all dire predictions, the global crisis of the auto industry has not hit those countries the hardest that belong to the ecological leaders trying to making cars – if ever so slowly – less harmful to the environment. It is the American auto industry that is most suffering from the current crisis, not the carmakers and suppliers in Japan or Europe. No great auto-producing country had cheaper gas and weaker regulation, no country more perverse subsidies for heavy cars and a more car-friendly government, than the U.S. **The most auto-friendly country has the sickest automotive industry, approaching a total collapse.**

The causes of the financial crises and the climate crises have many similarities. Key resources were too cheap and regulation too weak. Most managers and investors were **part of the problem, not part of the solution**. Short-sightedness and greed ruled the day. Warnings were neglected, warners ridiculed. Economic and political elites showed the foresight of four-year-olds and failed gravely.

But perhaps the gravest aberrations of all: Most actors had lost any sense for the real sources of value. The financial sector, with exploding incomes and fortunes, had forgotten that **within the economy as a whole, it is the real economy where value creation takes place, not in the world of investment bankers and hedge funds. For the economy as a whole, people forgot that yet so many machines, computers, factories, buildings and roads will be worthless and produce zero wealth unless the underlying sources of value creation, namely land, air, water and other natural resources, are preserved and maintained so they can function properly.**

We need to make a transition from cowboy capitalism to a softer, more social and nature-respecting market system. In German, we call this **Ökologisch-Soziale Marktwirtschaft**. In Asia, people talk about **Confucian Capitalism**. Whatever we call it, this vision could mobilize people and resources around the world to build a new planet.

Exhibit 3) A somewhat limited choice: More government – or much more government?



I. HISTORY’S GREATEST SPENDING PROGRAMS: NEW RULES, NEW OPPORTUNITIES

*With everything we do, we will not repeat the mistakes of the past and cure the economy at the expense of the environment.*⁴
Chancellor Angela Merkel

2008/2009: Global economic crisis demands a reappraisal of principles and priorities

Through the decades from 1970 to 2000, the MBI debate was mainly an eco-tax debate. Around 2003 to 2007, most MBI-advocates opened their thinking to the new and wider portfolio of a comprehensive Green Fiscal Reform (GFR). But in the dramatic evolution of the global crisis, even this new order of priorities is quickly coming under pressure. In many countries, the unpopularity of eco-taxes is heightened, not only with lobbies but also with many or most ordinary citizens. **The public wants higher energy prices even less than before and hopes for relief from lowering taxes.**

The majority of MBI-protagonist have been slow to react to the new conditions of the global economic crisis. Arguments about the supremacy of MBI in terms of allocative improvement through the elegance of Adam-Smith’s invisible hand, here reinforced by the visible hand of the State, do not catch with the general public which only sees the effect on energy prices and doesn’t like it.

All this must lead us to a second reordering of our priorities and our arguments. In particular, we may have to admit that for a number of political and institutional factors, it seems easier to expand ETS than ETR. Due to the economic crisis, we may also see better opportunities for cutting down perverse subsidies than for expanding ETR. We also should give more consideration to a strengthening of regulation, i.e. through eco-design. **If this is true, we should not fight for a restoration of the priorities of the last decades, but adapt to the new conditions.**

As advocates of MBI and a rational choice of first-best policy instruments, we probably must prepare ourselves for a period of second-, if not third-best policies. **We may even have to prepare ourselves to defend second-best environmental policies against those who would prefer no environmental policy at all or even anti-environmental policies.** The proposal for differentiated VAT-rates may be a good case in point.

Exhibit 4) Crisis changes the behaviour code

	Pre-Crisis Principles	New Rules in Crisis
Fiscal Discipline	- Balanced budget, budget neutrality of MBI-measures	- Deficit spending makes “bad” fiscal behaviour even desirable
Allocative Efficiency	- First-best instruments in line with economic principles	- Compromising necessary; second and third best steps acceptable
Mix of Eco-Instruments	- Balance of carrot and stick, push and pull	- Mainly carrots needed; more pull than push
Priority shift		

On the other hand, the crisis and in particular, the enormous deficit spending programs being developed all over the world may create a whole set of new opportunities, and perhaps even new instruments, which we mustn’t miss. **Never let a crisis go wasted!**

⁴ *Und wir werden bei allem, was wir tun, nicht alte Fehler wiederholen und Wirtschaft und Umwelt gegeneinander ausspielen. Wirtschaft und Klimaschutz, Klimaschutz und Wirtschaft – das geht zusammen, wenn man es nur will. Und wir wollen es.*

Spending of trillions probably OK – but please without collateral damage!

The news of the death of Keynesianism have been somewhat premature. After decades of a dominance of monetarist and neo-liberal theories, **Keynes is being rehabilitated and has become the prophet of the hour.** The lessons of the 1930ies are being re-learned fast – fortunately.

Never in the history of the world could governments spend so much money in such a short time as today. In the U.S., Obama is fighting to pass a program amounting annually about 3-4 percent of the U.S. GDP. Europe has committed itself to deficit spending of about 2 percent of GDP but probably will have to follow the U.S. example shortly. In other countries, spending programs have been partly less ambitious. But the total sum of world deficit programs can be expected to amount to somewhere between five to seven percent of world GDP quite soon. **So very soon, we may be talking about the unimaginable amount of 3 trillion dollars, if not more.**

Exhibit 5) Global deficit programs add up to around tree trillion dollars

	GDP in Bn USD	Spending programs in Bn USD	As % of GDP
USA	9,774	700	7,1
EU	14,285	500	3,5
Japan	3,381	470	13,9
China	2,842	400	14,0
Other countries		400	
Additional proposals		500?	
Entire World	54,000	2,900?	>5%
GBG analysis from several sources, mainly Süddeutsche Zeitung of March 19, 2009			

The way these millions of millions are spent will decide about our future fate. If we spend them without discrimination and with no strings attached, we will create incredible damage to the environment, perhaps also hurting the poorest people and countries instead of helping them. **If we spend them wisely and with discretion, we will be able to give an enormous boost to both the economy and the environment.** This is our once-in-a-lifetime-choice and also our biggest chance.

Up to now, the political forces favouring indiscriminate spending or even environmentally detrimental spending have had the upper hand:

- Traditional advocates of the neoliberal Right have favoured income tax cuts, thereby giving out money to the rich and the middle classes who profit most from tax reductions. **In a real crisis, everyone who still pays taxes should not complain but consider himself very privileged!**⁵
- Traditional advocates of the Left are more prone to giving away the money to the poor or to all tax payers, for instance by reducing consumer taxes.
- Both conservatives and traditional social democrats are even advocating the slashing of energy taxes, as if the fall in worldwide energy prices had not given enough perverse incentives.
- In many countries, nationalist forces are advocating spending combined with protectionist elements – thereby risking a further decay of world trade.

It is paramount for all advocates of a greener future to argue for spending money without creating collateral damage to the environment, the poor, or third countries. Indiscriminate tax cuts – whether through reductions of taxes for income payer or taxes for consumers – forsake any control about how and what for the money will be spent.

Obviously, our plead for greener deficit spending applies only to stimulus measures that are still in the making and have not already been spent. Looking at the economic forecasts and political de-

⁵ A Süddeutsche Zeitung editorial calls politicians favouring tax reductions, in the view of up to 800 billion Euro expected additional national debt expected for the next few years, “a case for the doctor” (Ein Fall für den Arzt – SZ vom 12. Mai 2009).

bates, we are quite certain that we haven't seen the end of such measures. As one of many, former Belgian Prime Minister Guy Verhofstadt argues for another 400-billion-Euro stimulus in the EU.⁶

Applying the principles of Green Public Purchasing for sounder spending

Before the present crisis, Green Public Purchasing (GPP) was a rather rarely debated instrument in the MBI toolkit. The basic idea is for governments to use their purchasing power to buy greener than necessary goods and services and thereby not only give a good example but shape the market. **In the context of unprecedented public spending, GPP can become a much stronger and dramatically more important weapon.** We only need to extend its application as to include indirect spending.

It is our duty to prevent indiscriminate spending and to fight for spending that will help the economy without hurting the environment. Better yet is to fight for spending that will help both. There is no lack of proposals how we can achieve this goal.

- We can subsidize the building of new homes and the restoration of existing buildings under the condition, that both will improve the energy efficiency of buildings. Most old buildings have horrible energy efficiency. **Modern technology permits us to build homes that produce more energy than they consume.** But most programs still waste this opportunity.
- Many countries are giving out, or thinking about, new subsidies to the car industry. But only very few countries attach strings that use such subsidies to creating a new structure of their national car parks, encouraging a change to less eco-detrimental vehicles.
- With all the billions flowing out, we have **a unique chance to improve our traffic infrastructure.** We should favour public transportation over private transportation, renovate our rail systems for long distance traffic, force the airlines to reduce flying where it can be substituted by rail and to greatly improve the efficiency and emissions balance of long distance flying.

We could extend this list, but the point is clear. **No penny of public money should be spent in a way that increases environmental damage. Every penny of public money should be spent to give the right signals and incentives for a sustainable economy of the future.**

Many of the existing spending programs are creating new perverse subsidies. Subsidies for buying big cars, subsidies for energy-intensive appliances and outdated technologies. This must be changed! Keynesian deficit spending is probably the only and correct answer to the present crisis, but it is not enough. It also does not suffice to make it both economically and environmentally useful spending. It must also be socially helpful and increase, not reduce, social justice. **With all the problems in the world, we don't have one cent to spend for building pyramids of the past.** We must think of the future instead. **If pyramids it must be, then only green pyramids, please!**

Creating jobs through green regulation

In the dark age of aggressive supply-siders, the anti-regulation sentiment was so strong that now one dared to propose regulation aiming at the creation of additional jobs. It may be true that in the long run, economic burdens inflicted by regulation may also be a burden for growth. In the short run, with idle resources waiting for employment, bold and swift regulation measures can certainly create jobs very quickly. In contrast to economic incentives, they can be trusted to lead to action:

⁶ See: A stress-test for Europe. Süddeutsche Zeitung, May 13 2009, p. 18.

Regulations, whether good, bad or indifferent, must be carried out to the letter.

Ascribed to Winston Churchill

There is no need to resort to bad or indifferent regulations. As the eco-design directive shows convincingly, a lot of intelligent opportunities can be found.

Perhaps advocates of economic instruments should think twice about regulations. We, too, had perhaps been over-impressed by the anti-regulation rhetoric of the Reaganites and Thatcher followers. When Obama is pushing for higher car efficiency standards, he knows that these work faster than higher energy taxes would on the production of new cars. In truth, we should probably combine both instruments to achieve best results:

- Stern regulations can make sure that new houses, new cars, new products of any kind will not enter the market unless they fulfil ambitious environmental criteria. This assures that everyone, whether rich, ignorant, indifferent, or short-sighted, will stop buying ecologically inefficient products.
- Economic instruments will then assure that the new equipment – plus all the older products already in circulation – will be used efficiently. Otherwise, we'll see people continue wasting energy etc. even with more efficient products. We can force them to buy a better light bulb, but no one can prevent people from letting the light on day and night.

So once more, economic instruments and regulation should not be seen as rivals but as two sides of one coin that should not be separated.

Thinking now about Green Debt Repayment in the future

The downside of the enormous spending of today – justified as it may be – are the debts we are accumulating for our children. **One day, these debts will have to be paid back.** But how?

Many people are rightfully afraid of a major currency reform, be it through runaway inflation or through devaluation of national currencies. Governments must respond to these fears by laying out plans how to reduce the multibillion deficits of tomorrow by the immense spending programs of today. **This is the point where traditional MBI-instruments can prove their virtue.**

Announcing future tax increases for consumers or income earners would be a perverse signal. Instead, governments should send the right tax signals. **These signals should be signals in favour of the environment, not signals that encourage further environmental destruction.**

The present amount of deficit spending calls for courageous counter-financing measures. These should be measures that do not hurt the economy while at the same time helping the environment. At the same time, we observe a worldwide fall of energy and resource prices, creating again just the wrong signals. This must be stopped and reversed.

If we want to give “ecologically correct” signals without stifling a beginning recovery, pre-announced eco-tax measures, with a delay of one or two years, could be a clever way out. The economic burden would be postponed, while the signal effect would set in immediately.

II. GREEN KEYNESIANISM OR THE ELEMENTS OF A GREEN RECOVERY

“To dig holes in the ground,” paid for out of savings, will increase, not only employment, but the real national dividend of useful goods and services. It is not reasonable, however, that a sensible community should be content to remain dependent on such fortuitous and often wasteful mitigations when once we understand the influences upon which effective demand depends.

Lord John Maynard Keynes

Defining new “products” and priorities for MBIs in the economic crisis

Just like the evolution of ETS and other green fiscal instruments required a priority shift from Eco-tax Reform to Green Fiscal Reform in the early 2000s, the new situation of the crisis requires from us a renewed shift of priorities.⁷

Exhibit 6) The needs of the crisis and Green Keynesianism enforce a second shifting of priorities

Rank	MBI-Priorities (modified, no crisis)	MBI-Priorities (modified by crisis)	Rationale for shift
1	Green Fiscal Reform (GFR – early 2000s) <ul style="list-style-type: none"> - ETS expansion - Cutting down of perverse subsidies - Selective ETR expansion (opportunity driven) 	Green Keynesianism (NEW) <ul style="list-style-type: none"> - Green Public Purchasing (GPP) in Deficit Programs - Green Switching Subsidies (GSS) for cars etc. - Green Debt-Repayment (GDR) <ul style="list-style-type: none"> - Pre-announced ETR - Cutting down perverse subsidies - Road and city tolls 	<ul style="list-style-type: none"> - Measures with net relief for consumers, workers and business must have precedence - No penny of government money should be given without conditions - Subsidy reform perhaps easier to justify if generous green subsidies are granted at the same time - Subsidy cuts can contribute to Green Debt Repayment
2	<ul style="list-style-type: none"> - Limited green subsidies, e.g. for REN 	<ul style="list-style-type: none"> - ETS expansion with more auctioning - Selective ETR expansion - VAT-rebates for top-runners (NEW) 	<ul style="list-style-type: none"> - Still absolutely necessary, but no top priority for citizens and politicians - Probably better justifiable as part of Green Debt Repayment
3	<ul style="list-style-type: none"> - Green regulation 	<ul style="list-style-type: none"> - Green regulation to create jobs (JCR – NEW) 	<ul style="list-style-type: none"> - Eco-Design can create new demand, for instance by forcing replacements
4/NO	<ul style="list-style-type: none"> - Voluntary measures 	<ul style="list-style-type: none"> - Voluntary measures - Unconditional tax cuts or subsidies 	<ul style="list-style-type: none"> - Moral suasion has little effect in crisis - Income tax cuts help those who need it least
Prio Shift			<ul style="list-style-type: none"> - An entirely new and unique situation

Applying the principles developed in Part I, we should set new priorities and define the new “products” within our portfolio that will help us **move from untargeted deficit spending to a balanced program of Green Keynesianism**. We see the following main elements:

⁷ The first priority shift is described in more details in Part III of this paper.

1. **Green Deficit Spending** means public spending programs that create jobs while at the same time producing benefits for the environment – and where possible, also helping the poor. Green Keynesianism can be enhanced with the following instruments:
 - **Green Public Purchasing (GPP)** is traditionally used to describe government procurement with above minimum environmental standards. Within Green Deficit Spending, this should not only be applied to direct spending of the government for its own needs. It could also be made a condition where the government supports indirect spending by others.⁸
 - **Green Switching Subsidies (GSS)** are subsidies that are supposed to stimulate the economy, but handed out only under condition that the receivers of these subsidies must convert from less efficient usages/ products to greener usages/ products. A good example would be a subsidy for buyers of new cars stipulating that the new car must have at least 25 percent lower emissions than the old vehicle.
 - **Job-creating regulation (JCR):** Giving preference to green regulations that will also create jobs by induced spending effects.
2. **Green Debt-Repayment (GDR)** are measures producing immediate or future fiscal revenues, like new or higher eco-taxes, cutting of perverse subsidies, or more auctioning of ETS. Some of these measures could be pre-announced, i.e. passed only to be introduced with some delay so as not to burden the economy right away but to already give the right signals.

We also should take a new look at regulation. It is part of the old neo-liberal thinking that regulation always endangers jobs. **We have just seen millions of jobs destroyed by ideologically driven deregulation!** Clever green regulation can enforce additional spending by business and/or consumers. The EU's Eco-design directive may be an excellent example.

A combination of these elements of Green Keynesianism with green counter-financing measures like pre-announced eco-taxes or long term ETS expansion will not only create millions of jobs through a powerful demand boost but also help the environment through direct spending and through the right price signals to direct our recovering economies towards more sustainability.

Making peace with second- and third-best options

MBI-advocates probably suffer more than others from inefficient compromise solutions. After all, we pride ourselves as guardians of three world-class first-best solutions, i.e. eco-taxes, emissions trading, and abolition of perverse subsidies. All these our favourite instruments combine useful environmental impact with a simultaneous improvement of overall efficiency and welfare. An added element of sufferance derives from the fact that non-economists often don't seem to understand what we mean by allocative gains and – even worse – don't seem to care, either.

It comes as no surprise that in an economic crisis, the tendency of the political system to grasp for any straw of help no matter whether under allocative aspects it is first, second or even third best. The papers are full of examples:

- Tampering with VAT-rates as a presumed environmental tool has always been a favourite of lobbies and politicians. For economists, it was always clear that VAT differentiation is far from a first best solution for making prices tell the ecological truth. VAT depends on market prices, good eco-taxes on physical quantities. VAT hits only consumer, true eco-taxes should

⁸ One could also speak of an EIA – environmental impact assessment – being applied on stimulus programs.

be born be everyone. VAT allows only for two, maximally three different rates, eco-taxes can be fully proportional to the damage created.

- Wrecking subsidies for older cars are a horror to any economist, since the goal of economics is the creation, not the destruction of goods.

May these two examples suffice. In practical terms, **we must be ready to acknowledge that second best instruments may still be better than no progress at all**. Take VAT-differentiation: It is certainly no instrument for fine-tuning. But if – for example – the top third of most efficient refrigerators pays a lower tax rate than normal “fridges” and the worst refrigerators even pay an extra high VAT, we can expect positive effects on allocation.

Sometimes simple and even crude price signals work perhaps faster than more sophisticated and seemingly more “eco-correct” ones would do. Take wrecking subsidies, an instrument used by many countries. The 2.500 Euro subsidy in Germany was a big success in terms of classical Keynesian multiplier. With relatively little money from the State, car demand increased up to 40 percent (so in March 2009). Even though the government had lacked the courage to demand strong environmental criteria, citizens quite wisely bought in most cases cars that were more efficient than the old ones they had to scrap.⁹ Apparently, a good German will react to a government subsidy much stronger than to an equally high rebate from a car dealer. State incentives seem to have a sanctifying and therefore more intensive effect on our nation. **Given the necessity to create jobs, and quickly, we should not be too prudish about pure theory requirements as long as there is a positive effect on jobs and on the environment.**

Notwithstanding, VAT and ecotaxes are rivals, not allies in the long run. Most protagonists of green taxes believe these taxes are the indirect taxes of the future, not taxes the indiscriminately punish consumption. After all, it was Adam Smith who pointed out the consumption is the goal of all economic activity – so why tax it? **Our problem is not consumption per se, but the blind consumption and destruction of irreplaceable natural resources.**

VAT based, as it is, on the industrial notion of value added, is both out of date and very anti-environment. It is out of date because we cannot measure with value added today's service and knowledge economies, nor use GDP – its by-product – as a universal measure of development and standards of living in a sustainable world. And it is very anti-environment because it excludes the use of natural resources and financial capital from its tax burden; the latter falls exclusively on labour and profits. So I welcome VAT rebates for top runners, but I think that at an appropriate moment we should start the debate on the replacement of VAT, with some more environmentally and humanly friendly tax.

Yannis Palaiocrassas, former EU Commissioner for the Environment

Redefining double dividend: New arguments for a new situation

In the context of Green Debt-Repayment, we may hope to achieve progress for ETR or ETS despite of their diminished popularity. But we must use a totally different set of arguments. They must be sold to the public by their financing contribution primarily, and only secondarily for their environmental virtue.

In the past, eco-taxes were partly sold over the revenues: “*Sorry for the inconvenience, but look at all the good things we can do with the money*”. Now it's the other way around: The money is already being spent, and no one seems to be worrying about how it will be pay paid back. So we'll have to argue:

⁹ www.tagesspiegel.de/zeitung/Titelseite:art692.2743355

“Did you really believe you are getting all these billions of spending for free? In the end, we’ll all have to repay the government debt. And if so, why not by making energy more expensive rather than stifling the economy through higher taxes on income, labour or consumption.”

There probably still is an excellent case to be made for the old double dividend argument on energy taxes to relieve labour costs. Higher energy taxes reduce energy imports – so part of the burden is born by foreign energy suppliers. **A shift from labour taxes to energy taxes may increase demand for domestic labour at the expense of energy imports. The bottom line from such a tax shift may be higher domestic demand and more jobs.** All we need to overcome for such a move is old thinking and the strong energy lobby.

Exhibit 7) New arguments for old instruments – different uses for fiscal receipts

	Ecological Tax Reform (ETR – 70ies to 90ies)	Green Fiscal Reform (GFR – early 2000s)	Green Keynesianism (NEW)
Tools leading to tax receipts	- Mainly ETR	- ETR - Savings from subsidy reform - Future returns from ETS auctions - Road and city tolls	- ETR - Auctioned ETS - Savings from subsidy reform
“Sales Pitch”	- “Tax bads, not goods” - Use revenue to relieve taxes and levies on labour	- Using tax returns to finance government debt	- Better counter-financing than inflation or higher taxes on income or consumption
Budget impact	- Budget neutrality	- Neutral or surplus	- Mainly for revenues
Typical political alliance	- Center-left - In particular green and red parties, plus unions	- Building a bridge to advocates of fiscal discipline	- Cross-party alliance of all enlightened parts of society
Type of double dividend	⇒ Classical DD of ETR: Parallel protection of nature and labour	⇒ New DD from several MBIs: Use eco-tools to reduce fiscal debts	⇒ Newest DD-type: Green re-financing for green recovery
Priority Shifts in MBI-Debate			
⇒ Phases 1 and 2: Environmental purpose first, double dividend second.			
⇒ Biggest difference phase 3: Money already spent. Now we to look for ways to get it back.			

III. THE NECESSARY RERANKING OF MBI PRIORITIES

The old alleged conflict between the economy and the environment is mostly a myth.

Al Gore

MBI often unpopular despite of proven success in many countries

After extensive research, many practical experiences and long debates, both policy makers and scholars of environmental economics can make **a clear case for the supreme efficiency and elegance of market-based environmental policy instruments (MBI)**. In particular, there is ample evidence for eco-tax reform (ETR) and emission trading schemes (ETS) to produce the desired results – and that at the lowest cost for society. Not only in theory, but also by long and rich empirical evidence, they are the first-best instruments, surpassing most other instruments by far. There is no lack of research to make this point.¹⁰ **So we need fearless action much more than further analysis.**

In the current academic debate, most present protagonists of MBI prefer eco-tax reform (ETR), at least slightly, over emission trading schemes (ETS), and both these instruments over giving subsidies for efficiency technologies or renewable energies (REN). All MBI-protagonists are in favour of cutting down perverse subsidies. And they usually care less for regulatory policies or voluntary measures. Green Public Purchasing (GPP) is a known, but scarcely considered tool.

Notwithstanding the academic preferences and the overwhelming evidence in favour of MBI, **we also need to take account of political realities.** With few exceptions, MBI-policies have advanced not because of their popularity with the general public, but because of courageous and enlightened political leadership, particularly in Europe, usually coming to bear only at rare political moments and under favourable political and economic conditions. **But these conditions now no longer prevail.**

After the rediscovery of Pigou: Original MBI-priorities put ETR at first place

Perhaps it is best to take a look back into the 1970ies, 80ies, and 90ies, when William Kapp, Hans Christoph Binswanger, Hans Nutzinger, Ernst von Weizsäcker and many others rediscovered Pigou Taxes and started to propose ambitious ETR programs. **Those were the days when MBI-priorities still seemed clear and simple.** And very few people were speaking about ETS then.¹¹

Simple and seemingly clear arguments were also used by the adversaries of green policies. Throughout the world, business people, conservative economists, and mainstream politicians rejected MBI-policies with similar arguments:

- Government intervention was seen as a threat to competitiveness (mostly *contra facta*)
- An ideologically misinterpreted Coase theorem seemed to supply theoretical justification for non-intervention.¹²

¹⁰ An excellent analysis of the positive effects of ETR in Europe can be found in COMETR Final Report: www2.dmu.dk/cometr/COMETR_Final_Report.pdf. Most countries undergoing major ETR reforms had up to one percent more growth than in the baseline case.

¹¹ In Germany, Holger Bonus was one of the pioneers of ETS.

¹² Coase's famous article "The Problem of Social Cost" made it very clear that his so-called theorem (that the concerned parties could find solutions without the help of the State) applied only to cases with a small number of players. Miraculously, in the

If any measures were followed by the ecological Right, they usually had a clear bias of command and control over market instruments, subsidies over taxes, and a general refusal to accept the reality of the climate threat.

In these years, the majority of “eco-fiscalists” were advocating eco-taxes, and eco-taxes only. They were hailed as a wonderful instrument, fit to cope with two evils at the same time, namely overpriced labour and underpriced nature. **And this double correction promised at least double, if not multiple dividends!** For the believers of these early years, it was only a matter of time until everybody would be convinced, excluding perhaps a few diehard eco-rednecks.^{13, 14}

Within the debate of insiders, i.e. mainly academics and NGOs, other instruments were never disregarded. But probably until 2003 to 2005, when the EU surprised almost everyone by a rather sudden introduction of emission trading, the public, media and political MBI-debate was to perhaps over 90 percent dominated by eco-taxes. **It is probably fair to say that in these years, eco-taxes got more public attention than all other MBI instruments in combination.**

Exhibit 8) MBI-Priorities of the 1970/80/90ies: Eco-taxes most favoured MBI tool (if not the only one debated)

	MBI-Priorities (classical view)	Rationale
1	Ecological Tax Reform (ETR – 70ies to 90ies) – Large, ambitious ETR (across the board, systematic, several years) – In some countries, also debate of ETS	– ETR seen as superior tool to internalize external effects and to realize Polluter pays principle – Let market prices tell the ecological truth (Weizsäcker) – Promising double dividend for labour and nature
2	– Cutting down of perverse subsidies – Limited green subsidies, e.g. for REN – Introducing ETS	– Preference for making sinners pay, not subsidizing them – With strong ETR, progressive technologies and REN will automatically be more competitive – ETS seen as less precise to correct wrong prices
3	– VAT “tampering”	– “True” ETR not based on market price, but on physical units – VAT reaches only consumers, not business
4/NO	– Green regulation – Voluntary measures – Green subsidies for worst sinners	– With courageous ETR, most regulation deemed unnecessary – Little belief in altruism on large scale – Why should we pay those who cross the street at red?

But the original enthusiasm and preference for green taxes started to wane when the unanimity principle blocked most steps for a European ETR reform and most national governments found it difficult to sell ETR to their people. Long before the crisis, people didn’t like the idea of paying more for gas or diesel or power, despite of the many proclamations of the polluter pays principle. **Polluter pays is a fine thing, as long as it is not me who pollutes and pays**, seems to be the general attitude. And whereas eco-tax progress was slow, emission trading progressed.

economic policy debates the Coase Theorem was turned into a sort of wonder weapon against all efforts for a more ambitious environmental policies. This is way I tend to speak of “Coase’s Curse”:
www.foes.de/pdf/GBG-GreenPaper-2003-06-Goerres-Coases-Curse.pdf.

¹³ Quite typical for these years was my enthusiastic contribution to the 2nd GCET Conference in Vancouver, Canada, April 2001: *Forget double dividend: Eco-taxes have at least ten dividends to offer! Pros and Cons of Ecological Taxation from a European perspective.*

Here is a quote from the abstract: *Since 1999, Eco-tax Reform has been in effect in Germany. Populist politicians from the right and some lobbies are still fighting it, but they are overlooking the many advantages eco-taxes have to offer. Far beyond the double dividend debate, there are technological and administrative dividends as well as moral and political ones. The paper also deals with many of the superficial anti-eco-tax arguments.* (Further down, I criticized ETS being used only as a diversion.)

¹⁴ A more recent example for unequivocal preference for ETR over ETS is Mankiw’s article in NYT of October 29, 2007:
www.nytimes.com/2007/09/16/business/16view.html.

A first priority shift in the years 2003 to 2007: From ETR-focus to ETS and GFR

In the early and mid-2000s, ETS appeared on the European stage quite unexpectedly. How many times did Americans market European inventions? This time it went the other way. Europe introduced a new instrument on a large scale that had known only some regional tests in the U.S.

Exhibit 9) A first shift of MBI-Priorities became necessary in the mid-2000s: From ETR to GFR with ETS

	MBI-Priorities (classical view)	MBI-Priorities (modified, no crisis)	Rationale for Priority Shift
1	Ecological Tax Reform (ETR – 70ies to 90ies) <ul style="list-style-type: none"> - Large, ambitious ETR (across the board, systematic, several years...) - In some countries, also debate of ETS 	Green Fiscal Reform GFR (early 2000s) <ul style="list-style-type: none"> - ETS expansion - Cutting down of perverse subsidies - Selective ETR expansion (opportunity driven) - Road and city tolls 	<ul style="list-style-type: none"> - Bias for ETS over ETR due to unanimity; rules for Trading Period II reduce cap and solve other weaknesses of Period I - Cutting of subsidies finds support of neoliberals and other groups who oppose ETR - Large scale ETR meets too much opposition, rare opportunities for progress must be used - Expansion of toll systems works like eco-taxes
2	<ul style="list-style-type: none"> - Cutting down of perverse subsidies - Limited green subsidies, e.g. for REN - Introducing ETS 	<ul style="list-style-type: none"> - Limited green subsidies, e.g. for REN 	<ul style="list-style-type: none"> - Successful example of Germany's feed-in laws copied by app. 20 countries - Non budgetary subsidy works like invisible eco-tax through higher costs for utilities
3	<ul style="list-style-type: none"> - VAT "tampering" 	<ul style="list-style-type: none"> - Green regulation 	<ul style="list-style-type: none"> - Limits to pricing become evident with growing ETR-experience (much demand in-elastic)
4/NO	<ul style="list-style-type: none"> - Green regulation - Voluntary measures - Green subsidies for worst sinners 	<ul style="list-style-type: none"> - Voluntary measures 	<ul style="list-style-type: none"> - MBI-advocates continue to prefer strong measures over "moral suasion"

In contrast to the introduction of eco-taxes, NGO played no large role this time. Nor was the progress of ETS a result of a large coalition of member countries. **No, the credit for this courageous innovation goes almost exclusively to a few enlightened EU officers and staff and a progressive EU leadership that followed their recommendations.**¹⁵ ETS was surprisingly well accepted, mainly because of attractive advantages to a number of important groups, and also due to a certain independence of Brussels from the power play in the member states:

- Powerful industrial lobbies profited from the giving away of emission rights (grandfathering). Their resulting windfall profits remained hidden to most voters.
- National politicians were (and are) happy for the EU to bear the highest burden of emission reduction, mainly by extending ETS from one trading period to the next, without the public blaming them for it.
- The strong lobbies that fought eco-taxes on a national level – populist politicians, the yellow press, the business community, farmers etc. – did not raise their wrath against ETS on EU-level. Tabloids like BILD are powerful in Berlin, but not very strong in Brussels. Fortunately!

Of course, it also helped a lot that until today, ordinary people and even most businessmen understand very little about the working of ETS.

¹⁵

On 29th May 2009, GBG will honour Jos Delbeke as a father of the EU ETS, at the GBE annual convention in Berlin: www.foes.de/veranstaltungen/adam-smith-preis/?lang=en.

The growing acceptance and importance of the new tool brought many advocates of MBI to adapt their priorities. They also had to take notice of other trends:

- On a political level, **green subsidies enjoyed growing popularity** and were presented as an alternative to the far less popular eco-taxes.
- Both internal and EU **pressure to reduce public debt made cutting down of perverse subsidies more attractive**, in particular to finance ministers across party lines.

In 2005, Green Budget Germany reacted to these developments by opening its political agenda to all these measures. With other NGOs and Green Politicians, we began to employ the term **Green Fiscal Reform to describe an ensemble of MBI measures**. We also felt it necessary to offer alternative instruments to make progress even when eco-taxes had come to a halt in most countries.

The resolution we presented at the 9th GCET in October 2007, organized by Green Budget Germany in Munich, probably can be seen as a good summary of the consensus the worldwide MBI debate had achieved – before the present crisis, of course. Of the 300 delegates from six continents and 50 countries, an impressive majority supported this line of thinking:

The scope of the entire global environment challenge is so immense that only by combining all existing instruments can we safeguard our diminishing chance of achieving a sustainable future without incurring enormous losses and costs. In particular, we will need to expand the use of market-based instruments (MBI) that have proven to be particularly powerful and efficient. MBI exist in many forms, the two most powerful being environmental taxation and emission trading.

Regulation – for a long time the backbone of environmental policy in many countries, as indeed it still is in some – has contributed to important environmental improvements. Regulation and MBIs acting as complementary policy tools have the potential to have a far greater global impact at lesser cost to the economy.

Over the last two decades, market-based instruments (MBI) have been increasingly implemented as they offer potential advantages like static and dynamic efficiency, and represent least-cost solutions which trigger and stimulate innovation. Furthermore, in many cases revenues can be raised and additional jobs created. By shifting the tax burden away from labour and onto natural resources, environmental taxes may also provide governments with a new source of revenue in the face of aging populations. MBI have made sustainable growth possible and even profitable for an economy.

Up until today, the potential benefits of MBI have not been exploited to the fullest extent possible, not even in the countries using them most. In some countries, they have not even been tested seriously. To sum up, we need both: using and correcting the power of the invisible hand by MBI, and the visible hand of government in the form of regulatory instruments. GCET 2007 has given ample evidence that without the potential of MBI to trigger innovation and efficiency throughout the economy, successful climate protection will be hardly feasible.¹⁶

In our meeting on March 29th, 2009 with high officials from the Czech Ministry of the Environment, the GBE Steering Committee has reconfirmed its firm support of this resolution.

The crisis leads to a second priority shift and a new definition of double dividend

The GCET resolution was passed when nobody – or only very few people – was thinking of a global economic crisis. As argued throughout this paper, the crisis forces us to rethink our priorities and reformulate the promise of double dividend.

¹⁶

www.worlddecotax.org/downloads/info/GCETResoEngFinal.pdf.

Another excellent summary of global consensus among progressive economists is the “OECD Framework for Effective and Efficient Environmental Policies”.

We also recommend: Andersen, Mikael Skou/Ekins, Paul (Eds.): Carbon-Energy Taxation – Lessons from Europe. Oxford University Press. Estimated publication date: September 2009.

Whatever use of green instruments we make, there will always be a double dividend in the sense that green revenues are the only revenues that do not only deliver fiscal returns, but welfare improvements for society through a better protection of the environment. All conventional taxes lead to negative allocative effects, the so-called excess burden of taxation. In contrast, green taxes always create an excess benefit of taxation.¹⁷

Exhibit 10) Each phase of MBI-evolution brought new double dividend aspects and different budget effects

Ecological Tax Reform (ETR – 70ies to 90ies)		Green Fiscal Reform (GFR – early 2000s)		Green Keynesianism Green Debt-Repayment	
Evolution of Double Dividend aspects					
Double Dividend, original version – Benefits from ecotaxes – Benefits from lower labour taxes		– Variety of green revenues – Variety of green signals – Variety of usages for new revenue/ reduced expenses		– Greener spending precedes counter-financing – Greener financing sold to public mainly on fiscal virtues	
Evolution of Budget effects					
⌘ More green taxes	No effect on expenditures!	⌘ More green taxes	⌘ More green projects	⌘ More green taxes	GREENER SPENDING!
– Less labour taxes		⌘ New revenues (ETS)	– Less bad subsidies	⌘ Other green revenues	
		– Less labour taxes	⌘ SURPLUS!		
Budget neutrality		Budget surplus to pay for debt reduction and green projects		Budget surplus used to counter-finance part of deficit spending	

In the present crisis, both causality and benefits of double dividend will undergo a redefinition:

- In the first two phases of MBI-evolution, environmental motives stood at the beginning of the debate. We knew that green taxes and other green instruments like ETS were equally beneficial for the ecology and the economy, but the majority of citizens didn't share this belief. So we had to find ways to convince a public with arguments outside of the environment.
- The political core of the Double Dividend Debate was to sell a non-green public green instruments over their non-green benefits.
- Still, the logic was a based on a priority of the green dividend. First we introduce green taxes, then we can spend the revenues for non-green purpose, like reducing payroll taxes and thereby creating or securing jobs.

In the crisis, it is just the other way round: The money has already been spent, or is going to be spent very soon, and no one has given much thought yet to counter-financing. **So in this new double dividend debate, the non-green dividend has to precede the green dividend.**

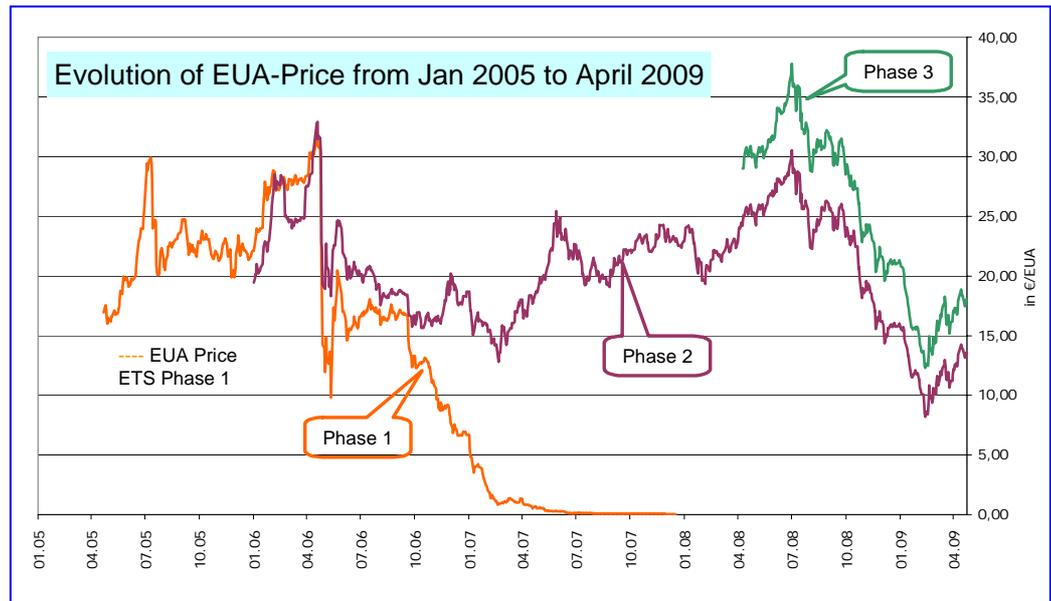
In the global competition of instruments, ETS seems to gain over ETR

¹⁷ See my paper: "Der Zusatznutzen einer Umweltsteuer" in Zeitschrift für Umweltpolitik, Heft 1/1985.

As mentioned before, a majority of MBI-advocates seem to share a slight preference for ETR over ETS. In the international competition of the two tools, the election of Obama as new US president as well as the global crisis **may tip the scales in favour of trading rather than taxing**. Some analysts suggest that some US lobbies are only faking support for eco-taxes, hoping thereby to stir up anti-tax emotion as to discredit the whole initiative and hurt ETS as well. On the other hand, demands from third world countries for equal allocation may support a feeling among Americans that it is perhaps **better to pay carbon taxes to Washington, D.C. than to buy carbon rights from Ouagadougou, Burkina Faso**.

Exhibit 11) Price changes in emission prices in the EU-ETS over 3 periods

Critics of emissions trading certainly found good arguments when looking at the second half of phase 1 (2005-2007) when rates dropped to zero. But this does not prove a general weakness of the ETS as such. It



only demonstrates to what degree in this first phase, European governments had successfully manipulated the allocation rules in their favour. Already during this time, the forward prices for the following phase reflected the expectation of more scarcity in Phases 2 and 3.

Another weakness in emission prices in relation to taxes are the ETS tends to reinforce price fluctuations, whereas ecotaxes can reduce them.

- Usually denominated in absolute values, eco-taxes are independent of changes in the net market prices of the taxed products. That makes them much better to calculate for consumers and investors. They reduce the volatility of gross market prices (i.e. prices after eco tax).
- In contrast, emission rights prices tend to reinforce the price volatility of the products that are directly or indirectly charged with emission trading. For instance, if an economic downturn weakens demand for electricity, both the base price for power as well as the price of emission rights may fall in parallel, thereby increasing volatility.

But advocates of economic instruments should see trading and taxing as rivals, but as beautiful twin sisters. Each of the two sisters has some virtues the other one does not possess, but both also share the fundamental virtues of being powerful and efficient. So if possible, one should marry both of them.

Exhibit 12) Relative price reductions on energy products were highest without ecotaxes

Vehicle	Price for a full tank in € ¹⁸		
	July 2008	February 2009	Saving
VW Golf	84	64	23%
Mercedes-Benz S 350	137	105	23%
LKW Actros, 40 tons	597	404	33%
Yacht 42 Sport HT, 13,4 m length	2238	1515	33%
Luxus-Liner "Aida-Diva"	1156500	383958	67%
Containership "Kuala Lumpur Express"	5786500	1921118	67%
Airbus A 380, 15.200 km destination	215140	60880	72%

Predictions are difficult, particularly when considering the future. In the long run, we believe a lot of factors speak for further positive development of both instruments:

- A gradual evolution of a global emission trading systems, providing a uniform minimum price of carbon.
- But at the same time we do not expect ecotaxes to disappear, but to also evolve gradually, in particular in those areas where ETS cannot or will not be applied.

Most members of Green Budget Europe agree that future ETS should not be grandfathered – i.e. usually given away to big companies As windfall profits – but should be auctioned. **The higher the share of auctioning in ETS, the closer the economic resemblances between ETS and ETR.**

Exhibit 13) Recent international developments seem to give comparative advantages to ETS

	Eco-taxes (ETR)	Emission trading (ETS)
Traditional economic arguments in early debate	<ul style="list-style-type: none"> ⚡ Least administrative burden ⚡ No new institutions needed ⚡ Price predictability for markets ⚡ Fine tuning for different groups possible ⚡ Stable tax element dampens net price fluctuations 	<ul style="list-style-type: none"> ⚡ Full quantity control for governments ⚡ Less resistance to introduction from stakeholders through grandfathering (free allocation)
More recent arguments, since Obama and global crisis	<ul style="list-style-type: none"> ⚡ Less "danger" of third world claiming part of revenue through per capita allocation — Blockade through EU unanimity rule — Watering down through too many exemptions 	<ul style="list-style-type: none"> — Reinforces net price fluctuations ⚡ Less opposition from lobbies ⚡ Less unpopular with general public (they're not taxes!) ⚡ Only instrument mentioned in Kyoto agreements ⚡ US debate seems to tend towards ETS
Possible implication	<ul style="list-style-type: none"> ⇒ Recent political changes (USA!) seem to favour ETS ⇒ ETS as "smallest common denominator of global climate control, defining an international carbon price minimum?" ⇒ ETR for countries that want to move faster or fine-tune ETS burdens? 	

There is no way to predict the outcome of this policy debate, but we feel it is wiser to be open for both possible outcomes. Also, eco-fiscalists should think twice before they criticize either of the two instruments in public. Talking bad about these instruments will probably be most welcome to and most abused by the enemies of either form of MBI. **Our policy at Green Budget Germany is quite simple: From either the two instruments, we take as much as we get.** This probably is also true for the entire portfolio of MBI instruments.

¹⁸ See: Impulse, April 2009, p. 10.

In the medium and long term, however, the very success of ETS may create new chances for ETR. The more ETS becomes a world wide system, the more we will come to see the same payoff we know from the evolution of the EU: Deepening versus widening. A wider ETS will make it more difficult to deepen and reinforce the system. **So progressive countries that want to move faster might have to use more ETR on a national or regional level.**

Whatever instrument policy makers prefer: Significant investments in novel structures of energy supply and transport will be required to comply with the need for dramatic reductions in greenhouse gas emissions to avoid dangerous anthropogenic interference with the climate system. Large-scale investments in public infrastructure have before been undertaken in periods of economic crisis and unemployment, and decision-makers in search of opportunities should not miss out the obvious linkages to be established between mitigation of climate change and curing the financial crisis.

Green Budget Europe calls for decision-makers in Europe to re-establish the carbon price signal in the market to provide the right signals for the investments to be undertaken in the next few years. While the conventional approach in periods of economic crisis has been to expense subsidies from the public purse, such approaches will in the market of energy be ineffective and costly for taxpayers if the fundamental price signals regarding the undesired carbon emissions are not at the same time 100% clear.

Green Budget Europe calls for decision-makers in Europe to re-establish the credibility of its climate policy package by placing a floor for the carbon price at a level of about 25€/tonne CO₂. Such a floor can be defined for the relevant fuels under the EU's Energy Taxation Directive, the revision of which is currently pending at the preparatory stage in the Commission, or it can be done by direct intervention in the ETS market. A credible floor under the carbon costs will be crucial for making the right decisions regarding future investments. Several member states have already put national carbon-energy taxes in place and Green Budget Europe also calls for more EU member states to unilaterally introduce carbon-energy taxes well above the joint minimum rates.

Green Budget Europe urges policy-makers to acknowledge the huge employment potential in accelerated climate, energy and transport policies - not only in the rhetoric of dinner speeches or as window dressing for economic crisis packages – but also by targeting low interest loans and subsidies for investors in these sectors. For critical infrastructure investments, in particular for trains and collective transport grids, high-speed lanes for decision-making are required too.

IV. MOVING FROM GREEN KEYNESIANISM TO CONFUCIAN OR ECO-SOCIAL CAPITALISM

Financial excess devoid of social responsibility, the loss of proportion by some bankers and executives – not all, but some – that's what led the world into this crisis. German Chancellor Angela Merkel

White, blue-eyed bankers have brought the world economy to its knees. Brazilian President Lula da Silva

For many politicians and business people, this is just a crisis like there have been others before. They are realizing that things have changed dramatically – but basically they seem to be dreaming of a fast return to the status quo ante. They have not realized that the world will not and cannot return to the failed ways of the last thirty or forty years.

We should make it very clear that regulation and appropriate taxation should bar a return to the virtual, speculative world of derivatives, toxic products and other fictional paper, peddled around in cryptic terms to innocent and ignorant investors by shifty operators ranging from investment banks to hedge-funds all the way to downright financial crooks. We cannot tolerate situations such as those of 2007 when, according to B.I.S. statistics, the outstanding notional amounts of over-the-counter derivatives reached 595.341 billion US dollars compared to a world GDP of just over 50 billion US dollars, i.e. almost factor 12.

We should also state very clearly that the eco-social market economy is based on the integration of the full environmental and social costs of any activity in prices, thereby leading to spontaneously sustainable production and consumption patterns. And that this is no longer a capitalist system, as it affords equal treatment – in terms of taxation, accounting, commercial and administrative law – to all three factors of production: i.e. natural resources, labour and capital. In practice the application of this new paradigm will bring about in few years and through the market the carbon-free revolution, which is the only way to solve the present triple crisis (economic, climate, social), in a drastic and final way.

Yannis Palaiocrassas, former EU Commissioner for the Environment

There will be no way out of this crisis unless we recognize the close connections between the financial-economic crisis and the climate crisis. Both are the result of unsustainable behaviour. If sustainability is defined as meeting present needs without compromising the ability of future generations to meet their needs, then in the years from 2006 to 2008, careless players in the financial world have undermined the very ability of their own industry to meet even their own needs within little more than a year or two.

The causes of the financial crises and the climate crises have many similarities:

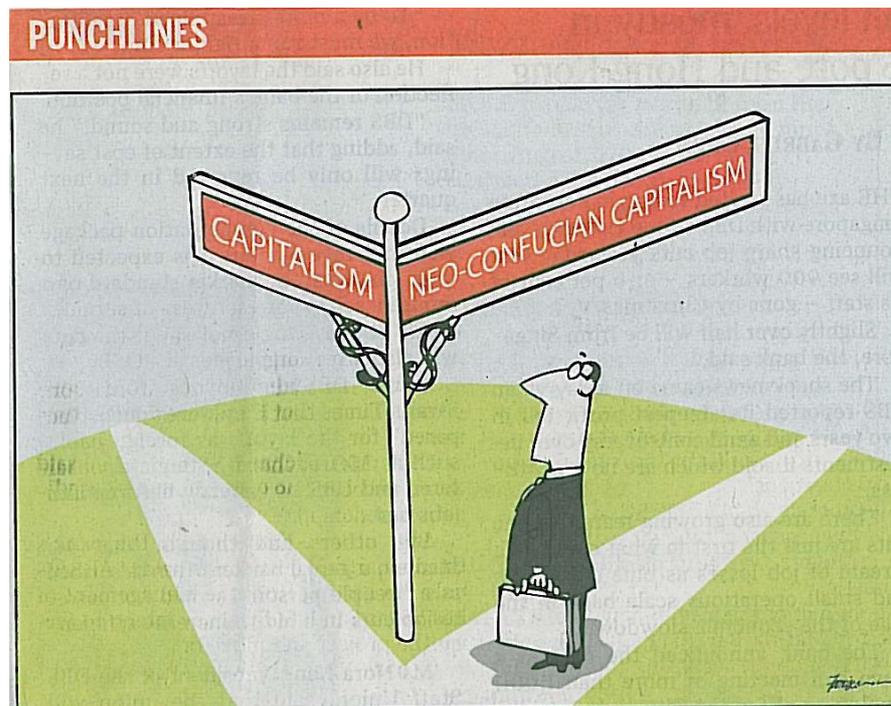
- In both cases, key resources were too cheap and regulation too weak.
- Investors and managers have been **much more part of the problem than part of the solution.**
- Short-sightedness and greed ruled the day, quarterly earnings counted more than long-term considerations. Warnings were neglected, the warners ridiculed as fun spoilers.
- Economic and political elites have shown the foresight of four-year-olds and failed gravely.

But perhaps the gravest aberrations of all: Most of the actors had lost any sense for the real sources of value in this world. The financial sector, with its incredible bonuses, multiples and exploding incomes and fortunes, had forgotten that **within the economy as a whole, it is the real economy where value creation takes place, not in the world of investment bankers, M&A-firms and hedge funds.**

In the economy as a whole, people tend to forget that yet so many machines, computers, factories, buildings and roads will be worthless and not produce any wealth unless the underlying sources of value creation, namely land, air, water and other resources of nature, are preserved and maintained so they can function properly.

So our ultimate objective must be to overcome cowboy capitalism and make the transition to a softer, more social and nature-respecting market system. In German, we call this **Ökologisch-Soziale Marktwirtschaft**. In Asia, people are talking about **Confucian Capitalism**. Whatever we call it, this is a vision that could mobilize people and resources around the world to work for a common purpose and to rebuild our beautiful planet.

Exhibit 14) World at a crossroad



ANNEX: OVERVIEW CHART AND LITERATURE

Exhibit 15) From the enthusiasm of the 1970ies to today’s world crisis: Two shifts of MBI-Priorities

	MBI-Priorities (classical view)	MBI-Priorities (modified, no crisis)	MBI-Priorities (modified by crisis)	Eco-unfriendly Policies
1	Ecological Tax Reform (ETR – 70ies to 90ies) - Large, ambitious ETR (across the board, systematic, several years...) - In some countries, also debate of ETS	Green Fiscal Reform (GFR – early 2000s) - ETS expansion - Cutting down of perverse subsidies - Selective ETR expansion (opportunity driven) - Road and city tolls	Green Keynesianism (NEW) - Green Public Purchasing (GPP) within Deficit Programs - Green Switching Subsidies (GSS) - Green Debt-Repayment (GDR) - Pre-announced ETR - cutting of perverse subsidies etc.	- As little Eco-Policy as possible - Voluntary measures - Leave it to the market (misinterpreted Coase Theorem)
2	- Cutting down of perverse subsidies - Limited green subsidies, e.g. for REN - Introducing ETS	- Limited green subsidies, e.g. for REN	- ETS expansion with more auctioning - Selective ETR expansion - VAT-rebates for top-runners (NEW)	- Weak regulation - Green Subsidies for sinners - Tax tampering in many ways
3	- VAT “tampering”	- Green regulation	- Green regulation, in particular to incite spending (NEW)	- ETS, but only if must be
4/NO	- Green regulation - Voluntary measures - Green subsidies for worst sinners	- Voluntary measures	- Voluntary measures - Unconditional tax cuts or subsidies	- Cutting of perverse subsidies - ETR? – never!
Back-ground	<i>Since 1970ies: Enthusiasm of eco tax rediscovery before introduction of ETS</i>	<i>Early 2000s.: Realities of European politics under unanimity vote and with switch to ETS</i>	<i>Since 2008: Radically changed conditions of world economic crisis</i>	<i>Since always: Typical preferences of eco-reactionaries</i>
Example	GBG until 2003/2004	GBG 2005-2008	GBG since 2008	George Bush
Priority Shifts				(Never ever)