## From Environmental Space to Ecological Debt - a European Perspective

Speech delivered by Dr. Martin Rocholl, Director of Friends of the Earth Europe Conference 'Globalisation, Ecological Debt, Climate Change

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## Campaigning on Ecological Debt in Europe?

Imagine vourself as a Friends of the Earth local group member somewhere in Europe. Saturday afternoon you are standing behind an information stall in the pedestrian area of your town, as a part of a campaign against a road building project.

One day your local groups receives a letter, asking you to join the global campaign on ecological debt. Well, you ask yourself, what can I do? If such a campaign shall be a success, it must amount to more than an exercise in theory. Campaigners have to convince the general public in Europe to accept the ecological debt accumulated towards the South.

That is not an easy task. Should you go to people and tell them: "Even though you did not realise it, over the years you have taken from people in the South and a pay-back is right and just". Obviously, this would not be a highly successful strategy.

How then would we raise the subject of ecological debt in Europe?

I believe, we need to bring the two important concepts of Friends of the Earth together: environmental space and ecological debt.

### **Environmental Space**

It is more than five years since Friends of the Earth Europe finished its 'Sustainable Europe' project, which outlined our vision for a sustainable society in Europe. The project introduced the concept of 'environmental space' which was a revolutionary step for the environmental movement in Europe at that time, because it combined environmental and equity issues.

Environmental Space is based on two principles:

- On the simple fact that Earth can only sustain a certain amount of pollution and use of resources. If we want to avoid a climate disaster, we can only put a certain amount of CO<sub>2</sub> into the air. If we want to preserve the forests, we can only fell a certain amount of timber. If we want future generations to have the same chances as we do, we have to reduce the use of non-renewable resources to the absolute minimum.
- The second principle is the equity principle: Every person in the world should have the same right to use resources of the Earth.

From these two principles one can calculate how much resource use is actually available for every person in the world. This, we call environmental **space**. In practice, environmental space is the total amount of energy, non-renewable resources, agricultural land and forests which each person can use without causing irreversible damage to the Earth.

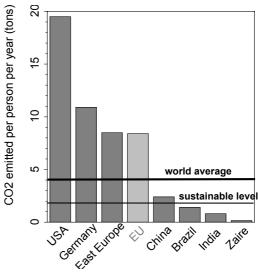
#### Basic assumptions to calculate environmental space:

- 1. Renewable resources can only be used to the extent that they can be replaced by nature.
- 2. Non-renewable resources should be used in a closed circle to minimise waste and the damaging impact of their extraction.
- 3. The amount of pollution must not be more than the biosphere can cope with.

Put into practice, environmental space is an enormous challenge for the industrial world. Let us look at some examples:

#### CO<sub>2</sub> emissions<sup>1</sup>

The average person in the world is currently producing approximately 4 tons of CO<sub>2</sub> per year. Climatologists tell us that we should reduce the overall emissions of CO2 by at least 50% to stabilise the world's climate. Taking population growth consideration, the sustainable level is about 1.7 tons CO<sub>2</sub> per person per Looking at current emissions of industrialised countries, we realise how far away we are from this aim: An average person in the USA produces almost 20 tons of CO<sub>2</sub> per year, an average European 8.



At the same time, developing countries still have some room to increase their  $CO_2$  emissions. This is an important message because, previously, our demands to save the world's climate were often misunderstood in the South (the so-called 'developing' world) as a trick to hinder these countries in their development. With the environmental space model, this is not the case. Both industrialised countries and 'developing' countries must develop towards a sustainable level. It is however important to notice that countries like China, Chile or Uruguay are already above the sustainable level, overusing their environmental space.

Looking at the per-capita CO2 emissions, one immediately sees how ridiculous the US demand is that insists developing countries should first join efforts to reduce CO2 before the US makes any international commitments.

Annual aluminium consumption per person (kg)

## For the use of non-renewable resources, the same calculations can be done.

Europeans, for example, use about 5 times more aluminium than people in the South (the so-called developing countries). North Americans use about 10 times more aluminium than what would be within the limits of environmental space.

## **Environmental Space: a radical message in Europe**

In essence, the environmental space concept asks people in the industrialised world to drastically reduce sustainable level

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their use of resources, thus leaving a fair share of environmental space to people in other continents. In Europe, the resource use would have to be reduced by 80%-90% within the next decades. This is a radical demand to make of our societies, which calls for fundamental changes in the economy and lifestyles.

We are often asked if that is possible. We strongly believe so: The technical and political options exist to provide the same amount of well being with a drastically reduced use of resources and thus a drastic reduction of the environmental problems. Household heating,

<sup>&</sup>lt;sup>1</sup> CO2 emissions or energy consumption (basically the same thing, as most energy is produced by burning fossil fuels) are a good example, because they correlate very much with environmental problems. Higher energy efficiency results in a reduction of environmental problems far beyond climate change (for example better air quality, reduced waste production, etc.).

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a major part of the energy consumption in Europe and North America, can be reduced by up to 90% simply by building houses more cleverly. I have seen houses myself, which do not need a heating system (or air conditioning) anymore, because they are extremely well insulated and harvest the energy from the sun. They are not more expensive to build.

More local production and consumption patterns instead of the - often useless - transport of products around Europe is another area where enormous efficiency gains could be made. Finally, long lasting products, which can be repaired, instead of throw-away products would drastically reduce resource demand. These are just a few examples where we could increase our resource efficiency simply by applying more intelligent technology and introducing small changes in lifestyle.

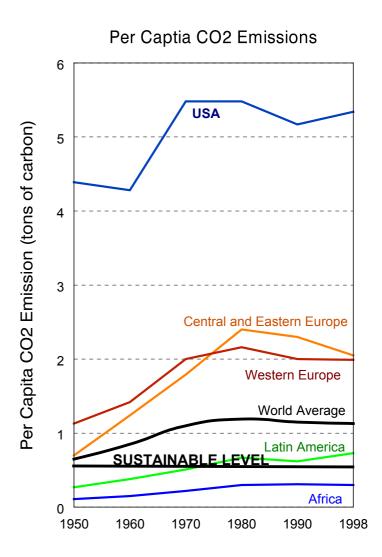
It will be the task of European groups to fight for the political frame-work (such as an ecological tax reform) which make these efficiency gains possible. The other challenge will be to move our societies away from their addiction to the advertisement driven overconsumption – a major cultural task.

FoEE's vision for a Sustainable Europe has a very positive message: it is possible to live a good life within the limits of environmental space! A life equally possible for all people on the Earth.

## Overuse of environmental space by the North

Looking at the per-capita CO2 emissions of different regions of the world, one can see that industrialised countries have been overusing their environmental space since at least 50 years. Today, in Europe every person is emitting about 5 times more CO2 than someone in Africa and almost 3 times more than in Latin America. US citizens produce 18 times more CO2 than Africans.<sup>2</sup>

Comparing Central and Eastern with Western Europe is very interesting: While producing about the same amount of CO2 emissions and therefore using about the same amount of energy per production of goods and services in Central and Eastern Europe (CEE) is much below the levels of Western Europe. This clearly shows that energy consumption and wealth do not correlate. It also points at the enormous efficiency gains possible in CEE. In the same way, nobody would say that Americans live twice as well as Europeans simply because they use more than twice the amount of energy.



<sup>&</sup>lt;sup>2</sup> The graph shows the per capita CO2 emissions from fossil fuel burning, cement manufacture and gas flaring (Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, Tennessee, USA and University of North Dakota, USA, July 2001). The sustainable level is an estimate, assuming that current CO2 emissions should be reduced by 50% in order to stabilise the world's climate.

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Latin America and China are already overusing their environmental space since several years, even though they are still very much below the world average. People in Africa, as well as Asia (without China) are still living within their environmental space<sup>3</sup>.

### **Beyond Environmental Space**

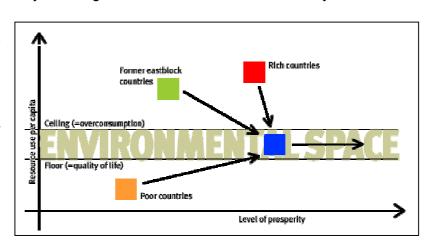
In Europe, we were quite proud of having developed the environmental space concept. Didn't we finally bring together the environmental and the equity question? We were therefore surprised that in other parts of the world, this concept was not greeted with equal enthusiasm. What were the reasons for that?

#### Distribution of environmental space within a country

For countries with high differences in wealth and income, calculating the per-capita environmental space makes less sense. In many countries in the South, the distribution of wealth is the actual question. While a small elite might totally overuse their environmental space, the majority of people may be using less resources than are necessary for survival.

For many people in the South, the question of the control of and power over resources is more important than calculating environmental space.

FoE groups in the South have added the concept of the bottom line, defining the minimum amount of resources that should be available for every person to live a dignified life. Environmental space therefore has upper and lower limits.



#### **Real Equity?**

The environmental space concept aims for every person in the world to use only as much of his/her environmental space as is possible without destroying the world. This implies that industrialised countries have to come down from a very high level of resource use to reach the sustainable level. It also means that developing countries can still use more resources but should not move above the ceiling defined by environmental space.

While this makes sense from an environmental point of view, it is actually a rather unjust concept, as it does not take into consideration that the North has made its wealth while over-consuming during the last decades. Even worse, the North will continue to overuse its environmental space for anther 50 years or so until we finally have reduced our resource consumption to sustainable levels (which is already a very optimistic future scenario).

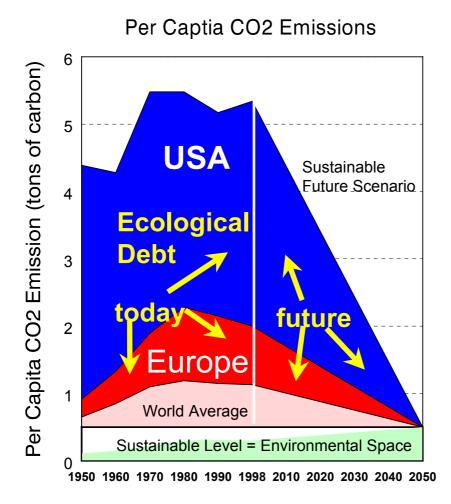
The reaction of the South therefore is obvious: Why can't we also overshoot in our use of environmental space for a while in order to create the same level of wealth for our people? While this is impossible from an ecological point of view (we would need 8 planets for that), it is a fully justified request from the perspective of the equity principle.

<sup>3</sup> The curve for China is comparable to that of Latin America but with higher growth rates in the last decade. The curve for the rest of Asia is comparable to Africa.

Per capita CO2 emissions of Benin were approximately 0.02 tonns of carbon in 1960, grew to 0.04 in 1980 and were 0.03 in 1998.

### **Ecological Debt**

The concept of ecological debt can be very helpful to overcome this dilemma. In our example, the ecological debt would be the overuse of the environmental space by the North – both in the past and in the future. Environmental debt would, for example, result



from the amount of CO2 which industrialised countries have put into the air and which is now causing global warming. Ecological debt can of course extended many other areas. It includes the environmental damage resulting from all kinds of resource over-use bγ North.

As the ecological debt is accumulated towards other people on the planet, it probably makes sense to define the world average as the line above which a country accumulates an environmental debt (dark areas in the graph).

## The Ecological Debt debate in Europe

How does this help us to conduct the ecological debt debate in Europe?

In Europe, the environmental movement succeeded in making the public aware of the importance of climate change as a threat to us all. Most people today will agree that something needs to be done about climate change and that therefore Europe needs to reduce its energy consumption.

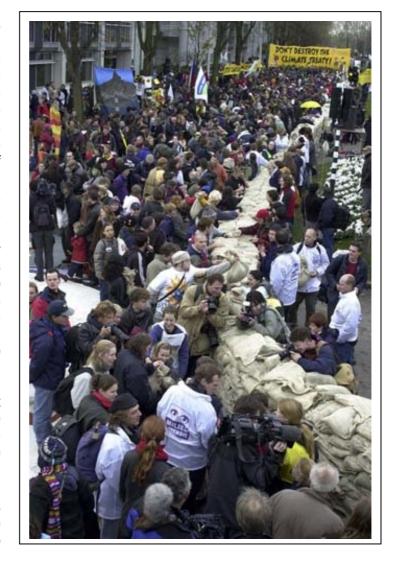
Friends of the Earth has been very much involved in bringing about this change in public opinion. Among many other activities, "The Dike" action in The Hague, during the UN Climate Negotiations (COP6), helped to make it clear to politicians that people in Europe are concerned and want to see action.

While being a slow and painful process, Europe has started to reduce its CO2 emissions. Currently, there is little hope that it will be done with the necessary speed to achieve sustainable levels within the next 50 years. Still, a start is made and people have accepted that a reduction of CO2 emissions is necessary.

However, people often argue that all this reduction will be useless, if people in the South want to use amounts of energy equal to that in the North thus far. If the South were to do that, global CO2 emissions would rise sharply and the reductions in industrialised countries would be eaten up very fast. There is no question that this would lead to an environmental disaster that would effect all parts of the world – including Europe where we can feel climate change already.

There is therefore a growing interest in Europe, to address this problem and to convince countries in the South not to overuse their environmental

space as we did in Europe for the past decades.



How can this be done? If we agree that all people have the same right to well being, we must find ways to improve the living conditions in the South without overusing environmental space. While there is some room for higher resource use in many Southern countries, this still means to aim for the highest possible resource efficiency as soon as possible.

The ecological debt should be paid by the North to allow the South to go on such a sustainable development path. How this payment of the ecological debt shall be done and how we make sure it is used to really improve the life of people will have to be worked out in detail by civil society in the South. A transfer of technologies for efficient resource use – which hopefully will be developed in the North to meet the environmental challenge – to the South at lowest or no cost is one option. Direct financial transfers to support sustainable development or a financial debt relief (which should happen for other reasons as well) are other ideas currently discussed.

If one calls these transfers from the North to the South the "payment of ecological debt", I think we could find a possibility to introduce the issue to the European public. I believe that Europeans would understand that it is also in their own interest that countries in the South do not repeat our development mistakes. It is essential to the planet's survival that the unsustainable development path of industrialised countries is not repeated by the rest of the world. If Europeans have an interest in that, they should accept their ecological debt and start making the necessary transfers to those countries, which so far have not overused their environmental space and hopefully will not do so in the future.

### **Towards Johannesburg**

Let me draw some conclusions for Europe for the upcoming World Summit for Sustainable Development.

#### Europe must accept the equity challenge!

European governments going to Johannesburg should accept 'environmental space' and 'ecological debt' as key concepts on which they base their actions. For Europe this means to show real action in reducing resource over-consumption. It also means increased financial commitments and a willingness to cancel financial debts of Southern countries in recognition of Europe's ecological debt.

#### **Europe is not sustainable!**

While having a rather progressive environmental legislation, key areas of European policies are still miles away from being sustainable. European transport policy still tries to accommodate ever-growing transport needs instead of finding ways to reduce transport in general (e.g. by encouraging local production and consumption cycles). We are waiting since almost 10 years for a European energy tax, which would be one of the economically most efficient ways to trigger energy efficiency and to create jobs. Europe's agricultural subsidies are still mostly directed towards high intensity agriculture with all its environmental and health problems.

A critical look and pressure from the rest of the world on the policies of the EU would be highly appreciated by European NGOs, as it will help us to fight for further reforms.

# There is no sustainable development without financial transfers to economically less developed regions.

Within the European Union (EU) it is common sense that economically less developed countries and regions (such as Portugal, Greece or East Germany) need financial support to cope with the EU's internal market. The EU spends over 30 Billion EURO per year on Structural and Cohesion funds to overcome economical disparities. This is done in order to give people in less developed regions a fairer footing in the EU's economy (which has no borders or tariffs) and to support environmental and infrastructure measures.

When it comes to the global economy, these facts seem to get forgotten easily. Developing countries are left alone to deal with the implications of economic globalisation. A key demand for the WSSD in Johannesburg therefore must be that richer countries increase their aid to poorer parts of the world.

One should however learn from the use of Structural and Cohesion Funds within the EU. We made the experience that without full involvement of civil society problems with corruption occur and funds are used unsustainably or are even wasted completely. Civil society will have to watch decision-makers in the South just as much as this needs to be done in the North.

#### Governments must take back power they lost to economic globalisation:

By now we have understood what sustainable development is – or better, what it should be. We really do not need to go to South Africa to understand what needs to be done. We know which political measures have to be taken, we are aware of what changes in consumption and production patterns are needed, and we have seen the development of alternative technologies over the years.

Still, we are not getting there. Sustainable development is little more than a vision. For many people and the environment, the situation is worse today than it was ten years ago. If the WSSD is to make sense, it needs to answer the question of why progress is so painfully slow.

If the politicians coming to South Africa are honest, they will have to admit that economic globalisation has decreased their possibilities to eliminate poverty, to introduce social

standards, and to protect the environment. The threat of companies investing elsewhere effectively prevents national governments from introducing social or environmental legislation. A downward-spiralling competition to offer the lowest taxes and best operating conditions for companies has reduced governments' abilities to finance social and environmental programmes. And while it is becoming more difficult to carry out sustainable policies on the national level, no international structures exist to take up the challenge.

All of this has been said many times before. Still, politicians have not addressed this impasse. The WSSD must be the moment for us to confront heads of state with the obstacles to sustainable development. This would definitely be more useful than more nice talk about sustainability.

The heads of state at the WSSD should answer questions about how they plan to reach meaningful global environmental and social agreements with the necessary enforcement mechanisms. They need to address the global power structures blocking the way, and set the necessary framework for the global economy. As a first step, they should ensure that Multilateral Environmental Agreements cannot be overruled by the WTO. The increasing and uncontrolled power of TNCs is another obstacle that needs to be addressed. Making TNCs legally accountable to citizens everywhere in the world and establishing rules for transparency are further first steps that heads of state must agree upon in South Africa.

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