



**Friends of
the Earth
Europe**

Transcript: Responsible or Irresponsible? Europe's resource use and its impacts

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DAY 2: 9th November

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Anders Dahlbeck – European Campaign Coordinator, ActionAid

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SESSION 1: Europe's land dependency and its impacts

Stephan Lutter - Researcher, Sustainable Europe Research Institute

Europe's Land Footprint

Presentation: http://www.foeeurope.org/sites/default/files/news/Lutter2_RoL_Land_use%5B1%5D.pdf

I am talking about the results of a study we did with FoE, about Europe's land footprint and demand. This study was carried out this year and quite recently published and the idea was to evaluate how big the land areas and in this case we measured it in hectares, are, which are embodied in the European imports and exports. If you remember yesterday the water embodied in products, virtual water; here it's about the land. It was also about looking at the relationship between those areas related to the imports in comparison to the land available within Europe. Ideas of such analyses are always to analyse which products or which sectors are the ones that have the biggest impact and also, these hotspots could then be points for first actions to be taken. It's also about looking at where this land demand is taking place, where does the land come from. And it

was imperative to have a comparison between at least two points in time, due to data availability we chose the years 1997 and 2004.

What about the methodology? It's quite technical but the methodology that we used here is called Environmentally Extended Multiregional Input-Output Analysis. Basically it's a monetary model where you have the so-called IO (Input-Output) tables, how trade is taking place within a country, between sectors, but by linking it with international trade sectors you have also the nexus between the different sectors in the different countries so you can really follow in monetary terms, and that's the issue, the trade relations between sectors and between countries. If you then add to this kind of data land use data, you can really use the advantage of having monetary collection and of having the land use data for tracing back to the final consumer where the original land was used to produce the product for final consumption.

The advantages are that it's across geographical borders, as I already said, and what we analysed here was really, what's the domestic consumption or the land used domestically, how much land is virtually exported, and how much is imported. Then, if you sum up the domestic consumption and the imports, take away the exports you really have how much land demand is related to consumption in a country.

What is really important here is that we are not weighing with productivity, so we are really looking at actual land demand. So if you are using a product less efficiently, you use more land. It's not as an ecological footprint but it's really looking at current and actual land demand, which then has to be compared to, for instance, biomass production and so forth. It's really important to have this in the context of the consumption of other resources, if yesterday we had a look at materials and water, here it would be land and materials and water, because we have to look at how much biomass is produced on this land and how much water is used to produce this biomass. So really having only this context all these data make sense and it is why we stress how important it is to have a comprehensive view on the type of resources.

Just a few words on the data sources: the monetary data, the I-O tables and bilateral trades, came from the so-called GTAP (Global Trade Analysis Project), including 113 countries and world regions. In terms of the land use data, we used the FAOSTATs from the UN, and here another really important point is that we focussed on agricultural land, on land used for grazing, and on forestry land use. So we have no industrial land use in this analysis. It's really about the agricultural land use, which also makes up the largest share. And here a point on data quality, there are a few issues regarding the land use data as well as the economic data, but still the data is at a level of quality which enables us to give a really decent result and bring out a good message.

So now we go into the figures. First, perhaps, if we look at the world map and current land use per capita in hectares. So what is important here? First look at the different colours. The greener the countries, the lower the per capita land use. The redder the countries, the higher the per capita land use. So now a comparison of different countries in the world. On the left side, you have five countries taken out of the top fifteen, so to speak, to give you an example. And here you see one of the top per capita land consumers is Australia, followed by Kazakhstan. Then further down you have Finland and Luxembourg. Then you have two different colours – orange for domestic, and blue for imports.

So how much land is appropriated elsewhere to produce the stuff this country is consuming (or the citizens of this country are consuming)? What is really important to say here is it's really about how productive is the land use in those countries, but also about what is the consumption style in those countries? Are they consuming a lot of meat products or dairy products, where a lot of land is used? Is a lot of fodder imported from other countries? So all this mixes up into this picture, and it's really important to know about the background of the specific country to be able to interpret these cases. So if you take for instance, the top-runner, Australia, here you have a combination between productivity because Australia has vast lands to be used for agriculture, but also of consumption habits because industrialised countries have high consumption levels, so more land is needed to produce the foods needed for consumption.

If we take the case of Kazakhstan (here Kazakhstan is quite a typical example for this group of countries), here productivity is extremely low. If we take the example of Finland it's 50/50, the relation between domestic land use and land use imports. Believe it or not, a large share of the imports come in the form of forestry products from Russia to Finland. Luxembourg is *the* example of high consumption values and at the same time having strong land constraints, so a very small land area but a high level of consumption, so here you see the share of

imports is very large in comparison to the whole land demand. Also look at the EU-27, where we have more-or-less a 50/50 relationship, and have a look at the country with the lowest land demand which is Bangladesh, with a 0.1 hectare per capita in comparison to 15 in Australia. So you see, the differences are huge.

So now we look at the trade balances in terms of land use, so how much is imported and how much is exported. If you take the imports as a positive value and subtract the exports, you get the trade balance. So the orange countries are the net importers, so in total more land is imported than exported, and the blue countries are the exporters. We can see here the top-runner net importer is the USA; also Japan is among the top five, Germany and the UK. If we take the EU-27 as a whole, we see the top-runner in the world. On the other hand we have the net exporters, again Australia, interestingly – so it's not only the highest per capita demand but also the highest exporter. We have here Canada, China, and Brazil, so countries with either a lot of land available or a lot of trade exports also going on.

Next slide - so here you have again a world map, where you can see where the largest amounts of land are being acquired to produce something which is then imported to the EU. The darker countries, the more land is used for the production of agricultural or forestry goods for the European market. The greener (and there are only a few countries) the more exports from the EU to those countries is taking place. So you can see this is really only the case in a few countries and in the majority land is used for the production of imports into the EU. The top five here are China, Russia, Brazil, Argentina and Mongolia. So if you take the example of China, a lot of land here is appropriated for grazing purposes, but also for forestry goods, which are then exported. In Russia the largest share of the land exported to Europe is via forestry products, which is 78%.

So now, to break it down more specifically, and we do this for all the countries analysed actually, we chose here the UK, so where, or for which product, is the largest share of land needed? We can see here first, that from 1997 to 2004, the land demand has increased, and we can see here, the largest share is going to grazing. So whenever meat production or dairy production is involved, we have of course, large demands of land for grazing. This is again, before the background of how is this production of meat or dairy products going on. In Europe, for instance, the dairy and meat industry is a lot more restricted and a lot more productive, with all the advantages and disadvantages compared to other countries with a vast range of grazing possibilities.

A second example is the forestry sector – here the main use of forestry products is the pulp and paper industry. So here this is really the footprint of the pulp and paper industry. Next slide. And then, what I think makes it very useful, this methodology, is that you really can start to analyse what are the sectors where land is used, where a lot of export is taking place and where that land is appropriated. You can really put it down to specific sectors, specific countries. If we look again at the UK example, and the impacts per capita, and this is now in 10^2 metres. To explain this matrix, the greener the box the lower, the redder the box the higher the impact, and then if you go into the rows, you have the crop products, wood products and so-forth.

We can see in the case of the UK in 2004, apparently the largest impact in terms of land demand was coming from animal products, followed by the crop products, followed by the service sector. In the service sector, you always have to bear in mind what products are feeding into the service sector because you're always looking at the whole production chain, really from the beginning to the final consumption. So you can see, those three sectors are the main land users.

If you then turn to the columns, the world regions, so where is which amount of land being used for UK consumption, you can see apparently in the case of crop products, the majority of the land use is taking place within Europe. If you look at the clothing, manufacturing or service sectors, here we have the Asian region, so perhaps this is not surprising, especially the clothing and manufacturing and also the service sector is very prominent in Asia, or in the UK market in relation to the Asian market. So as a whole you have then the lowest column, and you see that Europe and Asia are the biggest world regions where land is used to produce something which is then consumed in the UK.

Next slide. What are the conclusions of all this? I think it is a really comprehensive methodology and it's really important to always, when you look at those data, bear in mind it's actual land area – there's no weighing with productivity. So you have to compare it to the water use, to the production of biomass and so-forth. We can see here that the EU-27 imports almost 350 million hectares virtually from other regions in the world. It's geographically explicit – you can really break it down to the specific countries to where how much land is appropriated, and in this study we found out the highest imports come from China, Russia, and Brazil. And you

can also break it down to the sectoral level. We've just seen the UK example where agricultural and animal products are the main land uses but also the service sector. We have to bear in mind the data quality issues – there is still some homework to do I would say to improve this issue. And to stress this again, because you can't stress it enough, compare it with the other types of resources – materials, water, GHGs.

Anders Dahlbeck – European Campaign Coordinator, ActionAid

European threats to global Land Rights

Presentation:

http://www.foeeurope.org/sites/default/files/news/Dahlbeck_European_threats_to_global_Land_Rights%5B1%5D.pdf

I'm going to mainly present a few ideas to you at headline level. Some of the issues I will discuss now I know many people in the room are very knowledgeable about, so I'm going to outline them at headline level and then we can have more of an in-depth discussion afterwards about them. But first I should describe very briefly who I am and who I represent. My name is Anders Dahlbeck. I represent Action Aid. We're a development organisation, working primarily on issues of hunger and women's rights. So I'm not an environmentalist and I don't represent a scientific body. Our interest in land comes from the effects of land use and land dependency from Europe and other developed countries on people in developing countries. So Action Aid: we have about 50 offices around the world, and most of them are in the South, in poor, developing countries. So while I'm here as an European, talking mainly to a European audience, I'm really representing an organisation that represents the interests and realities of people living in poverty and who are directly affected by land shortage and other issues.

One of the things I want to discuss a little bit is land grabs and land deals. According to the International Land Coalition, about 227 million hectares have been leased by international investors in developing countries since 2001. This has been in a lot of different sectors, so agriculture, bioenergy, mining, tourism and lots of other things. I would like to stress that obviously this is a huge amount of area and some of these investments have been good. We need investments for development, but some of these investments have also been de facto land grabs.

I'm sure there are lots of opinions in the room as to what constitutes a land grab and when something is not a land grab. I'm not going to try and make a big academic definition here but some of the things that I think could make something a land grab would be the leasing of that land effectively leads to human rights violations. If there has been no prior consent of the people that actually lived on that land and that land will now be used by someone else. If there are no transparent contracts, that might mean that people who think they have sold their land might not actually receive very much for it and might not have understood the terms under which they sold or leased the land.

More specifically I want to talk about land grabs in the context of biofuels (I put bio in inverted commas) because some of you may agree, some of you may not agree. I would call it agro-fuels but so we speak a common language because some of you know it mainly as biofuels, I will call it biofuels. It is already quite a big driver of global land grabs. It's by no means the only one and it may not even be the biggest one. I often hear when I discuss this, why do you care so much about biofuels? It is already a major driver of land grabs around the globe and as we see later this is likely to increase. We also know that about 9% of transport fuels in the EU are going to come from so-called first generation biofuels by 2020. So by first generation, very roughly we're talking about biofuel crops that need land and compete with agricultural products, so that would be maize, wheat, sugarcane for ethanol, oil products such as jatropha, rapeseed maybe, and so on.

Currently, we're looking at roughly just over 3% in Europe, so we're going to see basically a tripling of demand from the EU for first-generation biofuels in Europe between now and 2020. This is according to the Renewable Energy National Action Plans, that EU member states submitted last year. In those Action Plans they also said they were going to import about 50% of bioethanol used in Europe and about 41% of biodiesel used in Europe by 2020. Coming back to the issue of land dependency, that means we as European consumers will be very dependent on land in other regions to satisfy our consumer needs by 2020.

However, the other side of it, the bit that isn't imported, isn't problem-free either. Biofuels production in Europe displaces not only but primarily agricultural production. So things that used to be grown in Europe, a classical example, which I know is oversimplified but which usually helps to understand, is if you have a piece of arable land on which you grow potatoes. All of a sudden you decide to grow biofuels instead; you're still going to need to grow potatoes somewhere. That production often moves outside of Europe in lots of different areas. It can be land that is already used for agriculture in certain places. In other places land is cleared, sometimes forests are cleared to create fertile land where these potatoes or whatever can be grown to satisfy the need for that and the demand for that which will still exist. This is called indirect land use change. I think a lot of people in this room are familiar with these dynamics so I'm not going to talk anymore about it, but obviously if someone didn't feel they got a good explanation ask questions when we get there.

So one thing that we do know is that indirect land use change results in additional carbon emissions for a number of reasons. One of them is that we are obviously not just creating land, so I was talking before of examples where forests are being cleared and being transformed into arable land. Without going into all the details, it is quite common sense that this will lead to increased carbon emissions. A study by IEEP (Institute for European Environmental Policy) has calculated that the extra carbon emissions just from indirect land use change will lead to the carbon emissions equivalent of having an extra 12-15 million cars on European roads by 2020. This is also part of the reason why I'm putting biofuels in inverted commas because the question is how "bio" it is and how environmentally-friendly it is. But in the context of the meeting we're having today, it's also interesting to really think about the fact that biofuels lead to additional land demand from outside Europe. On top of the already existing land demand that we have just for the normal biofuels, this kind of indirect land use change leads to even more pressure on land outside of Europe.

I discuss biofuels quite a lot with quite a few people, both in civil society, with journalists, with politicians and decision-makers, and very often people say: "why are we so worried as a development organisation about biofuels and landgrabs? This is a future problem, let's see what happens. Let's see if maybe it works out". But biofuels is already causing a lot of landgrabs, and remember we are using very, very little biofuels now in our transport fuels and we're going to use much, much more in the next ten years, unless the EU changes its policies and we change our consumption patterns.

I'll just give you one example, which is the example that we've been working on a lot as Action Aid. Also other NGOs here in Europe, such as Birdlife, have worked on it. But primarily lots of NGOs in Kenya have worked on this particular situation. It's a situation in a coastal region called Dakatcha in Kenya, where there's a woodland of about 15,000 hectares that have been leased to an Italian company who are going to produce biofuels, jatropha, for European consumption. In this woodland, you have about 20,000 people living. People there grew food, they grew maize, cassava, other crops that they ate and they also sold some of them, made money to maintain their own livelihoods and send their kids to school. It was also, and for us as a development organisation it was interesting for us to know, of great social importance as well – they buried a lot of their ancestors there and so on. The area was leased for 33 years by this Italian company. The area was leased by the council in Dakatcha, so not by the people living there but by the principality, without asking the people who actually lived in the area if they were ok with that.

Basically, a lot of action was taken against this by civil society (I'm not going to go through the whole history here) but the company started their production, they started clearing the land, a lot of the people were kicked off the land but through civil society they managed to stop this project and convince the local authorities that this was a bad idea and it was actually against the new constitution. Some of you may be familiar with the new developments in Kenya, where they have a new constitution since last year which also increases land rights. This is just one example and I'm very happy to tell you more about that example later in case any of you has questions if the example wasn't clear.

But we have loads more examples of where we're seeing landgrabs for biofuels. In Tanzania, Senegal, Brazil – just a few of the countries where we work, and obviously lots of other civil society organisations are aware of other cases in other countries. In 2010 we did a very rough estimate of how much extra land was going to be needed to meet European needs for biofuel by 2020. Now this is a very rough figure, and I don't want to discredit my own figure, but I'm just saying it's very hard to calculate very exact figures of how much land will be needed in developing countries to meet biofuels needed in Europe. But the ballpark we came up with in 2010 was 17.5 million hectares of land, of additional demand for land just for the EU's biofuels policies.

Now I told you about the Dakatcha case. We spent a lot of time on it. My colleagues in Kenya spent a lot of time mobilising people locally, in lobbying the authorities there. We put pressure here through the EU and some members of the European parliament were very helpful in raising awareness of this case. We did a lot of media work, and we put a lot of effort into just stopping one case of landgrabs for biofuels. That was a lot of effort from civil society. I really want to stress this because it's also something I also come up against when I discuss with decision-makers, because they often say: "Well, that's fine. You managed this bit. Where's the problem? If we have another landgrab, we can always stop it." But that was one case, and we see these cases happening all over the world all the time, and we can't stop them case by case.

And without going into any deeper discussion about that here, I think that also puts a lot of question marks around the sustainability criteria and around certification schemes. There are people in this room far more equipped than me to answer questions about that, but I just really want to emphasise that when it comes to landgrabs, and especially now in the context of biofuels we cannot go on a case by case basis – this is good, this is bad.

So what is the answer then? Well obviously in a lot of countries, in developing countries, we need better legislation. We need to make sure that a lot of countries just don't lease the land. Because very often, again without going into too much detail, the dynamic is that the national authorities or local authorities lease land, make money for that particular unit of authority but they don't particularly care about the people who are being kicked off their land. So obviously getting better national legislation is something that we need in developing countries, and it's certainly something that Action Aid and other NGOs are working a lot for.

But we can't ignore the drivers, what actually drives all this demand for land. That includes the EU's biofuels targets. And I know a lot of people don't like talking about biofuels targets because we're talking about renewable energy targets, but we do know that in the Renewable Energy National Action Plans, European countries have committed to having a total of 9% first-generation biofuels in transport fuel in 2020. That's the reality we're looking at. That's the reality we need to deal with when we're looking at landgrabs. So any other kind of different narrative about renewables really is window-dressing. We're talking about 9% first-generation biofuels by 2020.

So just by finishing off, and as I said we'll have lots more discussions about this later because I'm sure there are a lot of people here with strong opinions and ideas, but what can we do about this? There are a few things we can do immediately. The first thing we can do is to introduce robust indirect land use change (ILUC) factors. We need good ways of legislating and regulating ILUC. We were supposed to have this already last year, the European Commission has been dragging its feet with the pretence that it needs to look for more best available science that's out there on this, to make sure that we get this right. I think I would argue that there is an enormous amount of scientific evidence showing that there is such a thing as ILUC effect. It's all pointing towards the need for robust legislation that addresses ILUC, not raising GHG threshold, not doing other things that make it look as if the European Commission has taken action.

I think partially the problem is that this is the available science, and maybe that's not what some decision-makers want to hear, but while we're discussing this, landgrabs and environmental destruction keeps on happening. I think it's also fair to invest in biofuels, that we get this legislation right and as early as possible. If we are going to look at factors at the later stage, that will only be problematic for people who have already gone ahead and invested in biofuels. So let's get it right from the start, and then we can create an investment environment that can actually benefit European businesses that don't want to engage in landgrabs and who don't want to engage in environmental destruction.

It would also seem healthy to look again at the transport targets within the Renewable Energy Directive. I mean, I know that the Renewable Energy Directive had the best of intentions, and as Action Aid we support most of it but this particular 10% target for transport fuels has turned out not to be very workable, at least not very compatible with land rights and with food rights, which I haven't even mentioned here, and environmental rights. I think, although it might hurt the pride of many of us who like the Renewable Energy Directive, it would be helpful to bite the bullet and say we got this particular bit wrong. We can take corrective action, so I would say we do need to revise that sooner rather than later, and not try and pretend that we can keep on moving towards 9% first-generation biofuels in 2020, in any kind of sustainable manner.

Those are obviously the immediate actions. In the medium term I would say we also need a binding treaty on land rights. As you may know, FAO is developing volunteer guidelines on land tenure. I think we need something stronger than that, a binding treaty. And as I'm sure we discussed yesterday, and will continue to discuss, we also need to look at our consumption patterns and production methods if we are actually going to tackle our land dependency more broadly.

David Cardozo - Sobrevivencia (Friends of the Earth Paraguay)

Social and environmental impacts of monoculture of soy in Paraguay

Presentation: http://www.foeeurope.org/sites/default/files/news/Cardozo_2011-11_BRUSELAS_Soja_Paraguay%5B1%5D.pdf

I was asked to speak about the impact of soya production in Paraguay and how this has effects on the resources and especially how it creates social, environmental situations for the peasant and indigenous populations of Paraguay. For us it's an honour to be able to share our experience with you. I'm also very happy because I have some colleagues from my region who are also here in this conference, and it's a very big honour for me to know that our ambassador of Paraguay is in the Parliament and is also very committed to this issue.

Well here you can see in this picture a monoculture of soya in Paraguay. This type of image is very characteristic of the south and of the north of Paraguay. This model of agro-production is modifying the resource of land, biodiversity and of water. As a context of history of this type of production in Paraguay I must say that this type of practice began in the 1990's with the introduction of genetically-modified soya bean, which was illegally introduced from Brazil and Argentina. This produced an accelerated destruction of the native forests, forests which generate water in Paraguay. This forest system is very important. It's an Atlantic type of forest that we share with Argentina and Brazil. It covers an area which is very rich in biodiversity, especially in terms of the generation of drinking water.

So, as I said, this genetically-modified bean introduced in the 1990's and extended throughout most of the Paraguayan territory, mainly by foreign producers and I'm referring mainly to exploiters or producers who come from Brazil or Argentina, as well as from some German producers. This type of production of soya bean is based on the use of toxic elements. The seed that is used in Paraguay is the Monsanto seed, the RR seed, which is resistant to Round-up Ready, and the company that sells this seed and fertiliser is Monsanto.

Here we have an image of how the forest was altered, and how it quickly started growing and growing, and how this destruction of the forest expanded very quickly. In 2010 and 2011, we have 2,870,539 hectares of soya bean production, mainly transgenic soya. On the map, you can see Paraguay in the centre, but it's very important to remember that Paraguay is in the centre of a basin of silver. So all the negatives effects on the resource of land in Paraguay, Bolivia, Brazil, Argentina and Uruguay mainly affect this silver basin, which is an area where water is produced and many different cultures coexist: indigenous, peasant and rural communities coexist. So this river, this silver basin is very important.

We have a project in order to unite the Republic of the Soya. This would be a big region which is destined to the production of soya, transgenic soya and this would end with all the forest, with all the biodiversity, with the local populations, creating this, what we would call the Republic of Soya. Soya which is destined to the EU in order to feed pigs, cows, chickens etc. Some part of this soya is also exported to China. In 2009, 46,000,000 hectares were destined to the production of soya, which covers the area of Germany and Italy, just so you can have an idea of how large this area is, and how much impact this model of export and production has on the resource which is the land. This places Paraguay in 6th place of soya producers, and we are the 4th exporters of soya. This image is very interesting because we can see actually because we can see how much soya was exported mainly to Europe, so I'd like to focus on these numbers. In 2009, 36% of soya bean was exported to Europe, and this rose in 2010 up to 59% of export of soya bean to the EU. And there is a very interesting dynamic, for example, we stop exporting to Argentina but the export to Argentina is growing from other countries in the world.

Social and environmental impacts - well, in this image we can see a warehouse and we can see a church. The Paraguayan law says that all activity, that is very large in its extent, must comply with the laws that refer to land and population in Paraguay, and the laws on the earth say that all soya production must be protected by 100 metres surrounding the soya production by native vegetation, and that there must be a protection area between human settlements or human populations, schools and farms. Here we see that these laws are not being respected. This violation of the human and land rights is widely extended and the Paraguayan state does not have the capacity to control or to reduce these impacts. Since 2008, when the government changed, and when the civil society changed their perspective and we started to fight in favour of our rights, we are slowly, gradually defending our rights. These producers have much strength, therefore all of our work we are putting in order to change these practices is not enough. In Paraguay it's worse than Brazil, Bolivia, Costa Rica, Uruguay; we see a constant violation of environmental rights. Transgenic soya causes a displacement of the local populations, of peasants and of indigenous populations. It produces a death or an end to forests and to biodiversity.

Another very important consequence that we see in Paraguay is that soya bean is displacing farming to other areas. These are some of the negative effects that we see. We see that livestock is being displaced from the east to the west, where the water is very scarce. Also small family farming is being displaced and rural work is being displaced. In this image we can see how eastern Paraguay is being deforested. We have an image from 1946, where the first examples of forests being destroyed were due to use of wood or use of livestock in that area, mainly because they started raising cattle. Also in Paraguay we produce cattle to export the meat. This is an image of 1965/68, where most of the production of wood and cotton started destroying the forests in Paraguay. This is 1991, where we still had 50% of our native forests, and in 2002, where the soya entered the country with much strength we can see how small the areas are. The green areas are indigenous and peasant communities that maintain their forests as well as Paraguayan reserves. Now in Paraguay, only 2% of our forests are Atlantic forest, and they are tending to disappear due to the growth of this soya production.

Here we can see a land which is completely naked in the area of Iguazou. This used to be a large forest of the indigenous population. This is an ecological crime, a terrible ecological crime, of how this area has been completely deforested and how we have lost biodiversity and natural resources as well as land resources. This is a picture we took, I don't remember what year but it was in October, which is when we have most rain, so you can imagine how dead this land is.

So Monsanto and Cargill always have solutions: they give us synthetic fertilisers in order to continue producing in an artificial manner so we have a dependent type of production, depending on fungicides and insecticides and pesticides etc. Here we have an image of a peasant home which has been abandoned, which is completely surrounded by soya production. It's clear how the use of the land has changed. This is also a very important problem in Paraguay. We have schools that have been abandoned because they are completely invaded by soya. And this leads us to the interesting issue of corporate social responsibility. Here on the school, we have the logo of Cargill – these big companies have corporate social responsibility, so they put their little logo and they want to buy computers for the schools, and they want to paint the walls etc. but that's all they do. But they have to really have corporate social responsibility in order to minimise the impacts and to change their model of production.

Another example of intoxication of the population, of the territory and of the violation of the environmental legislation – which I already mentioned, officially we should have 100 metres surrounding the production plot by local vegetation. And this is a sports area, which should according to the law have at least five metres of local vegetation which has to be two metres high, so protecting the area where soya is produced and the area where sport is practiced. It's not the case. And here we have another case of an experimental field. This is a more recent picture. It's also transgenic soya bean and it's in the middle of a peasant community.

Regarding intoxication, well we know that agro-elements are highly toxic for humans and for the environment and they even cause some diseases such as cancer or leukaemia. We've had even some cases of death in Paraguay, especially some cases of children who have died. Moreover, these toxic elements create malformations in birth, and in 2007 a report was published showing that we had 57 malformations in a small community due to the presence of these toxic substances. Here you can see babies. We had the case of Silvano Talavera, this is a boy who died because he was sprayed with the fertilisers. He was just running some errands.

So we have to stop these criminal practices, we have to start fighting for our rights. Here we see how the peasant population is starting fighting for their rights. Moreover we have seen a mass exodus of the peasants. This soya production is displacing indigenous communities. These people develop their life and culture in the forest and they live in harmony with the forest. Now they are obliged to migrate to the cities. We can see that most of them are women. Who are the corporations in Paraguay? We have ADM, Cargill, which appropriates all soya beans produced here in Paraguay, and also Monsanto. These are the corporations that work in our country and they are making pressure for the liberalisation of other transgenic products like wheat, transgenic cotton.

Questions and Comments:

Q1. Mensah Todzro, Friends of the Earth Togo

I would like to share a concern with Anders who spoke about landgrabbing and I would like to underline that it is a new form of colonisation. But in my country the Chinese are mainly responsible for landgrabbing. That phenomenon has become a serious threat for food security but it is also a serious threat for the economic health of our countries. We must acknowledge that. And there are different phenomena – not only landgrabbing. There are people who live in these areas and these people are robbed of their land. The local communities are literally robbed of their resources so they have to leave, population groups are displaced, they look for housing elsewhere or there is a drift from the land – they go to cities. And people try to manage, to make ends meet – for example, they buy motorcycles and use them as taxis. Well, landgrabbing is seriously worsening the economic situation of my country, especially for the poorest population groups. We must help Africa strengthen food security and food sovereignty. We're speaking about legislation and regulation. We should go beyond legislation in our countries. We must use regional institutions such as Economic Community of West African States (ECOWAS), for example and other regional economic communities, institutions. They must be given more teeth and more capacity to counteract these phenomena, which are very harmful to the livelihood and lives of our populations. I just wanted to underline that these are extremely serious phenomena.

Q2. Unknown participant

I have a general question that addresses the land issue globally, with respect to Europe and its resources. Having worked on those issues, have you noticed and analysed whether the European agricultural policy 2020 is addressing these issues, and under what terms if it does, and to connect this with the soya bean presentation, as a biologist I would draw your attention on economic, social environmental dumping. So our imports in Europe can be associated with political dumping. So one of the issues in the European agricultural policy 2020 will be not only to find solutions to energetic problems, as we have seen this morning, but protein-rich substitutes for what soya bean represents as all the dumpings I mentioned before.

Q3. Rebecca Varghese, Traidcraft

Traidcraft is a UK-based development NGO. I just have one question for clarification to Stephan Lutter's presentation. You said that Europe import 350 million hectares - is that per annum? (A – Yes it is per annum).

I have a comment on Anders Dahlbeck's very interesting presentation on landgrabs. On the short- and medium-term solutions that you proposed, I would just like to add that the European Parliament, as well as development NGOs, needs to pay particular attention to the EU investment policy which is currently being discussed, and that's because the types of policies that the Commission is proposing and is negotiating with developing countries run the risk of restricting governments to prevent landgrabs or reversing landgrabs when they find that they have been taking place because of human rights violations.

Q4. Kriton Arsenis MEP

Chair's own questions and comments to panel. I think that we should all campaign together that landgrabbing of this kind, environmentally harmful practices, be it food or other crops or biofuel production could be viewed as a crime against humanity because in the end it is the same thing as if someone goes and kills as dictators do. This kills people as well as their livelihoods. Then we have legislation in the EU about the corporate social responsibility coming up, and this is something I would like to hear your comments on as well. I think this is something where the landgrabbing and the ILUC issue could be seriously raised as reporting requirements, maybe to have some other legislative tools there – a transparency directive, we had the idea of, opening up the accounts.

Then my last, but not least comment/question concerns the ILUC which I think is one of the most crucial issues. Could we use it as part of a co-signed directive? That is a directive which states what kind of involuntary requirements products imported into the EU area, what they should have, and now it has efficiency criteria but not that much more. Because I think that somehow we should incorporate the ILUC, not only the energy but on the food side as well, and then when it comes to a crop that is used for animal feeding, and then I don't know how we define landgrabbing but we should basically ban the import of the food to the EU market that is based on landgrabs. I know that there are certain difficulties. Because quite often we have the circulation that Company A grabbing the land and producing, Company B taking the next steps, and Company C selling to the European market, and this is contestable on the rules, but for the certain environmental and other criteria, it would be contesting it. I'm not saying that it would be easy, but that kind of concrete tools in the EU to grab the issue because to wait for the international convention, it's going to happen that fast.

A1. Stephan Lutter

Coming rather from the accounting side than the legislation side, I would just like to focus on the last two questions you raised. First, yes indeed, of course, we have to focus not only on the energy but also on the food imports and so forth. I think this is why our intention in this report which I presented today was really to be able to distinguish the different sectors where land use or land demand is occurring, to be then really able to go, "ok, here we really need to start with an intervention" or "these are the three main areas". Second, also yes to the CSR legislation. I think this would be a point to stress the landgrabbing or demand issue in this context, and I would really like to leave the other questions or comments for my colleagues because I think they're more experienced.

A2. Anders Dahlbeck

OK, I think there were some really good comments there and I don't know exactly how to respond to them because I think they speak for themselves, so thank you very much for explaining the situation in some parts of Africa. I think your intervention speaks for itself – I can only agree, and also say that of course today we're discussing Europe's role but China is a major driver of landgrabs internationally. I think we should acknowledge that but I think when we discuss the European debate it's very easy to hide behind people who are doing bad things in other parts of the world, and I think we should keep on focussing on what is happening in Europe, so the drivers we have for landgrabs. So I think it's an excellent intervention but just make sure we don't start blaming people who we can't influence, at least not here and now.

Regarding the agricultural policy, I'm not an expert but I'm not aware of any part of the CAP debate that would lead to less landgrabs but maybe there are people who are more equipped than me to answer that. I don't see any kind of positive signs there but there may be other people who know more. And again, to our colleague from Traidcraft, yes I can only agree – I think it's a very good point regarding investment policies and it's certainly something we need to look at, and we do.

Finally, regarding ILUC legislation, I agree that right now we have a process going on and we need to engage with it but I think it's not only about our biofuel imports. There are bigger discussions regarding biomass, bioenergy but also regarding food imports. Even if you look at things like where does the wood for our furniture come from? We need to think a little bit bigger, and I think it would be interesting to work up some sort of bigger proposal, but the reason I'm speaking about biofuels here and now, and ILUC because it's on the table, but I agree with you – we do need a more comprehensive approach.

A3. David Cardozo

I would like to add that if we are talking about social responsibility we could spend two days in this room. The issue of social corporate responsibility in my country – I don't know if this is the same model in Europe – but so far it does not satisfy the environmental needs of the communities. We would need to have social responsibility that tries to put an end to all products that destroy the land. I think that we must meet with civil society, the government and the EU as well in order to work to obtain policies which are more adequate, especially regarding the export of grain and we also need to have sustainability criteria. I know that in the EU for some years they already exist, but so far this hasn't been complied with.

The influence of corporations is very important. Corporations can influence politicians in the EU. We have some cases for example in Central America, in Costa Rica, the interaction of transgenic beans that are going to pineapples that are going to be exported. In Paraguay we have transgenic wheat which is illegal and it can pollute native wheat. We also have transgenic cotton. A colleague yesterday was talking about the production of cotton, mainly for clean manufacturers but we also have the threat that this filtrate into this work that some corporations are offering clean products, non-transgenic products. There's also a threat like the transgenic wheat used for the production of biofuels receives subsidies for other places like Africa. This is a problem and I think that we must work strongly to try to influence the policies of the EU because there is a high demand on producers and this high demand must be regulated. I think that Europe must produce its own food again.

Recently I heard that Europe could produce its own grazing but it stopped producing grazing to produce other things. So European producers were displaced and it had the same impact, maybe with lesser intensity because we are a developing country, we are a poor country where our state, even if it has the will, it doesn't have the technical and economic capacity to subsidise the demand, especially the demand of food, and the demand that is generated by climate change in Paraguay. In 2009, two departments were declared in food emergency due to climate change. This model that we have presented has generated changes in the climate - we have very heavy droughts where many seeds were lost, especially for food for the peasants and this produced a loss in the creation of food.

So we need to revise the policies, to review the policies of the EU and to create alliances and partnerships with this country in order to have a policy that can work in order to recover the land, to stop landgrabbing, which is a reality in our region and in the world. There are many lands that are being grabbed to produce food for other countries. Of course we have to feed the world, but we must do it taking into account what we can produce in our own countries.

SESSION 2: Tackling Europe's land dependency

Michael Warhurst - Resources and Consumption Programme Co-ordinator, Friends of the Earth Europe

Policies to tackle Europe's land dependency

Presentation: <http://www.foeeurope.org/sites/default/files/news/Warhurst-LandFootprint-Nov11%5B1%5D.pdf>

We all depend on land, both within Europe and outside of Europe. It's one of those obvious things but it's amazing how often it's been forgotten in environmental discussions and indeed other discussions over the years. So we in Europe have very high consumption levels, of things like meat, but also textiles and other areas, and it all leads to high land use and high land import. But land is surprisingly absent from the resources debate, and it's interesting – one of the techniques that is used a lot when you're looking at the impacts of a product, for example, is life-cycle assessment, and you come out with lots of different things about acidification and ozone depletion potential, but it doesn't come out and say how much land the product is responsible for – because land isn't viewed as an impact. So pollution is an impact and land use isn't, and I think that's a wrong position to be in. Land is very prominent in other debates: as we've heard this morning there's a big debate on landgrabbing and land rights; there's deforestation and habitat loss; indirect land use change and biofuels debate. And the great thing about land footprint, as has been explained by Stephan, is that it brings the issues together. It gives you that umbrella figure and then can help you develop land policies.

So why is land footprint useful for policy? Firstly, it clearly shows the scale of land use. It's not made more complex by trying to look at exactly how productive any individual bit of land is. So you can appreciate it with a country, you can find out the land use of a company – I'm sure Monsanto's land use would be an interesting analysis, or Cargill's - or one individual product, like an egg, for example. It's fairly easy to calculate because it's actually a real area of land and you've just got to go back through in a product supply chain – what's the product? How is it made? And you actually get the land quite easily. And obviously the more land that Europe uses, the less is available for other people and for biodiversity. And crucially, if we use an area of land for one thing, you know European soya, something else might need to move that was on the land before, whether it's a piece of biodiversity or whether it's a piece of food production. So there are always social and environmental impacts of land use. And land footprint provides the framework under which you can do the more detailed analysis of looking at which land, what social impacts?

This thing about Europe's trade balance – it's really fascinating to see the land coming into Europe and a very small amount of land going out of Europe as well, and the countries it's coming from. In the context of the current economic situation, it's worth saying that every time we're bringing in lots of land from China or Brazil, we're also going the other direction, exporting lots of money to China and Brazil to find that land. And this is true for all resource imports – they all imply that we are paying money out, and the interesting question is where are we getting that money? And can we afford it? And it's amazing that the issue of resource efficiency is not more closely aligned with the issue of how we make our economy, the finances of our economy, work better, through our balance of trade, for example.

We hear a lot about BRICS, and we've got Brazil, China, Russia in that top list there. We know the global population is increasing, quite rapidly, and levels of consumption per capita are increasing as the middle class expands in China and India. And this is a big part of the analysis that ties into the Resource Efficiency Roadmap, and indeed the work that World Business Council for Sustainable Development have done on 2050 scenarios. But what does this mean for land? It means we have increased meat consumption, particularly in India and China; we're increasing these bio-based energy sources; there's a lot of increased building on land in some countries; and then there's the use of biomass for products – the traditional ones like wood and textiles, and then newer ideas like bio-based plastics, which are usually marketed as green. What does this mean for Europe?

OK, so we have these facts – increasing population, increasing consumption, biodiversity under threat, climate is going to be a very interesting impact on land, as will water scarcity. So the question then is: Europe's land footprint in the future - should it go up, should it stay the same, or should it go down? That's your decision for now, and I think it's good to have a vote, so please put your hand up if you believe Europe's future land footprint should go up? OK, that it should stay the same? Or it should go down? OK, now that's always a good place to start a political discussion because if the land footprint should go down, then someone should do something about it. How can you do that? How can you reduce land footprint?

Clearly, there's stuff we can do with efficiency – obvious things like avoiding food waste, which is becoming quite a popular subject these days, and other waste down product supply chains; the stuff about maximising reuse and recycling – in the case of textiles it's very clear across Europe we could do an awful lot more to reuse and recycle textiles and get it out of the residual waste. But it's also clearly about changes in consumption patterns. We know that meat means land basically – if you want meat you're going to have to have a lot of land and it's interesting that the Resource Efficiency Roadmap actually states that we should be reducing Europe's meat consumption to WHO guidelines – now that's not a massive reduction in meat consumption, but it's a bit of one, and it's interesting to get the EC backing that position.

But our problem is that there are forces going in the other direction, trying to push to increase our land footprint. The first of these is this idea that we need to shift from fossil to bio, and obviously fossil fuels have massive problems but biofuels and related do not avoid problems. So biofuels has been a big debate, and biomass is just going on in the background, as big power stations are replacing some of their coal with biomass. If you look around the coast and ports of Europe, you see the building of quite a lot of power stations to burn wood – and they're at ports so that that wood can come in from overseas. So it's a big issue.

And there are two main things pushing this shift from fossil to bio. The first is the idea of policy, and obviously the biofuels targets are the clearest example of this, but there's also market, and in many ways this is the scariest aspect because if oil prices are high enough, then people will move to bio anyway. It doesn't matter

what other policy measure are in place – if the oil prices are high enough, the market will shift. And if the market shifts in a big way then you're talking about massive damage to the environment. What you can do is look at scenarios.

And this is a paper that was published a few months ago (*"Bioplastics in the context of competing demands for agricultural land in 2050"*, J.A. Colwill, E.I. Wright, S. Rahimifard and A.J. Clegg, *Int. J. Sustainable Engineering* (2011)) where they said: "OK, what would happen if we switched all plastic production to bio-based plastics?" And obviously they also looked at what was happening with the increase in biofuels; they looked at different ideas of productivity of land over the period up to 2050; different levels of consumption patterns; and they also made various assumptions to make it easier, for example, that you would not use biomass as a stationary energy source, basically you could use biofuels in vehicles because in vehicles you need high-energy fuels, but the idea of burning biomass in power stations was considered to be out of the question, in this analysis. No land being used for tobacco, and indeed textiles.

But anyway, they've taken these assumptions and this is one of their scenarios where they looked at mid-range productivity of land and high levels of consumption, for example, and they show, basically, it would be unfeasible to suggest the complete destruction of forest land to support food, fuel and plastics production provides a sustainable solution to meeting human needs. And this graph here looks at three consumption scenarios in this mid-range productivity: low consumption, medium consumption and high consumption. And that line is available crop land, then you have available crop and grazing land, and then you get all the forests as well up on the top line. So what this basically shows is if you're in the high consumption scenario and mid-productivity, basically all the forest is gone by 2050 because we're using it for food, liquid fuels and plastics. And you can see plastics aren't a huge part of it, but it makes a difference. So it's an example of using a land approach to see what that means. Onto the next slide.

Land footprint is only one of the top-level indicators. What we have been advocating, in this report, is having a small basket of indicators and this has basically been backed in the Resource Efficiency Roadmap, because by bringing in a few indicators, carbon footprint, water footprint and materials footprint, along with land, you get a very interesting and very informative analysis of what's going on. So I have an example from Austria, where GLOBAL 2000 (Friends of the Earth Austria) have been looking at eggs and these four indicators. And when you look at the soya that's coming in to feed the chickens that make the eggs – if you look at soya from South America versus soya from Europe, the land footprint actually comes out much the same, because as we've seen soya in Latin America is pretty intensive. But if you look at the carbon footprint, then Europe comes out much better than Latin America on carbon footprint. So even though we're talking about food from land, in that case, actually carbon footprint is telling us more than land footprint. And this is the argument for using this set of indicators.

But obviously sometimes you want to go deeper on land use as well. The next stage of analysis under land footprint could be looking at which land, where it is and that sort of issue. Indeed where it is is very much in the SERI study – looking at where the land is coming from, both countries and types of land, and you can also of course go wider on land use. And footprint is really looking at land use efficiency, but land use efficiency is not sufficient to deal with things such as biodiversity, pesticides, pollution and indeed the social aspects. And the classic dichotomy is, you might say, well we want to improve agricultural yields – shall we do this by basically making sure all agricultural land is in the hands of a few multinational companies, who've got really good management structure so they maximise yields, or do we want to make sure that thousands of farmers are able to have better practice and generate their own income. And obviously different industry groupings may have different views on that dichotomy.

If you look on the economics, on the next slide, we are in an economic crisis, and I think that in this context it is about convincing people across the political spectrum that it's worth taking action on these issues. I mean land is money. Growing pressure on land is showing up in higher land prices and in higher prices of products from land. If you look at inflation rates, I know the case in the UK, we have an amazingly high inflation rate of over 5% in a situation of almost no growth, and that inflation is being created by expensive imports of oil, but also food. So food prices are important there. The more we can manage our land import, the less money we export to get resources, because importing resources costs money. And excessive land consumption is risky. People are protesting against landgrabs. Climate and water stress is going to reduce available land, and land and water are becoming conflict flashpoints.

So what do we need to do? We need to finalise the footprints. We need to get the Commission, mainly, to finalise the footprint by carrying forward its decision to measure land, water, carbon and material use, rapidly agreeing exactly what we're going to measure. They need to standardise them. Some of them are already into the International Standards Organisation, but more could be done, and we need data collection, for example the trade analysis which is used for the land footprint work only goes up to 2004. We want to get that data being collected every year so we can do current data on what's happening.

But once we've worked out how to measure it, we need to get it into policy making. We need to discuss and agree targets for future direction of resource use for Europe, and land use is the perfect starting point because it is unarguable that our land footprint must go down. We need to integrate those into policy-making, impact assessment policies, renewable energy, bio-based economy – what does this mean for our land footprint? And we need to integrate into policies themselves, a toolkit for company footprints, integration into product policy, and into agriculture, energy and food policy. So, to conclude, we need to make our resource use more efficient, but we also need to reduce it. Land is a very important resource for biodiversity, people, food, fuel. We need to know how much we're using and work out how to reduce it. And land footprints are a key tool, and the other ones. They need to be standardised and used to measure European, national, company, product footprints and be part of impact assessment. Ultimately, we must reduce our land footprint, but the question is what's the target and how are we going to decide it?

Dr Paul Speight, Deputy-Head of Agriculture, Forests and Soil Unit, DG Environment:

I think it's been extremely interesting so far this morning and I'll try and give you some indications of what the Commission is trying to do to take this forwards and then we can discuss whether that's adequate or not. I think it's clear that land is an important resource and I want to stress what Michael has just come to at the end of his presentation. It's also a resource that is under stress and we are losing productive land because of climate change, because of water stress, because of loss of soil organic matter. So not only are we using very large quantities to grow large quantities, the actual resource itself is shrinking, effectively. I think the Roadmap does take a fairly big step forward on the notion of land as a resource. It's mainly focussed on European land, that's true, but if you look at it one way, if we clean up in our backyards, inevitably that will reduce the pressures that we exert on the rest of the world. So if we can improve what's happening on European land then that will come through in how we interact with the rest of the world.

I think that the absolute land-take is an important notion. I know it's referred to in the Roadmap as a serious indicator but I think it's also very important that we think about the quality of the land and the soil. What kinds of land, what kinds of soil are we taking? And that works two ways. For example, I would argue that there's no point considering a pastoral system of sheep-farming on a hill farm. Although it uses a lot of land per sheep, I would argue that that is a sustainable form of agriculture because you're using land that you can't plant crops on, it preserves biodiversity, and you are preserving a lot of CO₂ from not ploughing up that grassland. So it has to be a bit more sophisticated, even quite extensive systems, even when you look at the amount of land they use, they are still sustainable, and sheep-farming I would argue is one of them.

Still the absolute land-take is important. We have this no net land-take milestone in the Roadmap. Now I know we are always very cynical about 2050 milestones, probably because it's way beyond the political mandate of the people making the commitments, and even sometimes beyond our lifespans, but still this is not something we're going to be doing overnight. I think it gives us a good direction towards the kind of thing we should be looking at, and we do explain what sort of land-take we would need to get down to if we were to be working towards that 2050 milestone.

Three more important things. There will always be economic developments and there will always be a need for changes in how we use land, partly driven by social changes. In Europe, we're getting older, we're still divorcing a lot. All of this creates a lot of need for land. So if we are going to be able to fulfil those needs, then we need to create some space on the land that we have used before. This means decontaminating brown-field sites. If we don't start tackling some of our disused, industrialised land, then we'll never be able to respond to the societal and economic pressures without using yet more of our productive land. It's a sad fact that when we expand our cities, where do we put our cities? We put our cities on the best agricultural land. So when we allow urban sprawl, we sprawl onto the most productive land and that's pretty tragic.

And just two final points. I think this 2050 challenge is very helpful. It's true that people will act to the notion of 9 billion people by 2050 in very different ways. Some of the industrial corporations would say to you "well we could have something like in the US where we have some nice nature reserves and then everything else is highly intensively farmed to produce food. But maybe there are other models to get to that challenge, and of those several people have mentioned today is sustainable food. Sustainable food also has quite a strong profile in the Roadmap and with our communication promised and the issues around lifestyle and consumption patterns are pretty important if we're going to make that challenge without having to have every single bit of agricultural land in the EU look like Iowa, or somewhere like that. So I would argue that there are some pretty useful things in the Roadmap, a lot of it is green paper, communication-type initiatives but still I think it's a big step forward in what is and what has been quite a taboo area in European policy-making for some time. So hopefully we will make some significant progress.

Sirpa Pietikäinen, MEP (Chair)

Thank you very much Paul. I think that everyone understands that it is a taboo area and the Commission needs everyone's support to break the taboo. Talking about the Soil Directive and how everyone should be more proactive in putting the member states to responsibility, now this has been blocked but this is in no way excuse for inaction. We have to do things right this time because we don't have a lot of time to gamble. So I believe that either through the Resource Efficiency Roadmap or through any other means we should definitely raise the issue of the land footprint but this is also my personal opinion. I would like to give the floor to Bruna Engel, she's the aluminium expert of Friends of the Earth, Brazil.

Bruna Engel – Aluminium expert, Friends of the Earth Brazil

Bauxite mining and its impacts in the Amazon region

Presentation: http://www.foeeurope.org/sites/default/files/news/Engel_09.nov_Bruxelas%5B1%5D.pdf

I'm here to show you why aluminium because landgrabbing is not just about crops and cotton. To produce aluminium, you need to mine the bauxite so you need a lot of land, land that used to be used to preserve the water sources, preserve the lifestyle of local communities or to grow foods for the local markets. So, extraction of bauxite provokes a lot of impacts in the land, and I'd like to bring you to the context, to explain why land use. So we'll focus on bauxite mining but this is only the first step of the production of aluminium ingots. 80% of the reserves of bauxite are located in the Amazon region. So just to remind you, the Amazon has not only a lot of trees but there is a lot of biodiversity and social diversity and really, really huge quantity of sweet water. Bauxite production last year was 26 million tonnes or 5 million square metres. Brazil has the 5th largest reserve, which means 8 billion tonnes of bauxite, that's why bauxite mining is land use.

So here I have some pictures of how the region where they are mining used to be, and how it impacts the land because it is not just the site of mining. Because for mining, you have to clear the forest so we have deforestation but also you create slum areas, so you have erosion and water contamination that cause impacts on the land of course. This forest now doesn't have life, the animals just run away because of noise pollution at this mine. So after the mining of bauxite, you have to transport this ore to industry plant. When you have pipelines crossing the land, you have erosion. When you put the aluminium in powder in ships you have the air pollution. The fishermen just can't fish anymore here. And the lines of electricity to support the production of aluminium also destroy the land because you can't grow anything around these lines. And over there you have erosion in the river banks.

You have the community in the Amazon, you have indigenous, traditional communities who used to fish and they live by the riverbanks. So you have traffic of big ships in the river provoke this erosion in the banks. And every year they have to move their houses. And then you have overflow of red mud and you impact again the water, the land, the community so where they used to live, fish, play, now they can't because they don't have clean water. And in Amazon there is huge quantity of water, so for a community, a family, if they have to walk 5 km to get water it is really, really huge impact. They have to do this.

This region is Morokoro River, and the contamination of this river with red mud, it's frequently and maybe every year, and in the night the companies just put their trash in the river, every night, and nobody cares. And this is about contamination with caustic soda. It's really difficult to understand, for example why green buildings are green if you use aluminium because it is not a green chain and you should understand that it can't be green. It's impossible to be efficient, to be sustainable because they can't extract the bauxite if they don't clear the land, they don't displace people, they don't bribe the government to stop with the laws of the environment. They don't respect the legislation in Brazil – it's pretty common as in Portugal, Costa Rica and so on. Please decrease your consumption; please invest in research to substitute this commodity. We don't want this mining there. We don't want to produce food for you.

David: Bruna did show another type of landgrabbing and you see that these lands that are rich in biodiversity and in water sources and in culture, this is a problem that we are suffering in our region. Paraguay is also affected by mining of gold, as well as of other types of mineral. This kind of presentation that we bring here can raise awareness, especially for decision-making Europe. We think that having strong partnerships with consumers from Europe, in our case we are working with Friends of the Earth to try and raise awareness among consumers so that consumers can increase the pressure on their authorities. We do not want that this type of image repeats itself, especially when communities are affected. Bruna showed an accident with caustic soda, and in Paraguay we have many accidents of this type with the spraying of communities so that these communities abandon their traditional land and the land can be grabbed by companies.

Unfortunately we do not have much time to share our experiences of landgrabbing, and the ways these lands are grabbed. I'm sure that these lands can be affected by the agrarian reform. This is an area which gives life to the word "ecological value". Bruna showed us it is essential for life, I don't want to talk about environmental services because we also have some products with these kinds of compensations. We think the best that compensate is that lands are free and are managed with the people and by the people with support from the government and with support of organisations that can guard this recovery process and conservation process as well as looking for other economy mechanisms based on sustainability and techniques that do not damage the land. For some years we have been using the term territory, which is bigger than the concept of ecosystems because ecosystems are linked to each other. Our colleague from Lyon can tell us how these biological chains work. Currently these biological chains have many fragmentations which can lead to problems as we already saw on this panel. Personally, this meeting is very important for me. It is very important to show what is happening in our land and we are doing things that are not passive at all but we need a higher commitment from European consumers. Thank you very much.

Chair: Thank you David. Would Anders or Stephan like to take the floor?

Speaker 1: Yes, just two short comments because I think land is especially a kind of sophisticated resource. Because if we talk about resource productivity or the productivity of land, it's not only this possible negative feedback, or this boomerang of increasing our land consumption because we are more inefficient anyway. It's also that we have the negative feedback of all the Monsantos of using more pesticides, using more genetically-modified crops, where we then have the pollution, the erosion and so-forth. So it's really about reducing resource use and the resources we use, using them more sustainably. And related to that, I think it's really about consciousness and responsibility. It's really hard to understand for me, how it's possible that we have internally in the EU, our environmental regulations, and in other parts of the world, we're just not caring about it. And I think that's really a responsibility issue we have to tackle.

Speaker 2: I have a question actually, a question for Paul. Thank you very much for your presentation as well. I think it's important, the work that you do. I think it's also important that people in European services and decision-makers hear the stories of people like David and Bruna and understand what is happening on the ground. And I appreciate that it takes time for you to come here to meet us, and also to meet parts of civil society, scientists and so on. But obviously we are not the only people that you, and European services and decision-makers meet. You meet a lot of industry, who have very specific interests, that perhaps go against the interests and topics and issues that have been presented by people like David and Bruna. So I want to ask what are the arguments that industry could use that would, in a way, trump these kinds of arguments. Very often they do seem to come out on top at the end of discussions and lobbying sessions. So what arguments would you say trump this from industry?

Paul: Yes, well I think there's probably a few of them in the room actually. You might get some reactions live. But I think what you're talking about is different models of development. And certainly we get people who come to see us and they would say "our level of consumption is a basic human right worldwide" – I'm slightly joking – "to lots of cheap chicken, cheap aluminium and all the rest of it". Therefore, if you take that model worldwide, the European consumption model worldwide to 9 billion people, well that means lots of extremely intensively used fields with the pesticide and the fertiliser problems that we all know about, and not much space for any biodiversity or any alternative ways of life, so living in a city really. So you have that kind of a model, and then you have alternative models. And I think that's the question. What kind of development will we have? Because, for sure, if we just continue with the current situation, it seems that no matter how efficient we are, it seems hard to imagine that without further environmental damage.

Speaker 2: If I can add to that another argument frequently heard, is that if we don't do it also, we stay behind other nations and parts of the world. This is the most difficult argument that I will always hear. Of course everybody does his job. Our job as policy-makers is to keep to common sense and to see what really is for the benefit of people, and what is for the benefit of people in Europe cannot be truly for the benefit of the people of Europe if it makes harm elsewhere.

Chair: So I would like to open the floor for discussion.

Q1. Charles Berkow, policy advisor to the Green Party in the Swedish parliament

I'm working close to people who would like to be decision-makers, and who may be decision-makers after another election. I'm having some kind of policy issues in my mind, and I wonder if the people who've spoken would support something like a European tariff on imports of soya, or a European ban on imports of GMO soya, or a tax on imports of bauxite (or aluminium) or a tax on the material content of goods? And if you would support such things, could you help get your governments to support them?

Q2. Johannes Drielsmar, Euromines

I represent the mining companies operating here in Europe, including bauxite miners. And I wanted to respond to the last question, about what are the trumping arguments of industry? I think from our point of view, we don't come to try and trump these arguments. We're aware that there are problems around the world. A lot of the problems that we've heard today and yesterday relate to enforcement of laws, which is a problem, and even if we come up with standards or indicators or policies here in Europe, we're still faced with issue of how do we get them enforced? And I'm aware that that's also a problem in our backyard. In some of our member states enforcement is not up to scratch.

However I would argue that where we have had accidents in Europe, at least we do have some structure to react better perhaps to those accidents. What we see happening in the Amazon, is I guess not being addressed, whereas when we have a spill of red mud here in Europe, the whole community responds. So we don't come with trumping arguments but we do try and contribute to the balance, and that's where we say it's wrong, it's ethically wrong, it's scientifically wrong to say that we do not have these resources available in Europe. We may not be able to meet our entire demand today, but I want people to be aware that the EU spends less on exploration for mineral resources in its own backyard than Africa does. That should change. We should look at producing more for our own needs here, sustainably where we do have some chance to enforce our laws than to rely on practices of others in jurisdictions that we can't control. So these are the kind of balancing arguments we try to bring, and I want to make that point again. We are trying to contribute to a well-meaning balanced EU policy, we're not looking to trump. Thank you.

Q3. Robbie Blake, Friends of the Earth Europe

There was a question raised earlier in the day about the Common Agricultural Policy and how that can have an impact on some of these very important issues, especially on soya production. And I think we've got some very clear demands, and for us, I think we would say that the Common Agricultural Policy is a key opportunity to reduce the EU's dependence on soya, and to stop promoting the ever-

increasing expansion of soya. And this is a really unique opportunity to tackle that highly unsustainable path. So we're calling for farming methods in Europe that don't rely on soya, including crop rotations and increasing local production of proteins instead of relying on imports. I think that would certainly challenge the model of highly intensive factory-farms for our meat. But nevertheless I think this is a key opportunity. Well the thing is that agro-fuels (or biofuels) are also a key use of soya in Europe. The UK has the largest biofuel component that is made from imported soya, but even as a principle of indirect land use change shows, when Europe is using rapeseed and other biodiesels that is also indirectly encouraging the expansion of soya to replace the food oils that have been diverted through our own biofuel use. So agro-fuels are also a really important user of soya and a big impact, which we urgently need to tackle and reduce. Thank you.

Q4. Grace García, Friends of the Earth Costa Rica

There are several aspects that we should talk about on extractive industries in Latin America. I would like to focus on two aspects. One is the investment agreements that European countries have with countries in Latin America, to establish the importance of the extractive industries. The other, that I think is essential, is the violation of human rights in Latin America by extracting companies. Whatever the situation is for the countries in Latin America, when we have national legislation that develops measures against or in favour of these mining industries, it is very difficult when there are violations of human rights in our countries.

There is an anti-mining law in Costa Rica that has been passed recently against open gold extraction. This has been a very important law but it has also been a challenge for other countries in the Latin American region. I think that this also is included in the negotiation of the European Commission establishes when they develop bilateral agreement and when they develop free trade agreements with the Latin American region. They are doing the same with Africa and with Asia. This is one of the existing debates. Which are the elements that are being introduced and how European MPs have the responsibility in the development of this kind of agreement?

The other aspect I wanted to say is that tomorrow Friends of the Earth International is going to publish a report about the victims of the extractive industries of oil and mining. I think this is very important to mention this in this room. People come from social communities all over the world and they had to face extractive companies in order to defend their land against abuses of these companies and they were criminalised and some of them were even killed in their own countries. There is still impunity for the mining industries in our lands and in our countries of origin. I would like to invite you to [read this report 'Memory, truth and justice for heroes'](#), where all these fighters from all over the world are mentioned, who fight against these companies. I think it is important you know them and to know what they did in their countries. Thank you very much.

Michael Warhurst: Just a very quick point – I think it's very important to say it may be that the Commission is into getting good management of land in Europe, but I don't think there's any connection at all between how we manage land in Europe and how it is managed outside Europe, because we can do anything we like within Europe to some extent. We could have no agriculture and purely golf courses but it wouldn't help the rest of the world. If we carry on what we are doing now, we will have a massive increase in Europe's land footprint because we are moving into biofuels, we are moving into biomass, we are moving into bioplastics. All these things are happening. Some of them are actually being promoted. That is happening. So even if we don't change our meat consumption or all of those things, we're already very high, we're doing lots of things which will increase Europe's land footprint and the only way we can deal with that is by having policies to stop that increase, and we're doing that at the same time as countries like China and India are massively increasing things like meat consumption and are massively increasing their land footprint. So essentially, if everyone in the world wants to massively increase their land footprint, something is going to go wrong.

Bruna Engel: I'd like to reply to comments of Johannes Drielsmar. You say that you react when some contamination happens. I went to the region I'm talking about. The companies just don't react because they know what contamination is but they don't do anything because this invisible hand in the government doesn't allow the company to do something; because the companies in poor countries just don't care about this because they want a profit. When we try to resist there is some invisible hand that just kill people. Ok, thank you.

David Cardozos: I think our colleague from the Green Party said something very pertinent. If you go to Paraguay for example, and you say you are going to put a tax on the soya production, all the tractors will go and block the roads. In Paraguay they already spoke about a project of taxing the soya production. The agriculturalists disagree with this. They want to continue producing without paying taxes, neither on the production nor on the land. And it not only referred to soya, but also maize or canola or many other products. I think it's very interesting what you were mentioning - what we have to do is work with consultants and with parliament so that you can work at your different levels and so you can work with your colleagues or with other responsible people in Paraguay.

The soya production has to be changed but we also have to consider the political cost that this would have on the new government in Paraguay. We've had 35 years of a corrupt government that defended landgrabbing and now it seems that maybe it's changing. I think that having a clean government would be a first step but we have to continue working towards supporting Paraguay so that it can export healthy products, not only soya bean but many other products that Europe needs. Paraguay is very fertile land and we can produce many other products. So I think your proposal is very interesting. Also we have to support initiatives that we could introduce in our parliament in order to start implementing a tax on those who have produced and who have killed and who have destroyed our land without paying attention to the government.

SESSION 3: The Raw Materials Initiative: Responsible or irresponsible?

Michael Theurer, MEP (Chair)

Hello. Welcome everybody. I was asked by Friends of the Earth Europe to chair this meeting in the afternoon and the question we are focussing on is a very interesting and very crucial one. Our wealth in Europe is in a very far way dependent on raw materials but there is not only an economic wealth that prevails; there is also an ecological wealth, the beauty and the intactness of our whole Earth and world, and therefore we have a very distinguished panel up there. I'm happy that you are here and let us focus on the political and technical aspects of this very important question. If we talk about raw materials, we discuss it very often in the context of oil and gas, but raw materials are the basic material for high technology and industrial products, like rare earths and there the European Union and the industry in the EU is heavily dependent on imports. So it is 48% for copper, and in others it is more, and it's going up to 100% like for platinum, titanium or cobalt. So these raw materials are coming from other parts of the world, very often connected to mining. Just last week I had the opportunity to visit with the delegation of the Committee of Regional Development of French-Guyana in South America, and there we face severe problems with gold mining which is illegal, which affects with mercury disposals into the waters the Amerindian, Indo-Chine population.

Rein Nieland - Industrial Sectors Policy Officer, DG Trade

The Raw Materials Initiative

Presentation: http://www.foeeurope.org/sites/default/files/news/Rein_Nieland%5B1%5D.pdf

What I hope to explain to you today is the Raw Materials Initiative taken by the Commission already in 2008, guide you through the pitfalls that we see and then start our discussion. Raw materials are encountering high interest from all parties in European Parliament recently, which launched its own resolution with support from five committees, and it shows immediately it's a broad-ranging issue. And I hope that we can discuss most of the relevant aspects of raw materials. Raw materials – what is at stake? That was basically the introduction that I proposed to you.

Raw materials, as said by Michael, you could think about energy, agricultural inputs but we are focussing mostly in our discussions here on industrial raw materials, varying from metals to minerals to chemicals, not all of which we have a shortage of in Europe. If you think about construction materials, we don't have a shortage at all but if you think about high-tech metals like cobalt, titanium, platinum and rare earths we have

substantial dependencies from outside or to be imported here. This is important for our society in a wide range of issues. The jobs are obviously important, but if you look at the applications that need those types of input materials for - what I call emerging technologies, green technologies, things which we want to further build upon, we really depend on those materials of which there is critically shortage, so there is quite a lot at stake.

You can see for instance here, a picture of a car, where you can clearly see where those materials are required. But it's also about scrap of aluminium or of iron, which is abundantly available in the world but is not always coming to Europe, or able to come to our markets in order for us to continue producing the basis of those inputs. If you go to the next slide, summarising the situation, obviously as you know there is increasing population and an increased growth of area in emerging countries, all increasing their demand for those types of materials. It's not that there is a shortage in the world, as such. There is material available. It has to be exploited and put into trade.

There is an increasing demand for new technologies and what we see also is that there is a high interdependency of countries. There is hardly any economy in the world that is self-reliant, self-sufficient. And there are many countries, like the EU, that are dependent on raw materials. This is also not a North-South issue, because many countries in the South face the same experience. They simply have no access to the materials they would like to have to kick-start their development. There is also in the context of scarcity but also in the context of our current financial crisis, a clear tendency of protection. So countries with raw materials that are of interest to others, they protect their raw materials in order to build up their own downstream industry. And you see things such as export taxes, export quotas, licensing restrictions, all kinds of trade-related restrictions for the benefit of those countries, while those countries often benefit from access to our markets, so there is an imbalance also from that perspective.

It's not to say that export restrictions etc. are not allowed. There are clearly justifiable reasons why you can have environmental protection or infant industry protection. So there are policies allowed under the WTO that recognise all these elements but often, and this was the case for rare earths, which I call a wake-up call, is typically in this case, where China was blocking, banning the critical raw materials on which basis we couldn't produce our mobiles, our computers or applications in cars. So it was basically a wake-up call that started in 2006/7 I recall and that forced the Commission to launch a panel in the WTO against China, which for the first stage now, we have won because China was not using the right arguments. They used the argument of protection of the environment whereas internal consumption went up and up and up for the benefit of their local industries. We are aware that this is a long-term issue. It's not that we will solve these elements, getting a grip of the issue of sustainable supply in the world of critical raw materials will face a longer term.

Next slide you can see where the critical raw materials are coming from. Typically it is 50% from developing countries, obviously with its critical problems in relation to conflicts and lack of good governance, environmental concerns, labour rights etc. and that is something we have to address also in our policies. Then I have situated for you the problem as far as the Commission is concerned. Their reply or response to the concerns was the launching of the Raw Materials Initiative in 2008. You can see their aim is clearly to secure a sustainable supply of raw materials, but I think at that stage everyone understood you need an integrated approach, not a trade approach, not a development approach or an environmental approach only. It's more than that financial approach, transparency approach and that is basically what you will find back in the 3 pillars described. I will not go into pillar two and three. You can see them behind me, so pillar three is setting the framework conditions basically for fostering sustainable supply. I think you have discussed those things also yesterday. Also number three I will not go into: that's to boost resource efficiency and recycling. I will focus more on the first pillar which is about development and trade.

You can see on the development slide, getting the resource-rich countries up to speed in developing themselves further into the inclusive growth is one of the main elements in this pillar, obviously respecting the Millennium Goals, obviously respecting the Paris Declaration. I'm just back myself from four years' experience in a developing country where we see that the European Commission is putting a lot of development money on the table to get it right in developing countries. So recently, the EU, in its Africa joint strategy also highlighted that good governance and sound investment climate and sustainable and responsible management are the key elements for this strategy. It's not only Europe. If you see also Germany had recently concluded an agreement with Mongolia, basically with the same purpose in mind. If you look at development aid for Africa,

it strengthens basically the capacity for states in Africa to implement all kinds of legislation or guidelines, and the Commission also recently launched an initiative for country-to-country reporting.

So there are all kinds of elements on the table showing that there is a critical awareness that if you don't get it right in those countries, you'll never get it right. Then as a follow-up on this pillar, the first pillar, which is about sustainable access to raw materials, is that once those countries are developing in a responsible way also trade can pick up on that. And there the trade strategy basically kicks in. If you see what the EU trade policy is basically because the multilateral track is a very difficult track as most of you probably know in the context of the DOHOW rounds, so the bilateral tracks in that case are opened over the last two years. So you see free trade agreements opened discussions with countries where access to raw materials was limited by export restrictions and then varying, depending on which type of country we are discussing.

The emerging countries will be treated differently than developing countries. I think that is basically the toolbox of our trade policies, our free trade agreements with Africa, the economic partnership agreements but with a different approach to those countries, less tough approach I would say than we have negotiated with Korea recently. So there is a whole variety of approaches in the free trade agreements and to complement the development approach, and I think at the same time, and will conclude with that, so happening in the G20 where we try to have this debate please, that ok, raw materials should be available in view of the extremely quickly rising population. We have to do something otherwise we are in for a big crash or for more geopolitical problems. So addressing it in the G20 is already difficult but it is happening also last week. So that is basically the way that the Commission looks at it. Thank you.

Chair: Thank you very much Rein. We just heard the position of the Commission with the Raw Materials Initiative. The European Parliament has called for a coherent strategy for a long time. You now focus very much on the needs of the European industry. You also make clear the dependency. If you look at some critical raw materials, especially one country is there on the topic, that is China and officials of China announced that they will use for instance the rare earths as a political instrument. What does that mean? You mentioned what we discussed in parliament also, that in a coherent strategy, it has to be a partnership, a win-win situation with those countries that have the raw materials and us who need the raw materials. So the Commission announced to include research policy, partnership agreements, market assessments, development aspects into the Raw Material Policy of the European Commission. But that it is a topic which is politically heavily discussed, and there are some critical points, and therefore I am really glad that I can give now the panel to Rebecca Varghese Buchholz who is from Traidcraft, a UK-based fairtrade organisation established in the same year as the first direct election of the European Parliament in 1979. And you fight policy through trade, helping people in developing countries to transform their lives. And we are interested and keen to listen to your comments on the Raw Materials Initiative, please.

Rebecca Varghese Buchholz - Trade Policy Advisor, Traidcraft

Raw Materials Initiative – a development perspective

Presentation:

http://www.foeeurope.org/sites/default/files/news/Varghese%2520Buchholz_Raw_Materials_Raw_Deal_FOE%5B1%5D.pdf

Thank you very much. Traidcraft is part of a NGO coalition which has been monitoring the developments around the Raw Materials Initiative for the last couple of years. Thank you very much to the organisers for the invitation to present our view on the Raw Materials Initiative, which is a bit different to what the Commission has just presented. What I want to do today is just to raise a few concerns from a development perspective.

So what does the Raw Materials Initiative really mean for our development objectives? The Commission has already shown this slide, so that's really just looking at the critical raw mineral materials, and we can see that these are largely in developing countries. But if you would map the future potential, actually the map would have many, many more dots in developing countries, and especially in Africa because Africa today is actually quite a minor player in terms of exports of minerals and metals, but it has 30% of the world's reserves of 60 important minerals and metals. So crucially important in the future.

Our first concern is really that while developing countries are extremely rich in resources, they consume much less. On average, a European consumer uses about three times more than an Asian and four times as much as an African. Given the obvious physical limits on our global raw materials consumption, the way we manage these competing demands has important consequences for development. Asia and Africa, the population definitely has to increase their resource consumption to increase their living standards. The flip-side of course, is that the EU has to reduce in order to make space for those populations. Unfortunately, in our view, the Raw Materials Initiative fails on that front, because while it proposes strategies around recycling and efficient use, it doesn't at all address demand as a driver of raw material consumption. And I'm going to look at the very heavy emphasis on securing access to raw materials abroad, and through trade policy, and in our view, Pillar One, while discussing development sides which we had already mentioned, actually has a much bigger emphasis on trade and that is also reflected if you look at the document. There are pages and pages on how trade can be used to secure access, and only one page on development.

Our second concern is that the trade policy which is being proposed in the Raw Materials Initiative risks to undermine the benefits of resource-rich countries. These resources can of course be an extremely important development tool for countries to generate revenue, develop industries, create employment, as was the case for example in Botswana with the diamond industry or Norway with the oil industry, but whether these countries benefit from natural resources is determined really by a range of factors, including trade and investment policy. Pillar one as already explained, recommends that raw materials markets globally are fully liberalised and the Commission are pushing both at the bilateral level, but also at the multilateral level, at the WTO for these policies. The problem we have really, with these types of policies, we think this will perpetuate an already unacceptable situation. Looking at a quote of the Finance Minister in relation to negotiations, he said that we should not be part of trade agreements which perpetuate the current situation where the developing countries on the one hand remain the suppliers of raw materials at prices which we do not determine, and on the other side stay dependent on finished goods from the industrialised world. And this view is also very much reflected in the African Union's mining vision, which has stated very clearly that African countries have not really benefited from their resources in the past.

Now whilst partly you can blame domestic governance issues, one reason why they have not benefitted is because of the way the global mining value chain is structured, where countries are stuck as raw materials exporters rather than exporting processed goods higher up the value chain and often absorbing very little revenue from the mining concessions that are often run by foreign companies. Another issue from a development perspective is of course employment generation, and if you look at the purely extractive side of raw materials it contributes very little towards employment. For example, looking at Peru, the mining sector contributes 70% of export earnings but only 1% of employment. So what we would like the Commission to do is to promote a trade policy which allows countries to move away from being purely raw materials exporters and move up the value chain.

Now, in our view, one way of doing so is to protect the resource sectors by, for example, imposing export restrictions which will help the domestic industry to access their own domestic raw materials and develop processing capacity. As a result of which, the economy can diversify more, which can generate more revenue and more employment. Similarly, looking at investment policy, what we want the Commission to do is to allow countries to use performance requirements. Now, performance requirements are very important determinants as to whether countries benefit from foreign investment coming in, or not. For example, looking at performance requirements which require a foreign company coming in to transfer technology. Now that technology can then be used to develop processing capacity in the country itself. Often because of the high cost they cannot do that so that's a crucial policy that we would like the Commission to include in their investment policy. Unfortunately, in our view, they are very much insisting on the removal of both of these things – trade restrictions and performance requirements.

So essentially for us the Raw Materials Initiative (to be a bit provocative) represents to us a resource-grab. Countries will remain stuck as raw materials exporters, supplying cheap raw materials to EU businesses. My third and final concern is that while EU companies, and to some extent us as consumers here benefit greatly from the system, the high development costs which are associated with mining are really borne by governments and communities in resource-rich countries. Why do I say that? Benefits are often absorbed by foreign investors running these mining concessions. Investment contracts are often drafted in favour of mining companies. Just to give you a few examples: Zambia, which has one of the richest copper deposits in the

world, after privatising their copper industry and following advice from international law firms based in the EU, set their royalty rates at 0.6%. What does that really mean? That in a year where 2 billion dollar profits were generated in the copper sector, they only made a meagre 12 million dollars in revenue. Or take another example from the northern part of Zimbabwe, the mining firm generated about 12 million dollars in sales, and what did the government get? 18,000 dollars - very little. This is of course made even worse by the fact that about 150 million dollars a year is lost through capital flight.

Now a lot of people will respond: “ok, capital flight: corrupt government” etc., but actually an EITI (Extractive Industries Transparency Initiative) study shows that 60% of this capital flight is because of transferred pricing, and transferred pricing happens of course in global value chains run by transnational corporations. And just to give you the other side of the picture, mining firms have been really recording steady profits over the last ten years. Just looking at 2010, the ten biggest companies in the world reported a total profit of 144.7 billion dollars. Obviously the balance is very much tipped towards foreign companies who run these mining concessions.

On the other side of the coin is that the environmental and social costs associated with mining have clearly been outsourced to developing countries. As we all know, communities are displaced to make way for mining sites, labour conditions are often in gross violation of human rights standards, mining uses an enormous amount of water often leading to a depletion of water sources or to pollution of those, and they also lead to disastrous amounts of environmental pollution. Just giving you an example of bauxite mining, which is basically aluminium – one of the largest users of aluminium is actually the food packaging industry – now every two tonnes of bauxite mining produces about a tonne of toxic waste. Unfortunately a lot of the clean-up costs associated with this kind of pollution are not borne by the companies that are responsible for that. That’s why I really tried to make the point that the balance is tipped in favour of western companies and EU companies when they operate abroad.

To conclude my presentation, to come back to the title of the session, “is the RMI responsible or irresponsible”, the first important thing to note is that our responsibility needs to include these resources and benefits, as well as the costs associated with mining for these raw materials needs to be shared much more equally. From that perspective, I think that the Raw Materials Initiative is actually quite an irresponsible policy proposal because it does not sufficiently address the drivers of our dependency, which will only lead to greater inequality and possible conflict as the race for scarce resources intensifies. It risks to undermine the benefits associated with that wealth, and externalises the cost to developing countries. We would like the Commission to revise the Raw Materials Initiative, taking into account the above points but also specifically allowing for the right to use restrictions much more widely than is currently being recognised in the current draft and promote an investment policy that allows countries to use performance requirements such as technological transfers, capital controls to stem the outflow of capital and put binding obligations on EU investors to comply with environmental laws and respect international human rights. Thank you.

Chair: Thank you very much Rebecca for that overview on really crucial points. Allow me a personal comment because when I had the opportunity in 2010 to visit Zambian copper minefields, I can confirm what you said. And non-governmental organisations like the Catholic Church and workers’ associations, they confirmed what you just said. We also realised there that the Zambians complained that during the financial economic crisis, western firms pulled out this invested in Zambia, so they were urgently looking for other investors, and they found the Chinese. And when we were sitting there with the NGOs minus miner-workers, made us aware that when miners were striking on the Chinese company, the Chinese shot some of these miners, so we have a lot of aspects to discuss later in the deeper exchange with you. But first of that I would like to give way to Erik Rydberg from Groupe de Recherche pour une Stratégie économique alternative (GRESEA), also founded in 1978 by developing country activists, trade unionists and academics. And as far as I’m informed, you will give us an even deeper insight in what is going on in the mining spectrum. Thank you very much and the floor is yours.

Erik Rydberg - Secretary General, GRESEA

Raw Materials Initiative – Responsible or Irresponsible?

Presentation: http://www.foeeurope.org/sites/default/files/news/Rydberg_ppER11FoErmi%5B1%5D.pdf

Thank you. I thought I would be at least a bit provocative because others just did that. You have others like the Corporate Europe Observatory, the Seattle to Brussels Network in France, you can find on the web very easily a very good critique of the driving forces and objectives behind the RMI-plus. I call it RMI-plus because we have the 2008 RMI and then we have this year in February, RMI-plus. So no need to rehash that, but just to set the scene, this is a reproduction of what the Corporate Europe Observatory published in its newsletter in June, and it just shows how consensus was built by the German Industrial Federation. The central line is very interesting because you have a same point of view of state and the industry world, and then it goes up to the top of the EU. We did a small research as a finishing touch and we asked the Commission to have the list of members of the Raw Materials Supply Group, and this is an extract, and you see they have quite a few NGOs there. I think there are 32 organisations that are known as NGOs, and there are 16 that are evidently corporate submarines. There are only two clear-cut NGOs, Friends of the Earth and the World Wildlife Fund.

But let's go to some semiotics of the RMI-plus document (it's a rather long document) but what we did was just to check out the frequency of a few words. You can see here that "market" appears 165 times in this fine document, "transparency" 38, "supply" 34, "investment" or "investors" 27, consumers" 17, "access" 12, "competitiveness" 8, "citizens" 2. So this in a sense encapsulates the line of thinking. In this long document I've just singled out one perhaps, tell-tale sentence that I think encapsulates the whole document: "securing supplies of raw materials is essentially the task of companies and the role of public authorities is to ensure the right framework conditions to allow companies to carry out this task". It's worth looking at twice because this is clearly some strange wording. You have companies, as some alien, unidentified flying objects, flag-bearers of a great task, securing the supply of raw materials; and then you have public authorities, the State or the people, only there to give them a helping hand. Our great task is to assist them in their great task. This frameworking is the ultimate crap, and I'll come back to that very soon.

So what I'll turn to now, is perhaps, a few blind-spots in this document and in this line of thinking. So the question is how do you framework with some efficiency in order to obtain unrestricted, unlimited exports of raw materials. Well the usual way is by the use of force. This is an extract from an article just published by Ann Garrison, just reminding us that Canada is the mining superpower and the US is the military superpower, and both need each other. Because the military industry needs raw materials, the crucial things we've heard about, and the Canadians are mining. Just to add that France has four military bases in Africa. Japan and Canada just opened this year two military bases. Could also be good to remind that Africa has no military presence in Europe or anywhere else in the west. Nor does China, by the way. But that was just said in passing. There are other blind-spots I think, which are of greater importance.

The seat I'm occupying here, for this short ten minutes was originally meant for the ACP secretary, representing the old, mainly African colonies of the great powers of Europe, lately bulldozed by the latter to accept economic partnerships, which is somewhat a framework for the continued exploitation of Africa, which is the great task of the companies, remember. Well the ACP secretary, who is not here, of the third world, is I think the other blind-spot of this line of frameworking because you won't find usually in the discussions, (not very often – we heard it from Traidcraft here) the goals that the Third World have been demanding since 1955 to get a good price for its resources. They're not asking the market to give them good prices. Also to get rule over its only colony without outside interference, or share in foreign companies' foreign corporate profits, obtain redress for colonial exploitation and enjoy a state-to-state level playing field. These are some of the classical grievances.

I don't know if anyone of you has heard about the NNN? Or NAM? Or Belgrade? Well NNN stands for the NAM news network, NAM stands for the Non Aligned Movement (and that's 120 countries), and Belgrade where they celebrated their 50th anniversary in September. I don't think it made the headlines. So coming to the last message, is an extract, this thing refers to what I call the ultimate trap because this is what the NAM movement proclaimed at its 14th summit, which is reminded that genuine independence goes with the illumination of foreign monopolies and assuming control over natural resources and exploiting them for the benefit of their people. This is a refusal to let the markets rule over public policies. This is a refusal of this sea-change, or I call it climate change that enshrines the markets as the absolute arbiter, leaving the nations to squeak at more transparency and regulative measures. This is what I'm sorry to say quite a few NGOs and other civil society outfits accept also as their great task. I for one would like to see more references to what

the organised Third World is demanding when we speak about them because that's where the raw materials are, right? Thank you.

Chair: Thank you very much Erik for your statement. And you mentioned just in one half-sentence a very important fact, that the high degree of concentration in raw materials in mining markets, if I'm rightly informed the BHP Billiton, Vale and Rio Tinto, only three firms, account for more than 60% of the market, especially in some kinds of raw materials. We have there a very narrow oligopoly, and that is something we have to discuss also if we discuss market structure. Now I'm honoured and happy that we have two more panellists taking part in the discussion. Welcome with me, Isabelle Ramdoo, from the European Centre for Development Policy Management, an independent foundation which was established in 1986 in order to monitor and support development cooperation between the EU, and the African, Caribbean and Pacific countries (ACP).

Joining for the panel discussion:

Isabelle Ramdoo, Trade and Economic Development Policy Officer, ECDPM:

Thanks very much. I have five minutes I think, and I will make two points. Maybe just to take the discussion a little bit further because we've heard a lot about (you know, the title of this session is whether the Raw Materials Initiative is responsible or not), we've heard a lot about the not. And I'd like to add two things because for me the issue of the RMI being responsible, we have to ask the question, for whom? Is it for the EU? Which I think is absolutely a legitimate policy for European companies. Is it the responsibility of the Commission to make sure its own companies have access to raw materials to make jobs, competitiveness. But on the other side of the coin we also have developing countries. So we've heard a lot about the responsibility of this initiative to developing countries. Two points here.

First, if we want this RMI to be responsible, I guess it's very important to have a differentiated approach vis-à-vis the developing countries themselves. I think it was last week, Commissioner De Gucht made an interesting speech in Rome, where he clearly said that EU was ready (and I'm very happy that Rein mentioned it earlier that export restrictions and policies are accepted), so he said that the EU was ready to accept a degree of differentiation and asymmetry in trade associations, very good news, allowing the EU to take into account the level of development, economic development of its partners. Now, differentiation between what the EU asks from developing countries, and in the case of the poorest developing countries, differentiation in the time and extent of commitment expected from them. So I think the need for differentiation has been echoed in previous presentations from developing countries, especially from Africa.

We've heard about the IPAS. Many have criticised the IPAS, and in particular the request of the Commission to eliminate export taxes, saying that this will limit their policy space to take domestic measures, to use resources for their own development. So I would just focus on that issue of export taxes because that is one of the key elements, one of the key bones-of-contention that the IPAS negotiations linked to the RMI.

Export taxes are important for two main reasons. First, it's an important source of government revenue because a lot of those African countries have a weak domestic tax base, so the government revenue aspect is extremely important. And the second aspect (and Rebecca mentioned it very clearly), it's a policy instrument that can be used to foster industrial development, and to give the nascent downstream industries a competitive edge against foreign investors. Well, whether or not export taxes are good for development, I think is another debate, and I'm not 100% convinced that export taxes are the right instrument to sustain fiscal policy because we have seen that the capacity of mobilising resources out of export/extraction is much more from the profits of the companies, from the money that is flying out of the country. So export taxes are an instrument, maybe not especially.

I think that in the context of raw materials, the fact that a lot of those resources are bound through contracts, much of the export taxes actually don't get paid because measures are junked. So it might not be the best instrument but it is one policy instrument, and if this is used as a short-term, temporary instrument, and very important should be sequenced by complementary economic reform so that countries don't become dependent on the taxes, that could definitely be used as a lever to some genuine and legitimate economic goals. So I think it's very important to also distinguish between the differing types of developing countries out there. You have two kinds of developing countries exporting raw materials. We have the key suppliers, those

that were shown in the map earlier, the key suppliers of critical raw materials, those that have the capacity to affect the price because of their dominant position, like China – 97% of exports of rare earths; and the second one, which are those countries that are not big players but are extremely dependent on raw materials, and for whom that is the bread-and-butter.

We have to differentiate between those that can affect the market and distort the market, and those for whom it is very important, they are extremely dependent, they don't influence the price or market but they are extremely dependent for their production and for their exports. And there in the trade agreements that EU is signing with all those countries, this is something that should be clearly demarcated. I don't think we should have one strait-jacket policy "remove export taxes", it's really a case-by-case basis, and that has been highlighted.

And my second point, goes a little bit beyond the RMI where I think there are two or three DGs in Europe working on it, it is extremely important if we want the RMI to be responsible, to have policy coherence with what development is doing, what I've seen the transparency directive is doing, what the market is doing, what the environment is doing, to make sure there is no disconnect between that first pillar which is the outreach pillar, the one that affects developing countries. (I don't think pillars two and three have impacts on developing countries). To make sure that there is complementarity, coherence and coordination.

I'll just take maybe two examples. Sometimes in the field of trade conflict with development, for instance, you see Europe is a great supporter of budget support to help countries with their spending. On the other hand, what you hear in the IPAs negotiation, 80% of trade, remove your export duties, remove your export taxes. That is the basic government revenue. So there is a little bit of disconnect somewhere. Second thing, when you look at development support, and when you look at EDF, you cannot impose on developing countries what are the priorities we have to tell you. But there is also a disconnect, when here on the trade side, you hear raw material is the priority, we need it for value-addition, we need it for industrialisation. It is a big governance aspect but in the support of the industry itself it just doesn't reflect. So I think it's very important for all these to be reflected in a coherent way because otherwise, I mean priorities remain priorities, it will always be trade priorities, never get out of the trade debate on export taxes, industrialisation if this is not also taken care of and technical systems developed with government assistance and money support. Thank you.

Koen Warmenbol – Policy Officer Natural Resources, 11.11.11:

I just wanted to raise one question, and I think it's the central question in this debate. Also link it with Rio+20 and resource use. And that is: will RMI contribute to the transition to a green economy, to the more development part of growth, and more development in the North and in the South? Does it? Well, I think, on the one hand it does. Because there is a very clear charter of RMI on the more efficient use of natural resources, recycling, more investments and research and development for new technologies for the new age, and to reduce European dependency on extraction of raw materials. So it's opening debate and its broadening debate on that crucial issue of European action that leads to a more sustainable world. Now looking to the south, on the other hand, I think RMI has big contradictions whether it will contribute to that transition to sustainable development in the South. You have some elements in the RMI that I think are very interesting, also the need of more transparency. Many of the elements that have been mentioned by Rebecca and Isabelle are taken up by RMI, also the need of transfer of technology, of taking account much more of environmental requirements for the production, to look for much more sustainable production in the South, and I think especially the importance of the European Parliament elements who could make RMI as an instrument, tool for more sustainable development in the south. But we also have the impression that much more attention is paid on just the question of access of European enterprises to those raw materials, and much more importance is given to opening markets, of eliminating all kinds of export restrictions and so facilitating access of European enterprises to raw materials. And then the question is what will that contribution be of that kind of tools to sustainable development in the South. We also believe that those countries have the right to use those tools like capital controls, performance requirements and export restrictions, just to move much more forward in sustainable development, reducing drastically environmental impacts, generating much more opportunities for new employment for domestic industries. So we believe that aspect on the South dimension of raw materials are big imbalances, and that's I think the main task for redirecting the RMI, if we want it really used as an instrument for transition to new economy. Thank you.

Q1. Charles Berkow, policy advisor to the Green Party in the Swedish parliament

I would just like to bring up an element that in fact has hardly been mentioned in these two days, and it doesn't seem to be on the agenda for the rest of this afternoon either. And that's pillar two in this RMI: increasing extraction within the EU. This is not unproblematic, from our point of view. We were visited by a group of Sami reindeer herders whose migration routes risk being very hardly impacted by mining concessions, places where people want to do prospecting and things. And we're quite concerned actually that the EU has given some signals about allowing extraction in Nature 2000 areas. For me it doesn't really make sense, and I would just like to put that on the table. Please don't go too hard on sacrificing biodiversity in Nature 2000 to exploitation. And if you'd like to comment on that I'd be happy, or if the person from the Commission, but otherwise I just put it on the table.

Q2. Magda Stoczkiewicz, Friends of the Earth Europe

I have one question following what Charles said, and it's not Nature 2000 but also Arctic, that becomes now a place where we want to mine and extract as much as possible. It's a very fragile ecosystem and a very fragile part of the world. We haven't been there yet, and is it a prospect to go there? Is the EU supporting it? And what considerations there are? And the second question is about, I think someone mentioned here, the issue about transparency of royalties and revenues, the negotiating power of the countries. I think we all know quite well that many of the countries, they don't necessarily have the power themselves, the capacity themselves to negotiate hard with companies. I would say some of them have equal negotiation powers as George Papandreou when he was summoned to Cannes. But the issue is once they negotiate with the agreement between the company and the country about how much the country would get, and very often these royalties are kept secret. The Commission in its CSR strategy communication recently is suggesting it is going into the need to report on this and the transparency of it. Of course the extractive companies are going to outcry that this is not possible and it would diminish their competitiveness advantage. But how strong the EU will be in this issue of transparency of royalties and negotiating power is actually being revealed.

Q3. My name is Ivan Lukas, Prague Global Policy Institute

I work at a think-tank based in Czech Republic. My question is related to the issue of investment versus trade. Zambia has been mentioned twice at least in the panel, and I myself have done a bit of research recently, spent some time in the country on the political economy of resource curses. So in other words, without implication of the presence of extractives for the economy, in terms of diversification of the economy moving up high added-value corruption and environmental damage. One of the key lessons which I brought with me was that anybody that I spoke to, whether it was people from the government, people from NGOs, local associations, local businesses, they were basically complaining that the key problem for them is the lack of investment into secondary industries, i.e. secondary to extractive industries, investment which would basically promote the building of forward-backward linkages which don't lead to the promotion of high added-value production in the country. Now what they were also saying was China and India are faring much better in this respect. They could see on one hand, China, India importing resources but also investing in, for instance, Zambia.

But the criticism from the people in Zambia was that the EU basically only trades, it doesn't really invest in those sectors which I mentioned. So, for all stakeholders I talked to in the country, this was a key problem. They pushed forward the argument even further, saying that if Europe basically carries on this kind of approach towards Zambia and other African countries, Europe may very well find itself one day with no contracts for the import of raw materials because most of it will flow increasingly eastwards as opposed to northwards. This is because they see the approach of China and India as much fairer because they don't only trade but they also invest in those sectors. And again, when I look at the RMI, I'm not quite sure that I see the Commission appreciates the role of responsible investment in the sectors which I mentioned. Second question, which I would have the representative Director-General shed more light on – what mechanisms are established which would ensure that the DG trade really consults with other DGs, and stakeholders in the EU when formulating RMIs and next steps? So that it is not only the concerns of EU companies which are addressed, but also the concerns of countries which are rich in resources.

Q4. Unico van Kooten, Dutch Waste Management Association

I think a very positive element of the RMI is the third pillar, where Europe looks at its own potential. Where can we be responsible on our own? It's concerning resource efficiency and using waste more as a resource. And this goes hand-in-hand with the implementation of currently available European waste law on the table. And that's my question. What are we going to do about the still 18 landfill sites in Europe which are not really doing what has been agreed on the European level, that is to decrease the amount of useful resources that are landfilled, and to recycle and reuse more of this potential new resource. Because waste law is fairly old law and it has to be implemented. So it looks like an agreement on a European level doesn't have the same meaning as it has on a national level. Now of course I don't want to go into examples like Greece etc. but as for the financial and monetary issues linked to Greece, it is a shame if there is landfilling and violation of waste law. At the moment they have only one legal landfill site and no recycling capacity. And I'm just wondering: when are we going to implement European law on this matter?

Q5. Tom Harrison, European Concrete Platform, University of Dundee

I have no problem at all with resource-rich countries getting a fair price for their products but this proposal that EU policy should be to transfer our European intellectual property and jobs from Europe to countries, perhaps the panel could explain how the EU can sell that idea to its citizens, particularly the unemployed?

Rein Nieland: Obviously, the more policy-related questions outside of trade and development, so the Arctic question, and extraction in Sweden are a bit out of the remit of my scope. I've noted nevertheless the concerns. Also, the impression of participants that DG trade have managed this process on its own is not at all true as the RMI is an integrated approach, at least as far as we understand it and also confirmed by the Parliament. There's also quite a steering mechanism in the Commission behind this, so before proposals or elements are put on the table, it goes through all the departments. So this is just not the right representation of how we would work.

Regarding investment policy and also the stance that China is taking, we hear different elements already, how China is behaving in Africa. I think yes, they put money directly on the table and do business, and even (I was shocked by this story) shoot people there. The approach the EU has taken is that, let's say in Africa, the governance issue is of course one of the main issues to address first before you can go further. So before getting governance right, if you don't get governance right, I'm not sure you can do anything a substantial step further, and that is basically what you see in this African-EU partnership. Governance is high on the agenda. If you see then the elements they put in this governance, there are elements included to improve transparency, also to encourage countries to take up on the extractive industry initiatives. So it's basically a different approach to putting money directly on the table and being able to invest in downstream industry, because that is basically what our industry would normally do if they find the right framework conditions in those countries.

The EU operating approach maybe a longer term approach, but probably then a more sustainable approach. The Commission also recently approved this European strategy on corporate social responsibility, because we talked about the concentration of power in the value-chain by only a few companies, but those big companies, they will be asked to be much more stringent on all type of regulations and rules, as defines the WTO guidelines for multinational enterprises, but also as defined by the UN principles of business and human rights. So, we take a structural approach (and in Europe we don't have money to invest), if we do our development work it's though technical assistance. That is the typical way of us doing development work in those countries. I'm not sure that Europe should invest.

Rebecca Varghese Buchholz: Just a quick response to the Friends of the Earth intervention, I don't have a lot of knowledge in this area but I did attend a business conference in which they were discussing where exploration could happen in the future and the Arctic wasn't mentioned, but Greenland was quite extensively. And then I wanted to respond back to the gentleman from the University of Dundee, and I think I would probably throw a question back, and that's whether our living standards, our wealth should really come at the cost of other people's misery because if you look at the value chain, and that's in raw materials or commodities such as land, it's quite clear that there is an enormous wealth transfer from developing countries to Europe or to the rest of the western economy. And I think, as I've quite clearly demonstrated in my

presentation, the profits which flow either illegally or legally to the western world, especially the London Mining Stock Exchange, is used then to employ people in western Europe and develop the technology, so I don't agree that that's us transferring stuff back without getting anything. Thanks.

Isabelle Ramdoo: I have just one comment on the Global Policy Institute. You were mentioning investment and trade. You're absolutely right, and I think you should go a little bit further because it's not only that. We work a lot with ACP countries who are reviewing the mining legislations etc. They also say that the role of infrastructure is extremely important, and what emerging players are doing – India, China, and Brazil – is not only investing in things other than just extraction but also complementing it with infrastructure. And I was just reading the area of the change of the Commission where it's absolutely not the intention of Europe to invest in infrastructure. I think we're victims of legislation here in Europe. I'm not saying that Europe should invest in infrastructure and compete with China or emerging players, but that's something that should be thought of as part of the accompanying measures, not only financial, not only technical, but also infrastructure. Because standards here are extremely good, and not competing on the same ground, but what I'm trying to say is that thinking a little bit outside the box in supporting Africa, including infrastructure, might be something that could be important to consider in the context of the RMI.

I also wanted to comment on what the gentleman from the University of Dundee said. When we say "fair share", what we mean is not transfer your knowledge and your intellectual property, what we're saying is that companies should pay what they owe to those countries. Pay your taxes, avoid tax evasion, don't hide in tax havens. Then you can sell to your constituencies that if developing countries can mobilise their own resources they won't have to depend on aid from Europe. Then you can sell it! But it's not like we will transfer knowledge and then people here will be out of a job. It's the other way round. If you pay what you owe them they will be very much independent, and then you can defend that. Thanks.

Chair: OK, three very short comments. First, trade and investment. If we talk about not only Zambia, but of the role of Europe and China, I think there is perhaps a difference. Europe is not investing as the EU or European States but these are multinational, European-based companies, private investments. And if I have the announcement, what I heard in Ghana, there a Chinese firm announced it will invest 6 billion euros in building a railway track to some mining areas. This is the amount of the whole development aid of the Federal Republic of Germany for one year for the whole world, just what the Chinese announced they want to invest in Ghana. It is a Chinese company, but probably guaranteed by a state-run Chinese bank, so there are other instruments there and we have to discuss if this is our economic model or not. The second, which was already mentioned by Rein, is the question of how to attract European investors for climbing up in the value chain. And I know, from several member European states who try to allocate their development aid to attract companies, enterprises to invest in the next steps of the value chain, and I completely appreciate that that is the right way. For instance, in Mongolia, I know now from the German example, that German development aid is given to climb up the value chain of coal mining, so that the coal needn't be transported for more than a thousand kilometres to China.

On Zambia, I would like to say the corruption and transparency issues are very important. I was there in the delegation when the German Development and Economic Cooperation Minister transferred ten million euros from the government to the Zambian parliament to increase counterfeiting and anti-corruption measures. It is very hard issue there. The Zambian government now was not re-elected but when I talked to the old government, the economic minister, who was in those days our negotiating partner to the EU and trade issues, he said "look, the difference between China and Europe, if we talk to you, you come with social standards, environmental standards, you come with gender mainstreaming; and the Chinese, they build us roads, infrastructure, soccer stadiums and things like that, and that is more popular with our population". I think that was quite the truth of the thinking of some of our political colleagues in African states. They are under pressure by their electorate, but do we really want to change our approach, I think no. We should stick to our environmental, social standards but I think we have to question whether we can offer as an EU other incentives which help the administrations, governments and political decision-makers in those countries to have a win-win situation and we really have to discuss these questions which were raised here.

Q1. Johannes Drielsma, Euromines

On the issue of Natura 2000 and the Arctic, I want to put a question back to the floor. Are we really suggesting that we should not allow responsible investment, responsible development, respecting all

of our laws in terms of environmental protection, safety of workers, citizens etc. for the sake of a few tonnes of material from elsewhere in the world, where those things are not guaranteed?

Q2. Rob Motley, Price Waterhouse Coopers

We did a global survey about manufacturers about their awareness and preparedness for resource scarcity, and one of their main concerns is the geopolitical scarcity. And what I mentioned on this report of the European Environmental Agency about national policies on resource scarcity, and also what I got from my information, is that every European country does it its own way. I see German companies that take shares in mines in Vietnam, I see stockpiling in France, every country seems to follow its own path. So I'd like reflection on this by Mr Rein.

Magda: Well I really can't resist an opener from our friend in the mining industry. My answer would be show me one place where there is responsible mining that takes into consideration all the environmental, social aspects and doesn't do the harm that is even more important in the nature pristine or important areas, and maybe we can go from there, because until now I haven't seen one. And your previous comment about the industry having a problem with the fact that there is no implementation, and suggesting that this is why the companies are doing the things that do not go well because law implementation suggests that companies only do the right things if they are really forced. And we know there is sometimes no implementation and I wouldn't risk Arctic for that reason, for example.

Johannes Drielsma: I just want to say that the industry is not a single, homogenous block. What I'm talking about is Europe's ability to control the activities of Europe, outside of Europe versus our ability to control our own industry here in Europe according to our own laws. That's the contrast I'm trying to draw. Thank you.

Chair: All right, so I'd like to start here now on the panel. Erik, you begin, so that we have a closing remark now here on the panel.

Erik: A response to our professor from Dundee regarding the jobs that are going away. I think it comes back to what I tried to put at centre stage, that is the only measure now is the market to judge things. And I think there is no industrial policy in Europe. But's that's one answer to the problem of jobs going away. The second minor remark is that I heard twice that this problem of raw materials is also a problem of the South, and that we have to distinguish. Very few people in the South use these rare earth materials – that's one thing. Second, when you take another raw material, which is petrol, you have it in North Africa, it is going towards depletion without them having had the opportunity to use it for their own benefit, not for cars, because it's also used for plastics, pharmaceuticals, a lot of things, but it's just wasted in cars. So I would put a very sharp distinction there, when you say the South also needs it, well I'm not sure.

Rein: The concluding remark from my side would be that I think in the policies we pursue we have to aim at this win-win situation. If we jeopardise one of the wins, we jeopardise the whole plan. Europe has to remain strong. Also, in order to be a strong supporter of developing countries, in a differentiated approach, it's a different approach if you talk to an emerging country like China compared to developing countries in Africa. That is the approach we take. That's in reply to Price Waterhouse Cooper. The country member states of the EU have their own policies, and we see this. This of course has to do with how we define European competencies in the treaties. Development policies are still on both levels.

Rebecca: My question to the Commission is if it's not possible to have a win-win, if we can't increase our living standards, keep the jobs and improve development, what's more important? And on the differentiation between emerging and poor African countries, I'd like to know how you can differentiate between India, which is an emerging economy with about 700 million poor people and an African country which has a few million poor people? So I think one has to be very careful when you draw that differentiation. And finally, I just wanted to dispel that myth that Chinese companies going to Africa killing people and European companies arriving, bringing all these high social standards, because it's very clear that European companies are often implicated in very serious human rights violations. Just to name a few cases, Shell has been found guilty for killing in the Niger delta, a UK company has been found guilty for torturing in Peru, and another UK company has been found guilty of contributing to civil war in the DRC. Thanks.

Isabelle: I'm not an environmental expert so I cannot respond to the Natura debate. What I just wanted to say as a concluding remark is that if we really want the RMI to be responsible, both for Europeans, because we're in a globalised world now, there are jobs at stake in Europe, there are competitive industries, but also if the other side of the world goes wrong, they also catch the flu. So it's very important to have coherent policies between the different trade investment development initiatives. And the last thing I wanted to say is, we probably have to bring the debate a little bit higher, at the multilateral level. I don't think there is any forum at the moment which discusses key issues of governance, of tax evasion. Yes you do have the OECD, but it is composed of western countries. You do have things happening at the International Council on Mining and Metals (ICMM), but there is nowhere you have the key players now, including Brazil, China, G20 might be a forum but at the moment it's just a political thing. But I think it's very important to bring discussions about, not the RMI per se, but the issues around access to natural resources to make sure that it benefits everyone, that it's win, win, and win (a third win) - a multilateral level should have the right to do that.

Koen: Well we believe there is a good potential in the good management of resource counters in the South, development and life diversification in a new way. So, as a "Publish What You Pay" member, we are also very happy with recent measures obliging European companies to publish all their information on payments. So that there can be more information and social control on how governments in the south are using those resources for development. But what we believe are two central aspects that are still impeding sustainable development in the South, and especially in resource-rich countries are issues linked with environmental aspects, there is very much a shortage of measures to make sustainable exploitation, and all the elements link it with governance, so I think those are the two aspects that need to be enforced within the RMI to get outputs we want for more sustainable development in North and South.

Chair: Thank you very much. If I look at my notes, one major question was not answered. That is, mining industry in the EU from the colleague from Sweden. Looking on the discussion in the European Parliament, there was a question, if we have resources in the EU, it might be better for several reasons to explore them here than to transport the raw materials to the EU. This always raises new questions, that is clear. If we look to the history of industrial development in Europe, we had some villages which were resettled to mine coal, for instance, so I think that has to be balanced in the discussion between the EU. But there we have a very developed rule of law system, and if we now conclude the discussion, with a lot of aspects from my point of view, it's a little bit pessimistic. Because we have heard that there is a scarcity of raw materials, and some people speak of a run on raw materials worldwide, and from that point of view it is understandable that enterprises and companies in Europe call for a political framework to secure the supply of raw materials in the interests of their business development, but also in consumer and shop interests. From that point of view, I think the EU really should try to develop an own approach to secure raw materials and to combine it with a development perspective. We should call, as an European Parliament, and as representatives of the European Commission and the Member States, to sit together, whether we can combine together all our instruments, market access but also access to research and modern technology transfer to capacity building, for instance in transparency issues, royalties and something like that. So we have a coherent approach and I'm still hoping that is possible. Because if we look to the global market, this global market has not yet a global institutional framework to implement and enforce the same standards but I think we should not surrender from that task. But we should, as the EU try to stick to our goals and our values to lead on a better track.

SESSION 4: How can product policy contribute to better resource use?

Judith Merkes MEP (Chair)

This session is about how product policy can contribute to better resource use. I've been involved in this matter from the start of this mandate, and because I really believe this is the challenge, not only of our time, but from now on, the very future it will ever be the big challenge. From now in, if we are not extremely resourceful and resource intelligent, we're going to by 2050, look at 60% of the biggest ecosystems completely depleted. And we already need a few globes in order to fulfil all our resource wishes. So we simply have to get resourceful and resource intelligent. I think that it's time for a bit of disruptive thinking. Disruptive thinking is that we have to think out of the box. It's not a mere extrapolation of how we did things in the past. It is really what do we want, how do we shape our future? And then think back on what we can do now in order to attain

that goal in the future, of living comfortably, yet leaving the planet as a treasure for our children and the next generations.

There is low-hanging fruit, but sometimes, what is very near, is very hard to see. So really, let's not only talk about those far horizons but also let's see the things that are very clear already before our very eyes. I myself am a fan of trying to think about different business models. What if we would no longer buy our products, but if we would lease our products, rent them? Is ownership not one of the very issues that prevent us to become resource intelligent? If I own a car, a house, a cell phone, isn't it that because it's mine I tend to do with it what I want and not to put it back, recycle it into society? So therefore, I think that if we talk about a circular economy, and that is what we're going to discuss today, that we have to be extremely disruptive and that we must really want to put everything into question, even something that is as close to our heart as owning things. As I was not invited to be one of the panellists - I was invited to be the chair – I will not linger on this topic and I will invite our first speaker, Pavel Misiga from the European Commission to present the official position for DG Environment.

Pavel Misiga - Head of Sustainable Production and Consumption, DG Environment

The EU Resource Efficiency and Sustainable Products Policies

Presentation:

http://www.foeeurope.org/sites/default/files/news/Misiga_FoE_RE_%26_Product_Policy_20111109%5B1%5D.pdf

Thank you very much. Good afternoon to everyone. Well, I don't know whether my presentation can be considered official. I very much liked your invitation to disruptive thinking, so I would like to continue in this period a little bit. So let me first speak about something I guess was already mentioned during this conference, probably from a different perspective but still I would like to mention it now. I prepared some pictures which express one phenomenon which is relevant for perhaps all resources. Consumption in Europe means that we import a lot of resources embedded in products. The picture on the upper left is related to carbon; on the upper right to land; the lower left, materials; and the lower right, water. It shows that European consumption is very much dependent on resources elsewhere, and that significant parts of environmental impact are also located outside of Europe. So the picture that we have, and the policies that have been adopted so far, they are very much localised in the European regulator industry. We address pressures and impacts located in Europe but there is much more that is related to our consumption, and sometimes we don't take that into account and we don't have a full picture. So this is my main message.

The next slide, on the left side, shows a correlation between income of country and total GHG emissions, and you can see a very clear correlation, and a relatively steep slope, especially for products like buildings manufactured for mobility etc. so shifting income of a country from low income to middle income means sometimes two orders increase in carbon emissions. So this is the pattern if population in the world increases and with this increase in population income grows. And this is what we want actually. We want well-being and a similar standard of living as we have in Europe. We want everyone to enjoy it. But if we don't change the way that we use resources and how we manage environmental impacts associated with this resource use, I think we are in trouble. And other statistics that are related to this, if we continue in this pattern, even if we take into account innovation and improvement, at the same rate as we see now, then for all major resources the rate of use will grow enormously.

For example, if you compare the rate of growth in use of energy between the last decades of last century and the rate which is expected between now and 2030, so for primary energy it will be more than 50% increase, for steel production more than 400% increase, for food 60%, water 90%. For land use, we would need some 200 million hectares more to feed more people on our planet in 2030. That picture on the right is how we expect the middle class will grow, so we can expect some 3 billion middle class people in 2030, which would probably aspire to the same level of consumption as we have now.

Now I mentioned that very often we don't see the impacts of our consumption so the only approach that would allow us to see and take into consideration is life cycle approach. On this slide there is a schematic life cycle, a representation of life cycle of food, and you can see a lot of resources coming in in every stage and a lot of environmental pressures in every stage of life cycle. So what are the policy options for us to address this

complex system? We have a lot of policies already in place related to agriculture, related to food processing. I selected food because food is one of the most important categories when it comes to environmental impacts, but also it is a very important consumption category, everyone needs food.

So this policy approach – we can either split this cycle into different phases and to address them individually and we have many such policies in place but there are still many gaps so one approach is to fill in those gaps. The other approach perhaps could be to look at a later stage downstream at consumption and products which consumers drive all those resource uses and impacts in all life-cycle stages upstream of consumption. And perhaps we can somehow design policies that will look at whole life-cycle and address all hotspots, all important issues throughout the whole life-cycle. And this is where product policy comes into play. If the product policy is important in resource efficiency, there may be different kinds of interventional measures or actions related to that. This triangle is again abstract representation of objective. The growing line is what we want to achieve: growth, well-being or GDP; and the downward-sloping line is where we want to see the resource use and associated impact go – we want to decrease that.

So what kind of policies can fill in that space between? And we think that in relation to consumption, it can be product-related policy, we can improve our products. The other type of policy: we can stimulate use of different kinds of products, alternative products and I think that I heard from organisers of this conference before, that there is another element which is to reduce our consumption. I put a big question mark. I don't know, this is not a policy. I, as a Commission official, would like to promote that it should be considered as well.

What I would like to promote is the first one, the product. It is the low-hanging fruit that you mentioned at the beginning because it is based to large extent on innovation, on technological but also organisational innovation. It is not very dependent on behaviour, where we are not very strong. We don't always understand what drives consumer behaviour and how public policy can influence it. So the product policy has potential to improve the environment but at the same time to create jobs, to provide business opportunities, and here in Europe we can build on our innovational capacity. So this is why the Commission would like to promote and use product policy instruments to make progress on resource efficiency. What is the objective of such a policy? It is to transform the market. The red line on the slide is a representation of the market as we know now, simply we have good products, we have average products, and we have poor products on the market. And what we would like to do is shift towards the green line where products on the market would be those with better environmental performance. And we want to do this transformation on both supply side and demand side, so that we stimulate producers to design and produce better products, but also we want to incentivise consumers to demand such projects.

And my last slide: what we plan to do in this respect. So this is the list of actions that are included in the Resource Efficiency Roadmap. So first of all, I mentioned life-cycle approach, so we need robust methodology to assess life-cycle impacts for products. So as the first step, we would like to provide guidelines, methodological guidelines how to assess life-cycle environmental impacts for products, or environmental footprint. Then we want to address this footprint through a mix of different policy instruments, including the Ecodesign Directive which is probably the strongest policy instrument at European level, that sets minimum requirements for products and we see some opportunity there. It is already quite effective to address energy efficiency, especially in the use phase, but we believe it can also include material efficiency, so it may be feasible in a relatively short time to establish how ecodesign requirements could be set for recyclability, recycled content, recoverability, reusability of products or durability of products. Then we would like to provide better information to consumers on the footprint of products, which means the improvement of existing labelling schemes, perhaps also to enable an environmental footprint declaration for products, to provide a platform for something like that.

Another element of this information to consumers is to prevent misleading environmental claims through different instruments. Another action is to increase market rewards for environmentally-friendly products or resource-efficient products. What we mean is mainly to look at incentives that are provided to producers and consumers at EU, at national level and within the private sector. And to see how it is possible to make these incentives more effective. Another measure is strengthening green public procurement. Public authorities are important institutional consumers, very powerful, and can influence whole market so we have to use this opportunity. And then measures to expand producer responsibility to the full life-cycle, including recycling and take-back schemes, expanding warranty for products etc. and one special measure that applies probably for

all products is to set ecodesign requirements for packaging. So this is the list of actions which we think we could implement in a few years. We are in the stage when we identify policy options and start impact assessments. So I would like to finish with my invitation to you, if you have good ideas, areas for action, how we could make them more concrete, more specific. If you have some proposals, please don't hesitate to come back to us. This is the right start. Thank you very much.

Chair: Thank you Mr Misiga. I can tell you that I'm a very impatient person and you are very right and it sounds all very wonderful. It also sounds very policy-like and we all know how policy works in the EU: it takes a while. And as I'm very impatient, tell me what's going to happen tomorrow? Because it doesn't look like this is going to enhance the recyclability, or, this is not going to save the planet tomorrow. And what if I am a student? I have only very limited financial resources then, and I want to obtain a new product. How can I get a Hoover that works better, uses less energy, has a longer lifetime, that I can return, that I can get repaired better? Everything better, and that tomorrow. Have you any low-hanging fruit for that?

Pavel Misiga: I have to say that we have many policy instruments in place, so you will probably be able to go to the shop and find a Hoover that is very energy-efficient and you will have the possibility to return your old one to the retailer for dismantling and recycling. Perhaps we are not yet there that producers consider material efficiency and recyclability, but this is exactly what we would like to do, to expand the existing instruments to be more effective in terms of resource efficiency, to cover other aspects, material efficiency, water efficiency etc. And I am sorry it will probably not be able to do it from one day to another, but I would say our direction is very clear and I hope that if we meet next year about this time, that we will be able to present you with very specific policy proposals.

Chair: Thank you so much because the whole question is of course how are we going to do it? And I hope, Mr Arnold Tukker, that you have very concrete ideas.

Arnold Tukker - Program manager sustainable innovation, TNO

The contribution of product policy to resource efficiency

Presentation: http://www.foeeurope.org/sites/default/files/news/Arnold_tukker%5B1%5D.pdf

Well, there are high expectations. Thank you; that was not my brief. My brief was to explain how product policy can contribute to resource efficiency. That is what I'm going to do. But I will help you. We made a bit of an analysis. And at the same time you see that certain instruments that you really would like to have in place, this far it is not possible to put in place, and I will show a number of big gaps, and then I would like to have people like you stepping up and going to international meetings and arranging a few things. But I am jumping to conclusions. My name is Arnold Tukker. I work with an international product research organisation called TNO but I also have a professorship on sustainable innovation at Trondheim, one of the big universities in Norway, and I lead in TNO also on the sustainable innovation programme. What I'm going to do, and I'm going to do this quickly: what are the priorities for resource policy/ product policy; the relation between product policy and resource use; a kind of analysis of what is going on at this moment – what is going right and what is really going wrong and where do we have to intervene; and how do we make the improvements that probably all of us wants?

Next slide - this is a table that comes from a major study that I with Stephan Lutter and a few others. We really mapped the global economy, 30 sectors by country, 43 countries, all the resources and all the resource flows, and by that you can really see the resources that Europe consumes, how much we produce within Europe and how much we are depending on other countries. So a different way of portraying certain things. The next slide is much more telling. What you have there is 100% of what you need to cover final demand, so everything that you buy in Europe with production and land use that is 100%. What the blue bars tell us is that for certain environmental aspects, to what extent we rely on imports of that environmental commodity if you like. And the red things are the things that we export, so land use say, in agricultural products that we export. What you see is that the blue bars are much higher than the red bars in general, so that makes very clear that Europe is depending on the rest of the world to create wealth that we have. And you see also marked differences in height between these bars. It's difficult to read I think, but I'll talk you through it.

60% of the land we use is imported. So we use more land out of Europe than we do in Europe to produce a product. Related to that, you see the other big bar that is 50%, that is water use – green water use and so-called blue water use. Green water is rainwater – that is maybe not too bad, but the blue water, that is water you get from rivers and extracted from the ground, and if you do that in places where water is scarce that's not fine. So that is an important thing. And then you have also the various types of material use, about 30% of the materials that we use in Europe at the end of the day come from other countries. So there I think we have the three biggest environmental aspects where we displace on other countries.

The main message is the main consumption areas where we create all these impacts with, there are four of them – food, housing and the energy used in the house, mobility and the energy used in producing your house. These four categories roughly correspond to 80% of the environmental impacts driven by consumption. So if you really want to improve the world, look at these four categories. That is really what is relevant. And then you will say what does it have to do with product policy? Well this is a table used in all sorts of projects to organise economic and environmental data, and actually it's a stylish way of getting the economy in sight. There you have the final use of products.

And of course you have industries making them. They use intermediate products to make the final products that we all consume, but then of course at some point in time, you have an industry that produces emissions or extracts primary resources and it's crystal clear that if you make this chain more efficient, like I've already indicated, you reduce consumption, you have smarter consumption or you have cleaner consumption, you will automatically reduce your environmental impacts, also your primary resource use. We also have ballpark indications what certain interventions can contribute. You can say well of course the good old policies directed towards industries make sure that they emit less, make sure that they use the resource more wisely. Well if you don't do radical interventions there you probably will have 20%/30% improvement by that. If you have radical interventions by radical new technology, let's say shifting energy technology, solar whatever, and of course you can have more radical improvements. Then if you develop greener products, and if you do it incrementally, 20%/30% improvements, maybe 50% if you're lucky. If you have radical improvements, you could have a few factors.

Then there are product services, that's also in the list. If you do research into that, and you say, well we'll all do away with our cars so we'll use public transport and we'll be conscientious in that kind of stuff, then you can gain a factor of two by that. But it's very difficult because like you already indicated, we consumers, we like to own things, and there are a lot of reasons why product services are not really penetrating the market. A lot of politicians also say, well let's spend wisely. Well I don't have the graph here with me but we made a nice graph on one of the products you see. Actually the environmental impact per euro of products is not that big. Maybe between the best-performing product categories and the worst, there may be a factor of four to five. It looks quite a lot, but the dirtiest category per euro is foodstuffs. Well you cannot really kick that out of your consumer basket, and the best kinds of product are things like insurance. So yes of course you should try to shift expenditure but don't expect miracles from that.

And then there's something that I think is really interesting, but it's very difficult to tackle for politicians and policy-makers. I can see we have enhanced our gross national product by a factor of three or four over the last fifty years and if you look at all kinds of well-being and happiness studies, you see that overall we don't become happier. And why is that? Because life gets more stressful? Yeah, maybe that's it. So in a way we have an economic system that is addicted to growth but it does not really create more quality of life. It's very weird, and it's very difficult to break through that, but that is also I would say, a policy option that should be considered. Well if I go back to the products, I think you have an instrument that cuts off the worst-performing products. You have a minimum standard otherwise you are not allowed on the market – it's too dangerous, it's too dirty, it's too energy-consuming or whatever. But then of course that is not enough. You really need initiatives to producers to become better.

So you need a whole set of policies, with labelling, with green public procurement, top-runner schemes or something like that to really inspire and encourage producers to make the best-performing products. And that may be in areas where you really want to have radical breakthroughs, you actually have to think about having support, transition management type of approach. And the good news is that within Europe, we can all do this. And in quite a lot of places we do that already but the bad news is that for a lot of products we depend on imports. And the problem is, as Europeans what we can do is set quality standards with regard to characteristics of products. That is what you can say is a level playing field. What you cannot do at this

moment is set process standards. So if, for instance fish catch is a nice example, if somewhere in Latin America or somewhere else, the fish is caught in an unsustainable way, we cannot do anything about it. And we can only say that the fish imports need to have certain hygienic standards. We cannot tell other people how to fish.

And where I think the EU at the moment has a good cover of policy instruments is the energy used in products, the Ecodesign Directive is by and large covering that. As for the contents of products, I think we have the ELV Directive, we have REACH, that's pretty well covered. I think the waste policy in the EU, apart from certain implementation issues that may still be quite problematic, in principle the legislation is there. But then there are four aspects that are not well covered. That is land use, that is material use, abiotic and biotic, and that is water use. So these four, there are hardly any policies on. And it is these four aspects that we import most of.

So you have a double problem. First of all, within Europe we don't manage this, and second we actually have to manage a substantial part outside Europe. And then you run into the WTO rules, where people say "sorry, you should not meddle in how, Africa for example, manages its land use". And I think that is a real problem. So my policy message is quite simple: apply every decoupling approach that you can, green your processes, green your products, product services, stem consumption, try to really engage in the GDP debate – that is all pretty clear. Then I would say to DG Environment, please keep up the good work that you are doing, but also recognise that you actually at this point don't cover three very important environmental aspects: material use, water use and land use. And that here the big problems are actually outside Europe as well. And we need to find a solution to tackle that. And then I think you can really talk about a good product policy. But we're still a bit off I'm afraid.

Chair: Mr Tukker, if we talk about Dodd-Frank, a bill in the US, if we talk about chain of custody, if we talk about corporate social responsibility, and if we want to track how people are being treated in African mines, and have all kinds of label for that, why can't we just have the same labels for fish. If a well-treated fish, a well-caught fish – why can't we do the same with fish as with people?

Arnold Tukker: We have it. We have the Marine Stewardship Council with a nice logo. So that was indeed a problem. The EUP Directive that has been developed by DG Environment and DG Trade; that was a mandatory instrument. You can really say to a producer "you have to do it like that". You have not voluntary labelling but obligatory labelling. And that really works. What you are talking about is that you have voluntary kinds of labels and that with green public procurement and all that kind of stuff, you try to persuade the market to change. And there are examples where that works: the coffee example in the Netherlands where you have good certified coffee by voluntary guidelines. I think in five or six years they gained 50% of the market. And it worked because they had a good certification system and where the big companies, that really had power in the chain, were susceptible to change. But if you don't have that, it's all on a voluntary basis, that is my problem with it.

You really want to have mandatory standards. This morning you had one of your political departments, she also was in a session on land use, and she said "I want to set standards that we don't import products anymore for which it is clear that they were based on landgrabs". Well then you basically talk about certain standards that you try to set in Africa or another country and you want to stop the product at the border. And that is quite complicated. At this moment the WTO doesn't allow you and I would actually say it's a bit weird, because I mean, I'm pretty sure that you can change WTO rules in a way that you can implement such measures. So that is my message to policy-makers: try to do that.

Chair: Thank you Mr Tukker. Then we move to Ramon Arriata from Interface Flor, with a success story.

Ramon Arriata, European Sustainability Director, InterfaceFLOR:

Full product transparency delivers resource efficiency

Presentation:

[http://www.foeeurope.org/sites/default/files/news/Arratia The power of full transparency Brussels%5B1%5D.pdf](http://www.foeeurope.org/sites/default/files/news/Arratia%20The%20power%20of%20full%20transparency%20Brussels%5B1%5D.pdf)

Our company make carpet. We are inventors of cutting the carpet into squares of fifty by fifty, so it could be easy to install, and we're \$1 billion company, we have 30% market share. So we're an evil multinational selling products all over the world. And I'm going to give you some of the thoughts that we have seen, and this presentation will fit very well with the other two presentations because it is the same approach that we are proposing but from the corporate perspective. We were happy to have this target in 1994 to have zero impact. And everyone would think this is difficult, this is impossible and if you look at the next slide, we decoupled quite a lot. If you look at 35% reduction of GHG even if we have grown the business substantially.

And what I'd like to say is that today we, many companies, are still in the old pattern. They are talking about corporate responsibility. It is a beauty contest. And which company can tell you a good story to look good. And we need to move from this old paradigm of corporate to product. And the product sustainability is taking into account all the products from a life-cycle approach. And you need to make sure what really matters, ensuring the environmental impacts of all your products, including all the life-cycle stages. And we have seen, if you do that you can decouple, and create demand in the industry supply chain. And the next one would be the radical, which is where we talk about systems thinking and we talk about product service substitution, and we talk about cannibalising other product markets that have more impact. And we'll talk more about that later. This is the life-cycle assessment of a carpet tile. Sixty-eight per cent of the CO₂ is in the raw materials. Now what are we talking about? Corporate responsibility, corporate reporting, corporate, corporate, corporate... If only our impact is 9%.

We need to reduce whole LCA, whole life cycle impact. And for us, it's in the raw materials. 45% of the impact is in the nylon yarn. So what would you do to reduce the impact of a carpet tile? You have three basic solutions. Can you make carpet with less nylon? Can you use more recycled yarn in the composition? Or can you invent a new kind of nylon? We're working on these three things. And I'm going to give you the impact of doing the first two. The first one is we came up with a very flat carpet due to a new technique which uses 50% less nylon. And then what we're doing now is we're scavenging fishnets from all over the world, recycling those fishing nets and producing new nylon from old nylon. So you reduce your main raw material by 50% and you make your raw material 100% recycled. You still need energy to repolymerise the nylon, that's true.

Now look at what we are achieving. Some of the products from 1996 would be around 20kg CO₂. Now, an average carpet tile with 700g virgin nylon, 10kg, and our latest product in June this year is around 5.7kg. (Professor, calculate the factor!) It's around four. It's not difficult. The issue that Pavel was talking about: life-cycle approach, it should be the main tool for business to address environmental issues. And what we're seeing is the first thing you do when you take religiously a life-cycle approach as a business tool is that your product designers redesign the products so that they have less impact. The second thing is that the supply chain people, instead of sending the 700-question questionnaire with the stupid questions about do you have labels, or all that is irrelevant, they ask one question: "how can you radically redesign your raw materials so that they have less impact?" It's only one question. And then the marketing people stop inventing funny labels to trick the consumers and to confuse the consumers, and they just talk about the facts. And the third thing is the sales guys because they have all the data printed in the promotional material, they cannot lie anymore, so they have to tell the actual facts. So we see that this is very good approach.

This is the typical questionnaire that companies use. What is your environmental policy? – blah blah. Absolutely ridiculous. This is our approach today: cut the fluff. This is what we tell our suppliers. So one supplier invested heavily in a repolymerisation plant and these guys are now supplying us with 100% recycled yarn. And they take yarn from our factory, from recycled products, and from fishing nets, and other nylon distributors, and they saw the opportunity because we told them that we really want that, and now we're doing more business with them. So suppliers can see this opportunity. Now you go to a supermarket, and this is what you get: one company will tell you: "I'm carbon-neutral. Buy from me", "I'm 100% natural", another company will tell you that "I'm organic", "I'm cradle-to-cradle". It's all rubbish. Because marketing is about 100% something, the fastest, the biggest. And sustainability's more complicated so you need to regulate to get the facts to the consumers. And maybe my mum in the supermarket wouldn't have time to look at all these facts. She doesn't even look at the nutrition facts. But you have public procurement, you have retailers that have demand, without bothering the consumer with labels and facts.

Now I really have to give all the credit to the EU for what they did to the car industry. And it's a life-cycle approach. They said: what is the big issue? Energy at use. What is the magic metric? Kilograms of CO₂ per kilometre. We're going to regulate outputs. We're not going to be a Soviet State telling companies what to do -

we're just going to regulate outputs and let the market sort it out. The first thing was a European-wide goal for the industry on grams of CO₂: 95 by 2020. They said that was too much but now they are surprisingly achieving that. The second thing was a mandatory display of that metric on advertising. So you don't see any car company saying "Buy from me. I'm sustainable". You just have the grams of CO₂ per km printed in the materials. Even my mum today knows that 200 is too much and 99 is quite all right.

But that enables legislation at member state level. In the UK company car tax, more tax for more CO₂. Road tax the same. In London, you don't pay the congestion charge if you have low carbon car. Even companies like mine, we don't give a car to our people in Paris if it has more than 140g CO₂ and all the companies are following. This is true even if there is huge demand for low carbon cars. We can do the same exactly to the building industry and we have the magic metrics kg CO₂ per square metre and we could even regulate the embodied materials, grams CO₂ per square metre for example for carpet. So we can take the car approach and take it to buildings, food, the other sectors. I'm sure there's other ways to play around the rules to regulate that level of embodied materials. I'm not sure if there is a political way.

And the next step, we think, for radical sustainability is don't buy products, rent products. We tried that in 1994 and we miserably failed for several reasons because our customers, architects, they have a complex budget, so they spend, they do the refurbishment but they don't want to commit to the operating expense because people want the functional unit. People want to rent a car but a carpet is like the wheel of a car - you rent the office space. So you need to be in the right part of the value chain to make money out of renting. People want to be able to rent drills. It's going to be B&Q making money out of that.

The other way is closed-loop systems – making money out of recycling your own product. There are different ways to do that. We have now the technology to recycle carpet tiles but the problem is European law. And someone raised the issue of landfill. In a developing country like mine, Spain, you can throw away almost anything for free because the landfill tax is awful. In UK, a semi-developed country, they have increased by £8/year till 2014. In Netherlands, you can't throw away carpet. There is a ban on the landfill of carpet, and in Scandinavia. So we're lobbying against the landfill of our own products. Which might seem counterintuitive but once you develop the technology you have competitive advantage.

The key thing is sustainability. When Pavel was talking about reducing consumption, it's up to businesses. We need to tell businesses "you need to grow your business but by cannibalising other markets". So for us, one of the adjacent markets, we could expand into, was the glue. So the glue has a lot of environmental impact. So we came up with a substitute for glue. And this is what we use now for installing carpet tiles. So it is cannibalising the glue market by substituting their product. And this is the game today – sustainability. Installation companies cannibalising gas. And I think that rather than just telling the high-carbon industry to reduce their impact, we need to look at all of the other industries that they will cannibalise. It's much easier to partner with that. It's the same for NGOs. Rather than just complaining against the high-carbon companies, help the other companies that will have the technology to cannibalise other companies. And this is a really good framework to engage with business. Thank you.

Chair: Thank you very much. By the way, there is carpet leasing in the US. Why do you then say it didn't work? And that you have to be in the right part of the value chain if it doesn't work?

RA: We're famous for carpet leasing. We put that in the market. We make a big splash. We really want to try and our customers don't want it.

Chair: Could it be that there is a certain time when things work? And that simply things have to come together in order to work?

RA: It was ahead of its time. But also you want the whole building. You don't lease the carpet or the walls. You need to lease the whole unit. One of the things you can do, not only leasing or renting, is extending the life of your product, making money out of that. One of the things we are doing, we charge two euros per square metre more and we guarantee that the product will look good for longer, and then provide maintenance, so that we extend the life. So there are ways of doing a sort of leasing without actually leasing.

Chair: Kind of an extended service?

RA: Exactly.

Chair: I have two panellists who are going to react. This is Melissa Shinn.

Melissa Shinn, Independent consultant:

Yes, it's a kind of diagonal reaction really. I'm going to collect a little bit on some of the inputs here. What I've been asked to do – my name's Melissa, I'm a policy advisor, I'm freelance – I work a lot with the environmental community and environmental organisations – and I've been asked by Friends of the Earth to test the temperature of the water and some of the concerns and possible arguments for proposing a product-focused environmental information approach. Building on a lot of the things you've just heard here today, I'm going to give a little bit of initial feedback on what the reactions have been, talking to both experts on life cycle analysis data and methodologies, talking to academics, talking to some business organisations organising big processes, talking about environmental information, labelling or product declarations, talking to some NGOs as well as some government agencies.

The idea was to find out what is the political landscape of all these different stakeholders who, some of them have a lot of experience in this sector, in terms of what's the appetite for supporting such a proposal? And the basic line of the proposal is that there would be some kind of relative framework, whether that's building on the existing Eco-design Directive or that is a new relative framework that establishes a harmonised methodology for measuring resource use, for example, on the four indicators you've heard here today and yesterday: this is the water use; the land use; the material use; and the carbon footprint - quantitative indicators on a wide range of products.

Establishes a methodology – pillar one. Requires producers to apply the methodology. And then communicates this information. Whether to consumers, business-to-business, is an open discussion, and of course there is a whole prioritisation issue of which products you should start with, would you go for the hotspots, would you apply all indicators to all products and is it just quantity you need, or do you need some qualitative information? And we heard a lot about that in the land use discussion already. But the basic thing is that would be the framework, and the fourth pillar would give a mandate to allow you to either do some product requirements, specifically on issues like recyclability, like land use quality and food, whatever, and would link to very important structural drivers and policies which were mentioned by Arnold.

Green product procurement and product labelling. So if you can provide the information to these two drivers, you can pull through a lot of the products. It would also provide some information which would allow you eventually to set targets, this mythical idea, which could actually restrict you and reduce the use of some of the resources in some of the product areas. So we tested out this idea, looking across many of the member states, and what came out was four threads - discussions on four major points.

First, I'd just like to say that generally the reaction was incredibly positive. In the sense that there was very few absolute "no-way, it has nothing to do with us, it's going to be completely useless". Most of the responses were "yes, good timing", "yes this is the discussion on the table", "yes, this is how it should be tweaked or changed, and this is how it should be taken forward". So, that in itself I think is a very interesting indicator. The four themes that have come out of this consultation so far, and this needs to be taken a bit further, is 1) there is a concern from the business associations that are working with the big retailers and some of the big multinational companies that this could require extra workload on businesses to collect and verify this information. This is an argument we hear a lot, and a big concern you have is that there are thousands of products and a good few indicators.

But we also heard others say that (and you've just heard a colleague from Interface repeat that) we have many funny labels around already. So the reality seems to be (and I just counted 25 coming out of the French Grenelle process which is a pilot process on environmental labelling running now, which maybe Sylvain is going to say something about in a minute), there's more than 25 already on the table just coming out of that process, and there are many more globally. The reality is the data collection is already going on in the retailing sector, and this is already creating a necessity for data collection verification in the producer supply chain, but it's happening in ten or twenty-five different directions with twenty-five different methodologies, and this is actually becoming a bit of a nightmare. At least for the tier one manufacturing, and it will soon trickle down to

tier two and tier three. So here is an opportunity perhaps, for the EU to step in and avoid this duplication and this confusion, and maybe do it before it becomes too ingrained.

The second thread is that there is a lot of questioning from some of the stakeholders about the efficiency of information tools only to really drive the change in the production chain and processes and product design, and also can we move fast enough? Thousands of products and four indicators might take some time. Your question on urgency, what can we do tomorrow? But others are saying, well actually, the information is just the start. And based on the quantitative information on these four indicators, you can then use that selectively, in a much more prioritised way to tackle certain products. So identify the hotspots – where is the land use, in which products precisely, and what aspects of land use do you want to change on food processed products, on vegetables, on cotton T-shirts, on wooden flooring in the DIY sector? So it is really just a starter process to go to the next process. At the same time, the reality is from a consumer perspective, we have a lot of misleading advertising. And that's a reality that needs to be tackled. This is a consumer rights/consumer transparency issue. And it's actually an issue of regulation. It needs to be regulated.

The third issue that came up is, well the simple versus complicated indicator issue. There is a lot of work and research going on in Europe and outside Europe on indicators, and also a lot of life cycle assessment research. Life cycle assessment is a fairly comprehensive approach, and there is a school of thinking that says, well if you want to understand the impacts of a resource, it's not just about the quantities, it's about the air pollutants, the chemicals and all the rest of it. So be very careful when you start to collect just the hectares and the kilos, because if you make policy steering decisions, food is a classic example, more hectares in extensive agriculture but maybe it is actually having lower impacts. Be careful that you don't just choose for few hectares, big impacts. So be careful how you use that data and do you really just want to collect that quantitative data?

And others say, and this is shall we say, the more pragmatist approach to the indicator project, well you can actually collect, you can weight the quantitative approach, you can say so many hectares of intensive agriculture, when you calculate it you can give it a factor weighting and you can build in qualitative criteria like is it nutrient-cycling; is it maintaining fertility. And in fact this is already done in the energy efficiency calculation. Energy quantities are weighted when they're calculated. You could do the same with biodiversity indexes. You could also develop this methodology as the framework for raw materials. So those are some of the counter-proposals.

One of the other big threads of discussion is the data quality. So not whether it's simple or complex, but simply whether you have good quality data coming out of very long, complex and often very volatile supply chains that change a lot. And how are you going to be able to verify that data? You can use real data and you can use average data from databases, from life-cycle, resource use databases. How are you going to tackle that problem? And others say, yes that is a real problem. But the fact is that we're not going to be able to manage if we can't measure, so we somehow have to tackle that problem. We have to address that issue.

There are already quite well-used and widely-used quantitative indicators around raw materials, the water footprint, the carbon footprint, and you can take a quantitative approach to land use. But when we get to the qualitative indicators it gets much more difficult to measure. So we do need to develop some protocols there and improve the data, but the reality is, and this is one of the arguments coming from the Green Product Procurement front, is that we need that data. You cannot expect procurers to make robust decisions on products if they can't have the material use information or the land use information. So this is the first assessment from the consultation. I just add this in for discussion more than I am really commenting on anything that has been said before.

Sylvain Chevassus, French Ministry for the Environment:

Well, I'd like to say that like you, MEP, in France we are quite impatient as well regarding sustainable consumption policy. We tend to think that we cannot really afford any more years of research in the LCA sphere before progressing and going further. I'm thinking here, particularly on the big gap between EU and national policies concerning providing information on the environmental impacts to consumers and to industry on the conventional products, the mass market products which are at the source of most of the impacts from consumption. Obviously we are very supportive of the EU ESP policy and we fully take part in it. We think that

the 2008 EU ESP Action Plan was a good first step in order to consolidate the knowledge base to improve and extend existing instruments and to ensure better synergies between the existing instruments.

However now we need a stronger, more ambitious step, precisely from our point of view in order to address the impacts of conventional products because in the existing EU instruments, some of them have been successful but they have been created, some of them 20 years ago now. They address the ecolabel, they distinguish the most environmentally friendly products. If you take the energy label, or the organic label, they only address certain products or certain impacts, and we think in France we need to move on and address all the products. And I was really glad to hear the very interesting proposals from the earlier presentation regarding the Action Plan coming up next year but really hope that it will go further than just once again strengthening and extending existing instruments. Unless this extension does now address all of the impacts of all of the products.

And so how do we proceed in France? At the end of 2008 we started constructing a public-private national system in order to develop environmental foot-printing of consumer products in order to serve labelling purposes. For that we also adopted a legal basis, and at the same time ADEM, which is the French Environment Agency, is constructing with industry measurement methodologies for general foot-printing calculation as well as sectoral product category rules, and ADEM is building a generic database. They will also set up some foot-printing calculators, ultimately with the aim of producing product footprints that will allow us to differentiate products and compare them thanks to labelling instruments.

This year, in parallel, we launched an international experimentation on the environmental labelling of products. It started on the 1st of July this year. We have 168 companies taking part, all sizes, all sectors, including foreign-based companies and during one year they have to run projects consisting of delivering environmental information all the way to consumers, including carbon footprint of products, as well as at least one other environmental criterion. The public authorities will evaluate the results of this experimentation, and on the basis of this evaluation we will send a report to Parliament, and future policy decisions will be taken.

Maybe you'd like to see some results from our experimentation? So that's the proliferation of labels Melissa was referring to. There's really a variety and wealth of proposals from industry. For example, in orange, is a mobile phone operator. They are providing this label in their shops. They are associated with WWF. You can ask quite quickly. What you can see is a lot of creativity on the communication, on the labelling aspect. The spirit of this experimentation was really to create a sort of dynamic by which the industry would run this project, and of course what we will do is, I mean these labels are not meant to add new proliferation to existing number of product labels. They are meant to last just one year, from the time of project, and we will evaluate them in order to draw the best options for future policy.

And the projects also really allow companies to take ownership of the lifecycle thinking, to get better used to measuring the impacts of their products, and the whole idea is to mainstream LCA approaches and to practice this in order to make it more easy to use. So you see we have several ways of displaying the environmental impacts of products. Some of them are already inspired from many consumer surveys, findings, saying for example that consumers prefer easier and simpler information to understand such as traffic light system. Many labels actually took inspiration from the energy label. Thank you.

Chair: Thank you so much. We have only ten more minutes before we wrap up. But we have not only a lot of people with knowledge here but you have a lot of knowledge and something to add. Please be extremely brief and concise.

Q1: Michelle Wimarami, Industrial Minerals

I believe we have had a real picture of the variety of options we have and I would like to stress that there is probably no simple response to a complex issue. So having in front of us four indicators, they will demand from the consumer, whether this consumer be the general public or an SME or industrialist, a real brainstorming, to be able to integrate these four indicators in such a way that we are going to the life cycle approach which is needed when we look at whether a product is resource-efficient. Well first of all, we should maybe speak about eco-efficient because resource is not all, or we say ok, the primary impact is on resource and we look at the resource efficiency. As if we look at eco-efficiency. And what is more important, in my eyes, is that we have a clear message regarding

what the priorities are. If the priority is to have a low-carbon economy, then definitively we need to know better whether we need to have maybe a bit more of water in the product, or a bit more of a resource to have a lower carbon footprint in the application and in the end product. And I'm not sure that consumers nowadays are able to integrate

Q2. Emilien Gasc, the European Consumers' Organisation

I'd like to say first that we are in broad agreement with the points put forward by Melissa Shin on the risks of environmental labelling proliferation. I'd like to pick up on one of the first points, with your question to Mr Misiga, Mrs Merkes. You asked what it is that you can do today – I think you took the example of vacuum cleaners – whether it was possible tomorrow to buy one that would be efficient, and on that one I have to actually contradict the Commission – it is not possible at the moment. Vacuum cleaners, they are even marketed on the basis of their power consumption – the more powerful, the better – that has been communicated to consumers.

Actually, the perfect counter-example, one of the examples of the shortcomings of the Ecodesign Directive, vacuum cleaners have been looked at by the Directive, the preliminary assessment of the preparatory study has been finished for two or three years already, and we're still waiting for implementing measures. Between June 2010 and June this year, nothing happened. The product was put on the shelf. So it goes to show that maybe if it's not a willingness issue but if the Commission has sometimes a staffing issue as well. On EcoDesign you have basically one desk officer for three or four products. Some of them are very complex, much more complex than vacuum cleaners. Boilers – we are still hoping for implementing measures – maybe next year but it has been already five or six years that it has been discussed. So that's the perspective I wanted to give. And I'm sorry Pavel - I'm sure if you had said TVs we could say positive things about TVs but vacuum cleaners are actually a bad example!

Q3. Unico Van Kooten, the Dutch Waste Management Association

I was very excited by the presentation of Ramon, not in the first place because of the first slides of his presentation. And my question to that: would minimum standards for the treatment of waste-streams like landfill of carpet tiles help use carpet waste as a resource more effectively in Europe than is being done nowadays?

Q4. Andreas Kunsleben, Effizienz-Agentur NRW

Just a short comment on Melissa. She told us about problems with green public procurement because of lack of data. I don't believe there is any brown procurement because of a lack of data. It's probably because of a lack of qualification of the buyer. But you can do green procurement if you want.

Q5. Martin Wildenberg, Friends of the Earth Austria

I've more of a comment or example, of how to put life cycle analysis into practice. In Austria we have developed a set of ten indicators, five of them are resource indicators – carbon, resource indicators, water footprint and land use; and the other five are focussing on agricultural production, so nitrogen balance, phosphor balance, sulphur balance, energy intensity and pesticide use. This might sound like too many indicators to communicate to the customers and that's probably true, but what we see is that we can use these indicators to improve the production chain, so you really see where the hotspots are. You see if it's transport or agricultural production. You see also the interactions between the indicators which means you see that if you reduce the energy, it might raise the pesticides. This really helps you to design the whole production chain. In terms of data availability we can calculate these indicators mainly on the data farmers and producers are recording anyway for certifications for getting the EU subsidies. And currently we are implementing the whole system to a very large certification body for agricultural practice, so I think we are on a very good track to getting these indicators and a life cycle approach, and we can use them widely.

Q6) Rob Motley

I have a very short question. If you are the manufacturer of the hoover, what will be your first step to make it more sustainable?

Chair: Ms Shin, do we have less green product procurement because of lack of data? Will we have more brown procurement?

Melissa Shinn: I completely agree that there's a massive barrier on the use of the data and the training of procurers because they have problems even coping with energy efficiency, let's be honest about that. And it's pretty simple. I agree on that, but I do also observe that I've had a lot of the green public procurement experts that are desperately working with companies, trying to get GPP happening by marrying information and training. It's very haphazard and very fragmented. And it's not even available in terms of average data in databases. There's a lot of impact data, life cycle data, but there are some gaps still in the material use and the land use and the water use. So I think it's both.

Ramon Arriata: For me the critical issue is we should be very clever because we cannot win all the battles. So I really call the whole environmental movement to choose four battles: transport; buildings; energy use in products; and whole agricultural system. Let's ban all the labels and focus on absolute figures. You cannot divide by the output of a product because grams of CO₂ per km could apply to a Mini and a Jaguar. We're not doing that with energy-consuming products. We're dividing by how big is the TV etc. And that's wrong.

We need to, if we are able as consumers, you know you don't think of yourselves buying, you are not the typical consumer, think about mum or dad going to make these decisions, they cannot remember all these labels and they won't be able to remember all this data. But they can remember one piece of data about buildings, one about cars – it's already common, one piece of data about food and agriculture, one piece about energy use in products. Let's focus on that. We don't need any labels. And we have this combined with other policies, top-down EU performance of the four things, and then enabling Member States to go further at local, city level and help products with less impact. We would gain much more if we focussed on these issues.

Arnold Tukker: Consumers would be confused if they saw all four labels. Well they are confused anyway, much more confused than if they were to be given four indicators. If you look at all kinds of products, most products are relevant for only one or two environmental aspects. So for agricultural produce it is land use, water and maybe a bit of CO₂. And people can manage that.

Chair: Mr Misiga: the hoover question?

Pavel Misiga: My answer is simple: first do a good life cycle analysis but don't focus on one parameter only. I would do this analysis as broadly as possible, and then discover the dominant environmental impacts, and you can focus your design to address those dominant environmental impacts. And if I can react also to some other questions and comments, I think that this is the approach we try to take in the development of product policy to follow adoption of Resource Efficiency Roadmap. We try to analyse what our priorities really are in this initial scope, we don't want to limit it to one of four environmental parameters because we know that there are trade-offs. So if we consider CO₂ as a proxy for everything we may get some things wrong. So I think we need to identify priority products, priority issues that should be addressed, then we have to find the optimal policy mix for those products. There was a lot of discussion today about information to the consumer. We have 15 years of experience of the ecolabel, we know experience of member states with national schemes etc. and the only success story is probably the energy efficiency label. We need to have complementary instruments, fiscal instruments and other instruments, incentives linked to that.

But what is new, what is disrupting thinking, is that for the first time I think we reached the stage where we use this life cycle approach in broad scale in policy making. And also in industry for private initiatives. Even two years ago, we didn't have robust methodology to apply life cycle assessment in this way. Recently there were few methodologies adopted on carbon footprints of products. So this is very new thing. And we are in an adolescent phase, and we may face lack of data at the moment but if we promote these tools, data will be collected, there will be more and more data. And application will become cheaper so that it will be easier to apply it, and ultimately we would like to apply it in policy instruments. While today, we are able to set only ecodesign measures for energy efficiency in the use phase because this is something we can measure, I hope that in future we will be able to apply a life cycle approach in policy instruments, be it market-based instrument, taxation and other fiscal instruments, be it regulatory instruments of ecodesign type.

Sylvain Chevassus: First of all I'd like to stress that we shouldn't be too conservative about consumers: they're not that stupid. Secondly, like for any innovative policy, there is the usual resistance but it shouldn't stop innovative and pioneering projects taking shape. It started like that 20 years ago with the current labels which we know very well, which are mainstreamed and which a large share of consumers know and use. Having said that, it's clear we're looking at the complexity for consumers and their understanding. In many of our projects for national experimentation, you find in examples provided by industry, an indicator on a relative scale, so there is really a wealth of proposals, including aiming to simplify the information to consumers and we want to draw on that in order to take the best of suggestions. For example, a few years back, in France consumers didn't understand information on CO₂ emissions of cars. Now, thanks to the car label, thanks to the system we have in France, everyone understands what 100 grams CO₂ per km means. So we think that consumers can progress, and they are not stupid.

Secondly, I'd like to come back to the carbon footprint. We shouldn't focus only on the carbon footprint because it can give an inappropriate environmental picture of product. It can lead to impact shifts, for example. It's not necessarily relevant - if you take detergents, the carbon footprint is not relevant. It can be counterproductive in some cases. For example organic products don't fare very well on the carbon footprints for some reasons of yield but if you add other indicators then you get a better environmental picture of the product, and that's what we are doing in France - getting industry with agency working on these footprint indicators that have been mentioned and that are really important, for example water, for example biodiversity.

We basically have to start somewhere, and I think what is a bit underestimated, or maybe it wasn't correctly presented for my side on our policy, officially it targets consumers - it's our angle initially. But we are well aware that improvements in resource use will take much longer from the pressure from consumers, although it's also a way to respond to their increasing expectations in terms of being provided with environmental information, that the resource efficiency improvements will take longer from the pressure from consumers than from the production side.

And the producers in France, through the tools and methodologies we're developing, are heavily involved in the measurement of their impacts in the footprinting of their products they are learning by doing in our projects at the moment. They are collecting data, they are getting more familiarised with footprinting methodologies, they are using Ecoinvent, GaBi databases and all that and they are taking on LCA practice and LCA tools. And inside these businesses, what is really interesting is that the environment and LCA people are now working with the communication and marketing people, and this also contributes to the mainstream inside business of footprinting tools and methods, so don't underestimate behind a label, the very important work that is behind a label on the production side and the stakeholders because the stakeholders are associated as well of course. Thank you.

Chair: Thank you Mr Chevassus and sorry for having tried to cut you short because this was a very important addition also to the role of the customer. We tend to look at it very much from the supply side and the demand side is as important. Well I leave the conclusion very much to the next chair - my colleague Gerbrandy. Just in order to thank you again, because we heard from you that there is no quick fix or simple bullet indeed. Mr Tucker called for policy measures and a different approach in international organisations and that we have to put a lot of emphasis on decoupling of growth. Fortunately, Mr Misiga then answered that policy measures are going to be made, be it in the long term, but we'll get there. And then Mr Arriata said that there are different options and that is from the business side and we have to emphasise the life cycle approach.

Seatter: Thank you very much. Can I take your question and put it in the context of today, and the question I'd like to address is how can we get people to focus on the issues of resource efficiency at a time of the most serious economic crisis that we have faced for eighty years? People are angry, they are frightened and they don't have much money so how do we get angry, frightened and penniless people to face up to the challenge of resource efficiency? And some of you might say that's an impossible challenge and refer to the analogy of squaring the circle. How can we square the circle? Well squaring the circle has a depressing part to it but it's got an encouraging part to it. The depressing part is that people worked on this problem for 2000 years and in 1882 somebody discovered that it was impossible. But the encouraging part of this story is that round about the same time somebody else proved that it was possible, and it was possible because you have to think about

space in a different way than was done by Euclid many years ago. And you have to think about transforming that space into a kind of curve, and when you do that it turns out that you can square the circle.

And my first point about how do we address this at a time of crisis is the rather philosophical one, but necessary which is we have to transform the terms of the debate. In the same way that people transformed the notion of space, we can transform the debate, and that I think is a really important step. Alongside all the practical things we can do, and I'm going to come to three practical suggestions in a minute, but alongside that what we've got to get right is changing the terms of the debate. Because in the Resource Efficiency Roadmap, as Commissioner Potočník pointed out when he opened the conference, there are some quite radical ideas about transforming the economy.

We're talking about decoupling the economy from material inputs and moving to a value-based system for products and services. We're talking about valuing ecosystems and natural capital. We're talking about a major shift in the tax system. We're talking about moving to zero residual waste in our economy. And we're talking about changing in a radical way food production and the way that we use land. None of those things is happening now. All of them will require a radical transformation and a way out of the crisis into a new kind of economy, so that's what I mean about changing the terms of the debate. And that's an essential part of convincing angry, frightened and short-of-money political leaders that it's essential to do something about this problem.

So that's the philosophical part, and what about the practical suggestions that we would ask people to focus on in the immediate term? And the first one I would pick up is this tax system question. And what I'd put to you is two points. The first one is when the OECD and the IEA come out with a report that says that the OECD is spending between 30 and 50 billion euros a year of taxpayers' money to create harm to the environment, and that's only on fossil fuel subsidies, then there is something seriously wrong and there is an urgent need to address it. That will release money to cut the cost of labour and address unemployment, more or less immediately. The second point is if you take the example of Ireland, which was faced with a total collapse of its economy, it has moved to 15% of its tax base being on resources, then it's an example for others that you can take a route out of the crisis and move your tax system. It's not a luxury but it's a necessity, and so we're calling for that to be looked at much more seriously in the European Semester of Economic Policy Coordination, and we'll be trying to do that next year. We've started on some of that this year; we're trying to do some of that next year.

My second practical point linking with the previous discussion is what I would call the Green Single Market. Now a lot of people will fall asleep when we talk about the Single Market, but the *Green* Single Market brings in two notions that came up right at the beginning of the conference. Magda spoke about responsibility and Jacqui McGlade spoke about design. And responsibility in the Green Single Market is responsibility of public purchasers to do something about what they're buying and to improve the way they're making those purchases on behalf of taxpayers. And that's the green public procurement issue. And the design point, as you've just had a really interesting discussion about product policy, that's a central part of what I would call the Green Single Market. And when we've heard the really interesting things that the French government is doing as part of the Grenelle de l'Environnement, also about an Austrian example, well what can the European Union do but open up possibilities for firms within the Single Market to take advantage of what's being done at national level, so that there's a national level playing field and a bigger market for them to operate in and for consumers to get the benefit from?

And there is also a design problem in our finance system, in particular venture capital for small firms who are looking for funds to invest in eco-innovation and new techniques. This is not working at the moment, and the Commission more generally is looking to break down the barriers in the Single Market that operate to prevent venture capital from offering what they have to offer, particularly to small businesses that are at the sharpest end of eco-innovation. So that's the second set of measures that I would highlight as a priority. And finally, and perhaps most urgently, and linking again to the discussion on the first day is indicators, is measuring the problem. Part of convincing political leaders to move on this is to get better indicators and to move towards a system of targets. We've put on the table a materials-based indicator which is not good enough, and have suggested, if you go through the annex 6 to the Roadmap, you'll find a whole series of other ideas about how we can integrate measures related to land use, water and carbon.

So can we move together to create a better measurement of the problem, and the extent of the problems that we're talking about? We believe we can, and we've set a period of two years in which this should be done. It's not the Commission that's going to come up with the answers. We will be responsible in responding to what we hope is a movement to get better measures and better indicators of the sorts of environmental impacts that people are really concerned about in this area. So I would conclude by saying, we're hoping that you will join in the movement to get better measures and indicators and we will respond to that, hopefully within the two year period that we have suggested. And I would ask you and your organisations also to come in in support of the transformational agenda, the other side of this that goes alongside the practical measures. The Commission will try to face up to our responsibilities, coming forward with practical measures of the sort I've just mentioned, but we need other people to come in and help us with pushing the transformational agenda that is an absolutely vital component to the practical one in convincing our political leaders to take action. Thank you.

Chair: Thank you very much. I think that you've summarised Friends of the Earth's response to the Roadmap at the end of your intervention in some ways, and I would also fully agree with you that we do need to move into a Green Single Market. For that we do need both fiscal and legislative measures, and that was something which I think we believe was missing from the Roadmap. Equally for the harmful subsidies, it's very important that you mentioned that. However, it is a bit of a disappointment that by 2008 the Commission was supposed to bring a Roadmap for phasing out and now it seems to be shifted more to the Member States to come with an idea how they are going to do that. And these are things that need to go, and they need to go fast. But as we have the parliament being part of the discussion here, I would like to move to Mr Gerbrandy for his intervention.

Gerbrandy: Well thank you very much, and it's quite a challenge. You've been sitting here for two days, you've heard everything about resource efficiency, so a lot of what I'm going to say has been said before, and not only that, just before me we had a philosopher who also has the ability to be concrete, which is a rather unique combination. So I'll try to take this challenge, and to say a few words of what I believe is necessary in this whole debate on resource efficiency. I believe the most important thing is that we all realise the sense of urgency and if I hear especially in the Member States people talking about it, if they're talking about it, I notice a huge lack of sense of urgency.

And for an example, three weeks ago the biggest paint producer in the world, AkzoNobel, presented its figures for the third quarter this year, and the CEO talked about a tsunami of rise of resource prices, and in figures, in one year, the prices of resources used by this company, AkzoNobel, have risen with 700-800 million euros, and this company has a turnover of 4 billion euros, which puts it in perspective. It's huge. A company like Unilever had an increase in prices for resources of 2.5 billion euros in one year, and that's what we're talking about. This is not something that should be done by environmental NGOs, no this should be a number one priority on a Monday morning board meeting of every company in Europe and outside Europe.

I think that is the sense of urgency that I would like to spread around. And that is necessary. I've noticed that the flagship Roadmap for Resource Efficient Europe was not presented by President Barroso because it was of huge importance, no it was presented by Commissioner Potočník, who is extremely capable but it doesn't show the huge political importance that this topic has to the whole of Europe. And not only that, I heard rumours that there were pressures within the European Commission towards Commissioner Potočník to postpone the presentation of the Roadmap for a few months because we have an economic crisis and it might not be good timing to talk about sustainability.

But this has nothing to do with sustainability; this is the economy. It's like quoting Bill Clinton: "it's the economy, stupid". That is I think the main issue we have on this table. We are talking about improving the competitiveness of our European industry and it's a wonderful coincidence that by doing this we make them much more sustainable as well. So maybe for the first time, we see that ecology and economy are coming very closely together, and that is an opportunity that we shouldn't miss. It is a huge opportunity that we should grab with both our hands.

To put it even in a broader perspective, I would like to talk about the story of a revolution we're in. We are in the starting phase of a global green industrial revolution which will have the same impact of the huge industrial revolutions we've seen in the past. And if I see developments in China, India, Brazil, emerging markets becoming much more sustainable, not because they suddenly care about the environment, but

because they notice that they have to produce much more efficiently in all ways, with water, with land, with energy etc. So we're in a green industrial revolution. And the question is not whether we in Europe will follow this revolution, the question is more will we rapidly enough to adjust to this transformation we see in the world economy.

And I talked about the huge role of business. I've spoken to maybe hundreds of different businesses on an individual basis, through associations etc, trying to convince them that this is not something where politicians are going to present them or propose targets etc. that they will play the role in the game by pushing the brakes, by saying no, no, no, that goes much too far, we're not able to do that, we have to water it down etc. No, this is in their own interests to set very high standards for themselves together, that we're in this boat together, we should work together to make Europe as efficient as possible with the few resources that we still have in this world. I notice that there are a lot of companies that completely agree with me. I've mentioned a few but there are hundreds of them, but it also means that there are thousands of them that are not yet convinced.

And my major concern, as we've seen in previous industrial revolutions is that we will end up with huge losers next to a few winners. So I see it as let's say my public responsibility to try to convince companies but also business associations that they should move much more rapidly in order to be competitive in the future.

What about concrete measures? Well, Alan did say a lot of things that I was going to say. One of the issues that I would like to emphasise again is the environmentally harmful subsidies. We spend so many billions on subsidies through governments that are running out of money but continue spending these billions and have to spend additional billions later on to clean up the mess that was made by these subsidies. This is such a no-brainer. It's such a win-win situation that it's incredible to understand why we have to convince people to start with this process. And the G20 has embraced this two years ago. The Nagoya summit on biodiversity last year also made commitments to phase out environmentally harmful subsidies in the coming ten years. And still countries are moving far too slowly.

I've taken the initiative to ask colleagues from the National Parliaments last week, to put questions to their national governments to ask them to indicate all environmentally harmful subsidies, and the second question to ask them, a timetable to phase them out in the coming eight, nine, ten years. I'm looking forward to the answers. I know that a lot of people still find it extremely sensitive. I know the OECD was supposed to come out today with a report on environmentally harmful subsidies in the field of energy, fossil fuels, and not only are they saying that it's harmful, but they also say that the original objectives of these subsidies are not reached, that is helping poor people in their energy consumption, but what we're actually doing is we are having them consume a lot more energy instead of being more efficient and spending less money on it. So that's extremely important.

Another thing is implementation of legislation in Member States. The Roadmap is very optimistic about this. The 2020 Vision statements, it says for example on air quality, by 2020 all air quality legislation will be implemented. Well, it's a mess. Twenty out of twenty-seven Member States are falling hugely behind in implementation so by saying that by 2020 it will be all implemented is at this moment not enough. We have to put much more pressure on Member States to do so. And we have to support them with their national programmes on resource efficiency because that's very important as well.

Two more things. The coming fifteen months we will be discussing in Europe the Common Fisheries Policy and the Common Agricultural Policy. We can discuss here resource efficiency for not only two days but two years without having any results if the Common Agricultural Policy and the Common Fisheries Policy are not changed radically, so I hope that Commissioner Damanaki, with her wonderful fight to maximum sustainable use in 2015 will be successful but it's going to be a huge battle, especially against the national ministers of fisheries because they behave incredibly irresponsibly.

My final remark is on waste. Although you see the transition of seeing waste not as something we have to get rid of but as a new resource, we see changes in the way of thinking, we see changes in countries, so it's going in the right direction but again far too slowly. And as we speak, huge tankers full of old paper, old iron crap, and all other stuff, go to China and other countries, just count the amount of tankers that come to Europe from China with all the products that we want to consume. They don't go back empty, they go back with our very valuable resources. Someone from the paper industry told me that the paper industry close to borders in

Europe is not able to get any old paper because it's all shipped to China. I spoke to steel companies who said "we would love to have old steel but it's all shipped to Turkey so we are just unable to get hold of it".

And we have so few resources ourselves, but still we export a lot of the resources that we do have, that are the resources that we've used before. The Environmental Agency in Copenhagen told me that only in Germany one third of the total consumption of platinum is exported through old cars. And that is something that we shouldn't do. I think I will conclude by again stressing the need for a much higher sense of urgency. I would love to have not only Commissioner Potočník, Commissioner Damanaki fighting for much more resource efficiency but also President Barroso, President Van Rompuy and the Merckels and Sarkozys of this world. It has to be on the top priority of the political agenda in Europe, and then we might be able to speed up the process and have some successes in the coming ten years. Thank you.

Chair: Thank you very much. I think, as Friends of the Earth, we are very clearly with you on the issue of urgency and on the issue of convincing President Barroso that it's very important; that this is a way out of the crisis rather than an obstacle, but I think we also need to find a way to convince businesses that it's good for them, because from what I understand, many of them still see it as a threat. And that's the same with the harmful subsidies as well, money goes somewhere and there are vested interests close to the political power that would like to keep those subsidies. I want to ask one question back to Alan. As Mr Gerbrandy is the reporter on the Roadmap of Resource Efficiency, what would be the one thing that you would love to see in his report? I know it's a very superficial question but if it was one thing, what would it be?

Seatter: Well as a public servant that is under control of the European Parliament, it's like asking what kind of stick I would want my head beaten with! But what I think I would want is really what he said about this link between the environmental world and the economic world and putting this at the top of the agenda of economic policy. How to do that involves what you just said about convincing businesses. I think that's part of this, but if that message were to come strongly from elected members in the European Parliament and we can help to push that in the work that we're doing with finance ministries, I think that would help to move this issue to the top of the agenda.

Chair: Thank you very much.