

# **”Resource Intelligent Europe” - a MEP/MP network to promote global ecological system thinking and to help EU institutions design policies to bring the EU economy back to its ecological limits**

## **Initiated by**

**Judith Merkies, MEP S&D, Netherlands**

**Sirpa Pietikäinen, MEP EPP, Finland, GLOBE EU President**

**Claude Turmes, MEP Green, Luxembourg, Davos World Resource Forum Board Member**

**Anders Wijkman, former MEP EPP, Sweden, Club of Rome Board Member**

## **A. Background**

**The human economy is part of a larger system, the Earth System.** Yet in daily life the limits put by the Earth System are rarely talked about. The default assumption seems to be that economic growth will continue indefinitely – not only for the poorest people on Earth, who desperately need a better quality of life, but even for the richest people, where growing wealth adds little to happiness and well-being. In order for growth to continue, decade after decade, the resource base has to be infinitely large and the same goes for the capacity of ecosystems to absorb all the residue materials resulting from the increased economic activity.

Based on global assessments the challenge ahead is colossal. Today the global economy is five times bigger than it was in 1960. If it continues to grow at the same rate, the economy will have grown almost 80 times by the year 2100. Such a phenomenal expansion of global economic activity would be in stark contrast with our scientific knowledge of the finite resource base and the fragile ecosystems on which we ultimately depend. Numerous studies and scientific assessments of the state of global ecosystems by recognised international bodies like the Intergovernmental Panel on Climate Change (IPCC), the Millennium Ecosystem Assessment, and recent reports on ”peak oil” and ”rare earths” show that humanity is already overusing a number of vital ecosystems.

The combination of resource constraints, increased pressure on ecosystems and pollution will however force us to change course. The question is: will it happen after careful analysis and orderly steps in the right direction or, which seems more likely today, will it happen only after repeated crises?

## **B. From the global to the EU level**

Today the EU 27 is the world's largest economic zone, larger than the US and Japan and still larger than the economies of emerging countries like China, India, Brazil and Russia. The EU has been traditionally at the forefront of progress on social, human rights and environmental questions. **We, the initiators and signatories of Resource Intelligent Europe think that the EU should now take the lead to develop an organised transition of its economy and of its society from the unsustainable consumption practices and production patterns of today** which overuse ecosystems and resources to a new economic, social and ecological paradigm which insures that wealth creation and distribution in the EU are not built on systemic overuse of ecosystems and resources nor on the exploitation of other regions of the world.

Special emphasis should be given the North/South dimension of this problem. Many developing countries are at particular risk in terms of ecosystem degradation and price spikes on major commodities. At the same time the same countries are suspicious about any attempts to reduce resource use because of their high dependence on income generated from raw materials exports.

With the help of indicators like the "ecological footprint" as well as the "carbon footprint", total material requirement and "hidden flows", "water footprint", "land use per capita", and biodiversity loss we will define targets to achieve to make sure that until 2025 the EU economy will respect its fair share of global ecosystems and resources.

We are convinced that initiating these policies is not only our ethical duty as responsible world citizens but that such a paradigm shift will also allow the European economy and businesses to be in a leading position in the development of new products and services which will create jobs in the EU and also be of high interest to other economic zones of the world.

## **C. The rationale for "Resource Intelligent Europe"**

The recent price hikes in global commodities such as oil, certain minerals and rare earths have drawn the attention of EU businesses and policy makers to the dependency of the EU economy on imports from other regions of the world. As a reaction some businesses and circles are calling for a more aggressive EU resource policy using the EU's leverage in multilateral and bilateral trading negotiations and agreements to force access to resources. Some are even calling for the use of military power to secure EU's vital economic interests.

While we the initiators and signatories of Resource Intelligent Europe are aware of the global competition for access to resources between the traditional economic blocs of the EU, the USA and Japan and emerging economies like China, India, Brazil and Russia and understand that the EU should be not only "nice" and "naïve", **we see also the risks that policies to embark the world on a race for the last resources, including competition for land through land grabbing** could potentially mean.

Such a race **could end in more tensions between different parts of the world and be a major threat to world peace.**

Our approach will be a holistic one including a major push for resource efficiency and resource productivity.

We need nothing less than a paradigm shift. Since the first Industrial Revolution, all efforts have been geared towards increasing the productivity of the labour factor, given that labour was scarce and nature abundant. Today, the picture has shifted to a situation where labour is abundant, while natural resources are becoming scarce. Therefore, the efforts now must be geared towards increasing resource productivity.

But even a radical increase of resource productivity will not be able to cope with the challenges ahead. This is due to the so called "**rebound effect**". Higher energy and resource efficiencies mean lower per unit costs of a commodity or a product or service which often creates an incentive for businesses or the consumers to consume more of the same commodity or spend the extra money on more resource consuming activities (lower heating costs in a super insulated house freeing money to book a weekend flight). As ecological boundaries are absolute boundaries /tipping points it will not be sufficient to be relatively more efficient as an economy but to decrease the total volume of certain resource uses. New policy instruments like "the budget approach" (total amount of GHG to be released over a period) and new economic models like extension of capital stock or development of a service/leasing economy will be needed. We will also have to develop new indicators to measure wealth in society which go beyond the GDP concept.

#### **D. European and global outreach required**

The main objective for Resource Intelligent Europe will be to help raise awareness and shape policies so as to avoid both the breakdown of the life-supporting services of the biosphere as well as major constraints in the supply of vital resources such as land, water and raw materials.

A network in the EP should be the first step. Awareness needs to be raised through seminars and workshops – reaching out to all major stakeholders; in the EP all major committees should be involved in outreach efforts.

The next step would be to reach out to parliamentarians in EU Member States, preferably through GLOBE. Partnership with research institutes and civil society organisations, like the Club of Rome as well as with forward-looking businesses should be looked for. In order to succeed it is imperative that EU leaders at the Council, Commission and Parliament engage in dialogue with Frontrunners and Champions of Resource Efficiency, rather than being exclusively exposed to the arguments of companies reluctant to change.

The World Resources Forum launched in 2009 in Davos and its second edition foreseen in October 2011 also constitutes a major opportunity to reach out to decision makers in other parts of the world. Special attention should also be given to the EU's pro-active positioning as part of the 2012 "Rio Plus 20" UN process.

“Traditionally environmental policies have focused on specific problems. In certain respects this approach has been quite successful. For instance, this strategy has cleaned up water and air pollution in rich countries, taken dangerous goods off the market, recycled certain products, and reduced ozone layer depletion.

But these policies are toothless against the problem of exploding global resource consumption. What we urgently need is economic policies that make the global economic system take into account the inherent limitations and the value of the cost-free life sustaining services of nature. The politically defined economic framework conditions have to be adjusted to protect the global ecosystems, and to preserve resources for future generations.

These conditions must include incentives to make planned transitions now, rather than being forced upon us by catastrophes. Major increases in resource productivity would occur if all relevant markets operated perfectly instead of being blind to the environmental costs of growth, and if there were no barriers to entrepreneurial innovation.

However the markets are not operating perfectly, market prices are wrong due to discounted externalities<sup>5</sup>, relevant information is not available to the actors, and innovation barriers exist. No incentives or policies currently exist for a sufficiently resource efficient economy.”

(World Resource Forum 2009, final declaration)

## **E. Suggested activities**

### **1. Promote a new legislative framework for Resource Efficiency/Resource Productivity**

We welcome that the EU 2020 Strategy identifies more efficient use of resources as one important objective for the future and that the EU Commission intends to launch a Flagship Initiative on “Resource Efficiency” in 2011.

However we urge EU Commission to take an ambitious and holistic approach to resource efficiency not reducing it to nothing more than policies to favour acquisition of rare earth by EU companies using “trade” and other policies. Such a narrow definition of resource efficiency could only fail.

- **An overall target**

In order for resource efficiency policies to make a "volume" difference on the EU economy's it is imperative that resource productivity grows substantially faster than the EU's GDP. In that respect the Commission will have to propose one or several concrete targets for the EU economy as a whole.

- **New legislative proposals**

There have been some attempts in the past to enhance resource efficiency, e. g. the IPP and the Take-back Directives with regard to vehicles and electronic waste as well as waste management in general. But we still lack a coherent strategy to bring about major shifts in production as well as consumption.

A first step will be identifying existing EU policy frameworks which could be amended to enhance resource intelligence, such as the Waste Framework Directive, the Take-back and the Eco-Design Directives, etc.

And other idea could be to come up with an overarching "**Sustainable Resource Management**" (SRM) Directive, establishing principles for resource use, setting resource efficiency targets for most relevant sectors– thereby favouring better design of products and production processes, recycling and reconditioning – but also addressing the issue of reuse (for instance enhanced spare part systems, enhanced repair systems).

In order to address the **rebound effect** new legislation on resource efficiency will have to be paralleled by an Ecological Tax Reform/Value Extracted Tax on Resources:

- reducing taxes on labour and increasing taxes on use of virgin materials etc;
- a paradigm shift from labour to resource productivity

We need nothing less than a paradigm shift. Since the 1st industrial revolution, all efforts have been geared towards increasing the productivity of the labour factor, given that labour was scarce and nature abundant. Today, the picture has shifted to a situation, where labour is abundant, while natural resources are becoming scarce. Therefore, the efforts now have to be geared towards increasing resource productivity.

## **2. Focus on land use change and land use competition**

The actual resource efficiency discussion at EU level is largely ignoring/not giving enough attention to the impact of economic growth and of changing diets on biodiversity and on land use changes. A recent example of this missing understanding

is EU's biofuels policy, which has largely ignored its impact on global food/feed and on land use changes triggering CO2 emissions.

In order to tackle this urgent problem, the EU Resource Efficiency policy must be complemented by a new approach on land use change and land use competition. The upcoming reforms of the EU agriculture and EU fisheries policies must put an end to the systemic overuse of ecosystems and resources by the EU, its businesses and its citizens. Reducing the unsustainable high levels of waste in food/feed production and defining a holistic EU "nutrition" policy will be key. Today's mining and logging practices will also have to be addressed as they cause heavy destruction of ecosystems.

As land area and land resources are scarce, an equitable and sustainable basis should be developed for their calculation, distribution and usage; the EU must also develop a policy of hierarchy of usage and more massively invest in innovation and R&D around "multiuse" - optimising certain land uses.

### **3. Special emphasis on the North/South dimension of this problem**

Many developing countries are at particular risk of ecosystem degradation and prices spikes on major commodities. At the same time the same countries are suspicious about any attempts to reduce resource use because of their high dependence on raw materials exports.

EU must develop fairer trade policies notably to more vulnerable countries and populations (including land-grabbing issues). Fairer distribution needs to be debated and better "resource deals" offered to parts of the developing countries.

Resource efficiency concerns will have to be integrated into the development assistance policies of the EU.

### **4. Challenge the present macroeconomic policy framework**

The myth of infinite economic growth is not difficult to understand. Our economies are structured in a way that makes them reliant on growth for their stability. When growth fails everyone loses. Businesses sell less goods and services. People are laid off and often lose not only their income but their homes as well. A spiral of recession looms. Tax revenues are reduced and welfare programmes are threatened. No wonder that every government wants to maximise growth.

This is probably the most difficult and the most controversial area of new politics to be developed. Therefore we propose that in a first stage we will try to objectivise this debate by creating a number of tools.

- **New tools for measuring welfare**

The Commission and EUROSTAT should continue their work on "GDP and Beyond" and include issues like resource accounting, including carbon disclosure or carbon, as

well as new accounting schemes to be developed in parallel with traditional accounting systems. This should also include the mainstreaming of new kind of statistics measuring metrics relevant to resource use (EUROSTAT, national statistics). The work of TEEB (value of ecosystems) under the auspices of UNEP should also be integrated into EU policymaking.

- **Establish a meeting place for economists and ecological system experts**

There is a real lack of expertise on economic policies which would respect the limits of global ecological systems. There is a need to organise seminars between mainstream economists and ecological economists with the view of incorporating into conventional policy framework some key propositions from the field of ecological economics.

- **Insuring transparency and combating speculative behaviour on world resource markets**

Transparency in global resource markets, in price setting and material flow, is a prerequisite to avoid speculative behaviour and market distortion

- **Budgetary reform**

It is necessary to reform EU subsidies and incentives to truly support a transition to sustainable economy.

- **From product to services economy**

One key point which gets more and more attention in academic circles is the enormous potential which the development of new "leasing and sharing" services could bring. There are already a number of large companies (e. g. Xerox, Michelin, Ellis, Caterpillar) which are moving away from selling products to selling performance and services. This move allows a better grip on the total supply chain and on the total life cycle of a product and thus more possibilities to optimise resource efficiency. We need to better understand by which sector and horizontal policies political and financial incentives to accelerate this move can be created.

## **5. Innovation policies**

Innovation is the driver to sustainable economic activities, renewable energy supply and to reducing our ecological footprint altogether.

Innovation and research is needed to increase resource productivity (reduce material use) and reduce energy consumption. As energy and material costs account for the largest part of the industry's budget, increasing efficiency and savings lead to more profitability. Large savings and efficiency gains can be made when the entire supply or value chain of a product is optimised for resource efficiency with cooperation between the different layers in the supply chain. Europe's industry, more than other industries in a dependency situation, can improve its competitiveness by improving resource efficiency.

Research must be directed to substitution of scarce materials, to increasing resource productivity and to economic benefits of how resource savings are related to productivity gains.<sup>1</sup> Research must also be performed on how to optimize the supply chain with all stakeholders involved.

Citizens play a key role. It is their behaviour and consumption that drives the economy and drive the necessary changes. Positive communication, practical education and information about resource efficiency are essential, what is to gain? How to change the consumption patterns in daily life? The government must set a good example in resource use, reducing its energy consumption and by developing public procurement guidelines rewarding resource efficiency and by taking resource efficiency into account in impact assessments.

Indicators for resource efficiency must be developed. Benchmarks can provide a good tool to measure efficiency per sector, for all levels of the supply chain, to be set by public players, the industry and experts. It is this comparison can instigate changes, whereby the front runner in the sector becomes the benchmark for the others.<sup>2</sup>

#### **Suggestions for innovation measures at all levels:**

- Identifying the resource savings potential in supply chains
- Setting targets and benchmarks at supply chain level
- Additional dedicated R&D projects (R&D for supply chains!)
- Coordination and knowledge transfer within supply chains by sector
- Financial support (the financing of investments needed to reach the higher savings potential counts still as the most important barrier to change at SME level. It is worth the while looking again at SME-friendly financing solutions for mid-size investment needs)
- Incentives (quicker write-offs, tax incentives, price signals, commitment of large buyers to resource efficiency...)
- Involvement of industrial associations in innovation support (To tap the massive savings potential and yield an impact at national economy level, we need to initiate a long term, multi-layer process, based on trusted multipliers, like technical networks, industrial associations, or clusters.
- Coordinating of EU, national and regional initiatives
- Establishing a resource hierarchy: priority setting for material use

---

1. At single firm level, investing in resource efficiency yields an average savings of 2 ½ % of the turnover or 5-6% of material costs. As a rule of thumb, these savings can be obtained with no or very low investment, and they have a RoI of less than a year

2. Currently, a full audit for a single company costs easily 50.000 EUR and more and is too expensive for small players.