

Report on the HBS Future Workshop on resources in the EU

Prague, 2nd – 5th of April 2013

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Schedule

Tuesday, 2nd of April

Morning: Excursion to Institute of Plasma Physics

15:30 – 17:30 Introduction in the process and the methodology/ getting to know

Wednesday, 3rd of April

9:00 – 17:30 Problem Phase

Thursday, 4th of April

9:00 – 14:00 Utopian Phase

14:00 – 17:30 Realization Phase

Friday, 5th of April

9:00 – 14:00 Realization Phase

14:00 – 17:00 Presentation of results

Narrative Report

The workshop started by a personal introduction of the group. Participants were asked to choose from a range of pictures showing different resource related objects and sceneries, according to their personal interest and knowledge and then explain to the others why they chose their picture.

On the following day, as a thematic extract of these mini presentations six groups were formed around the resource related subjects: energy, growth, food/agriculture, waste, mining and land/soil. During this first phase, the problem phase, the workshop's goal was to identify main problems in the different areas first each by him and herself and afterwards in small group work discussions.

After an impressive amount of problems was identified the workshop entered its second phase – the vision phase. In the respective areas a vision of the situation in 2025 and 2050 should be created. This vision was not meant to be realistic but idealistic. How would you imagine a perfect world in each area?

To do this, four most pressing problems were elected for further debate. These problems were corporate power in the area of land and soil, uncontrolled exploitation of resources in food and agriculture, missing energy community strategies in the area of energy and waste not being seen as a resource.

In the third phase, the realization phase, and with these visions in mind, the workshop's focus then shifted towards precise projects and plans. In small groups, policy measures or concrete projects that could lead towards the right path for the vision until 2020 were developed and presented.

In the following the elaboration and development of the different problem areas is described.

As a synthesis of all problems discussed there are some major topics to be outlined. According to participants, our current, growth based, neoliberal capitalist economic system was identified as a major cause for various problems. It enhances profit oriented behavior of companies as well as at a personal level, regardless of environmental and social impacts. Concretely, this leads towards an extractive resource based economy where value is defined by income. This is underpinned by biased power relation between the global north and south as well as between citizens and multinational corporations. Corruption and governmental failure to address these problems aggravates the issues. In essence, it was pointed out, we face a multiple crisis, where resource related problems are embedded.

1.1 Energy

Participants agreed that problems in the field of energy start at the very beginning of the supply chain. Our entire economy depends on energy and dependence on fossil energy is particularly high. Regardless of concrete problems like peak oil, energy poverty and the ever more obvious risk of nuclear power, there is a lack of broad political will to take concrete and far reaching action to change the energy supply system, especially at a global level where no functional governance regimes on energy are established yet, although it is a cross border issue. Producers seem to have no interest (if not financially incentivized) in promoting

renewables, instead they are lobbying for brown energy and trying to maximize their political influence. The political focus of energy politics, even when meaning to improve energy provision, is still largely on replacing brown energy by green energy. The public debate, it was assessed, still avoids a strong stance for energy efficiency and sufficiency, what would be actually needed to seriously solve the problems. This goes along with another problematic development: The rise of new energy that relies on risky technologies like shale gas, fracking and solar panels using scarce raw materials. Also energy distribution is not functioning in a way that would support a sustainable energy transition; grids are highly centralized and designed for huge power plants. When it comes to consumption, especially inefficient energy use and inefficient production methods were outlined.

1.1.1 Energy Vision

The overall focus of the group's vision was on reducing energy consumption, intelligent use of all energy sources available and innovations in the field of renewable energy. For 2025, the group envisioned energy supply to be almost fully decentralized and integrated in local areas and houses. This would go along with intelligent combinations of sustainable energy generation through renewable energy and organic waste and efficient design of houses and items. Cities and villages would have community areas to trade and share in order to prevent needless energy consumption. These community spaces would also serve as platforms for social exchange and support, education possibilities and cultural events. This way much of private entertainment would not be based on electronic, energy consuming devices but shared within the community. Schools would educate about the advantages of low energy systems in practical, entertaining ways. In addition to that, in 2050, new technologies would evolve, allowing for intelligent use of space to garden in cities, to use energy we produce in our daily life through movements etc. for energy generation and intelligent grids that coordinate different energy source influx. Systems would work as closed cycles so no energy can possibly get lost and outside influences like rain, wind and water will be used in a smart and efficient manner to provide for household's needs. The community level will be of high importance, as it will contribute to a vital society.

1.1.2 Concrete Plans in the field of energy community strategies

The group developed two specific projects in order to encourage communal energy strategies and pass on knowledge how to realize them to communities.

The first project is a film making project for teenagers. It is meant to give students in different schools among Europe the opportunity to produce small documentaries about already existing low energy communities. The process should be supported by professional filmmakers and afterwards the movies would be presented to the whole school. This way, other students as well as parents could get inspired and persuaded by new ideas for low energy, sufficient community organization. Some expert should be present at the film screening to answer questions and pass on further knowledge how to realize these projects.

The other project has a similar approach and objective but a different target group. One professional documentary about a successful low energy community project should be

produced and then shown in various communities around the country. This screening could be accompanied by a small exhibition and a discussion after the documentary about how to start these projects in one's own community. Experts and representatives from the documented community should be present in order to support upcoming ideas for own community projects. This way, ideas about sustainable, low energy communities could be spread and action in the different communities would be encouraged.

1.2 Food/Agriculture

Various problematic issues were outlined on this topic, beginning with food production, especially agricultural crops, which are fertilizer and pesticide intense and harms the soil, groundwater and biodiversity. Along with this goes the large scale focus on monocultures which also damages the soil and does not provide a sustainable way of food production. Along the supply chain more problems arise: Food travels miles to reach consumers, causing greenhouse gas emissions. It is packaged in a way that leads to more waste, and at any point, because of long distribution procedures, food is thrown away – by farmers, supermarkets and consumers.

On a broader level, multinational food companies control the international market for food without showing any interest in sustainable food production or fair wages for their workers. Western world's high demand for infinite availability can result in landgrabs by multinational companies in areas where locals are deprived of their livelihoods. Our current economic system was identified as a major problem factor because it encourages such behavior regardless of its negative effects on nature, biodiversity, and people's livelihoods.

1.2.1 Food and Agriculture Vision

The elaborated vision consisted of various aspects. For 2025 the group envisioned changed power structures where multinational companies are banned but state governments and international institutions are still in place. People, even in the cities, will have a closer relationship to land and farmers, show more interest and be involved in decision making processes. Farming will work exclusively with organic fertilizers. At the same time, most waste will be compostable and used for energy production and fertilizing. Production chains will be very short and hence, supermarkets will slowly disappear as their products will not be needed anymore.

This form of small scale farming will be very efficient and people will get empowered and gain more self determination on what to eat and how to produce.

In schools, children will be educated to appreciate organically, locally grown food and learn how to process food themselves and prepare their own food at school.

For 2050 the group envisioned a changed political and economic system based on an open source, decentralized approach. For food and agriculture this means an exclusively local, small scale production, integrated in the community. Trade among communities is possible but based rather on exchange than money. Also urban areas will be designed in a way that allows for sustainable food production. Almost everybody will contribute to food production but not in a full time job format. This way, soils will be of high quality and more resilient,

providing for good, stable harvests. In order to protect wildlife, enough wood and free space will be left to nature and biodiversity will flourish.

1.2.2 Concrete Actions in the field of Food and Agriculture

Based on this vision the main goal of the concrete projects was support for local food production as a way of shifting away from industrial agriculture. Additionally, a strict system of labeling and quality control is to be put in place. Taxes on food miles shall reduce the overall amount of global trade and therefore emissions. This money is to be used to support a broad farming transition towards organic and local farming. In order to guarantee farmers a stable income, minimum prices for farming goods are to be established and an organized distributive network to ensure food security and accessibility is to be set up.

To support these goals, awareness needs to be risen; the group therefore proposed a broad media campaign and education tools in schools. This could also provide a fruitful ground for lobby work both in the political and the corporate area.

The challenge is to define what falls under the scope of the food mile tax and to determine how high the tax should be. Another question raised was if exporting countries would not suffer from this tax as their exports would probably decrease. This is where local production for local needs becomes highly important as well as the mentioned distributive system to cover any risks to food security.

It is crucial that farmers are willing to take their part in this transition; therefore it is necessary that enough public money is provided by taxes and other sources. A threat to the functioning could also be corrupt bureaucracies; this is why the whole system needs to be recognized as effective and trustworthy.

1.3 Waste.

The major problem identified is the mere presence and the character of our waste. It is dumped, rarely recycled and often highly toxic. It is by no means seen as a resource and therefore only minor efforts are undertaken to reuse it as valuable material, like minerals in e-waste that are usually obtained by mining. Another problem is the lack of waste prevention: Our consumption and production patterns cause a lot of waste, from organic waste to highly toxic waste. This waste is mostly dumped and the existence of effective recycling methods and garbage collection infrastructure highly depends on the economic welfare of a region. In many parts of the world waste is simply dumped into the soil or the sea, which causes for example the huge pacific garbage patch. Another criticism raised by within the group are short product lifecycles and a throw away mentality of consumers, which together cause much more waste than necessary.

1.3.1 Waste Vision

The group's vision focused on closed cycle waste management and using waste as a resource. This is based on a broad consensus concerning the value and impact of waste. The importance of education and research on the topic was strongly emphasized since it will help gaining knowledge on how to alternate our products to be easily reused and recycled and in the end how to create closed production and consumption circles.

Toxic waste and toxic materials will be forbidden completely and people will have started to clean up with the waste that is already dumped in the soil and sea. Additionally smart, decentralized waste management systems will be in place, allowing for environmentally friendly waste deposition and recycling.

By 2050 production cycles around the globe will function as closed cycles, not producing any waste that is not reusable anymore. Durability of products would be improved as well as people's will to use them longer. Another aspect to reduce consumption and hence waste are community based exchange systems for different devices.

1.3.2 Concrete Plans in the field of Waste

The group that elaborated concrete measures in order to improve our waste management and waste production highlighted the importance to conduct ambitious research on the possibilities of recycling and the durability of products in order to have clear ideas and targets. Additionally, research is needed in the field of product design, where the main focus should shift towards durability and reusability or recyclability of products components.

Based on this information, producers can be addressed in order to reduce especially plastic packaging to a minimum and replace all non-reusable items by reusable ones. Therefore, ambitious political frameworks need to be put in place, setting high targets for producers. At the same time, users need to be involved as well. Through awareness raising campaigns they should start to appreciate long term use of products (which is also cheaper on the long run) and get involved in recycling mechanisms. A broad infrastructure to return electronic devices and other products should be build up.

In order to support this, the group proposed a tax based on the durability and recyclability of a product: The higher the latter, the lower the tax. This should also provide an incentive for producers to increase both factors.

This plans bears the risk of being ineffective as it basically needs to be applied on global scale. From this point of view, lobbying from producing companies could block the whole plan. As a political agenda it almost seems like political suicide as it doesn't advocate for popular goals. It therefore, again, needs a change of mentality among the population concerning waste and strong political will to advocate for these goals.

1.4 Land/Soil

In this area the main problem elaborated was land grabbing, driven by the relative rise in value of plain soil. The group discussed the problem of direct foreign rural and underdeveloped areas. Local population loses access to land they used for food production, they have to either work for the buying company or flee for cities or less fertile areas. This was stressed as a major violation of human rights, which, nonetheless is not acknowledged as such by decision makers.

Soil degradation and erosion is another aspect. It is caused by various factors. On the one hand climate change intensifies certain weather events: strong rains and severe droughts, harming the soil as a result. But also intensified farming, use of pesticides and fertilizers and

large scale monocultures damage the soil, which is a resource of utmost importance for the world's nutrition.

1.4.1 Land and Soil vision: Corporate Power and Land grabbing

In order to ensure fertile soils and eradicate land grabbing, for 2025 the group drew a vision of certain rights for everybody, like certificates that entitle traditional users of land to their land. In order to ban corporate power legal instruments to claim their rights and the international legal system will be structured in a way that strongly regulates influence of big companies on especially countries which are not so well off. Awareness on destructive consumption patterns will be raising and technical solutions, like common use of open space in cities will eradicate land grabs. Corporate responsibility, sustainability and efficiency were pointed out as important factors. Instead of private ownership and exploitation land will be managed on a common level, safeguarding the soil's quality at the same time.

Recycling and Reusing was given high importance, as they will ensure that resource needs will not be fit by mining and extraction.

The group also addressed people's attitude towards possession which will be more altruistic: There will be more sharing instead new production and people will not demand for so many consumer goods anymore.

1.5 Growth

Discussions on growth mainly focused on economic growth which still seems to be the guiding theme in political debates around welfare and prosperity. Policy makers largely see economic growth as formula to overcome financial crisis and social injustice. However, this mere welfare measurement by GDP contains various problems: Limitless growth (of resource based economies as we currently have) on a limited planet is simply unsustainable in the best sense of the word. This also accounts for endless consumption and production in our current way. At the same time, the world's population will keep growing, especially in those areas of the world where problems of poverty and hunger are most pressing. Another aspect elaborated was the social injustice of economic growth, namely the question which part of society actually gains from growth and which is underprivileged.

Due to its nature as very broad and overarching topic, it did not make it to any further steps of the workshop. Yet, its main themes could be found in every other subject and it was this way still included in the discussion.

1.6 Mining

Also on the topic of mining the guiding theme throughout the discussions was the problem of current production patterns and used materials which ask for more and more scarce and finite resources, like minerals and metals. Their extraction is very toxic and harmful for the inhabitants of mining areas, ground water and soils. During discussions it was pointed towards international institutions and global schemes, like the Environmental Impact Assessment (EIA), which are ineffective in mitigating these phenomena. It is still cheaper to

extract raw materials from mines in southern countries than to alternate products and to reuse those materials. Banks and corrupt governments play a key role in this area since they are mostly responsible for huge investments in mines.

The topic was dropped afterwards since only four most pressing problems could be elected. Nonetheless, the group working on land and soil was integrating the mining topic as well, when it came to develop a vision.

Problematic issues

After designing the above stated visions in the four sectors every participant was asked to contemplate about possible shortcomings in the vision. Since the dominating theme throughout all the visions was decentralization and a focus on communities, questions arose whether this is actually feasible and whether humans are actually capable and willing to live in such community based surroundings. There were concerns that this would be a turn back to communism and could suppress individualism. It is also doubtful how these decentralized communities could be linked together in effective ways, especially facing the degree of globalization we are already at.

Conclusion

It is not easy to draw a conclusion of the workshop and its discussions, since debates were diverse. But all participants agreed on most of the basic principles. Localized production of goods and energy, waste as a resource, corporate power as a threat – overconsumption and overproduction as symptoms of this power, a more democratic and sustainable dialogue on resource-use and exploitation on a decentralized, but also on an international level, and maintaining basic human rights and civil liberties are all crucial in the pursuit of sustainability. Many of these approaches actually address the wide range of closely interlinked resource related problems at the same time.

Thursday – Vision Phase

Four most pressing problems were voted as topics for further debate: corporate power, uncontrolled exploitation of resources, missing energy community strategies and waste not seen as a resource.

In general, in the vision phase the following issues arose:

- In order to reduce energy consumption, should we centralize or decentralize?
- Should we minimize energy use by moving villagers to concentrated housing units (skyscrapers)?
- Will everybody in the future live in cities? Will villages still exist?
- Vision of a completely redesigned sewage system (mixing pee and poo with water and pouring it into the ocean is crazy)
- How to prevent food speculation – question of money – should we have a barter economy or local money? – value of money should represent something real, not necessarily physical, something of value to the society
- Do we need a nation state? Local market economy requires proximity with no regard to borders – region-based economy
- Does self-sufficiency mean cutting trees down in order to gain more land to feed local population?
- Countries that export cash crops should refocus on producing food for domestic consumption
- A big question is how to link many decentralized systems together
- No companies but only cooperatives? – are we repeating communism?

Friday – solution phase

These are the main issues discussed in the last day of the workshop:

- Technologies for extracting minerals and metals from used products during recycling already exist – we do not need to focus too much on these but we need to change the whole waste management system and reduce demand for virgin materials and therefore for land (mining)
- Setting minimum price for farmers (buying from farmers) and setting maximum price for sellers (retail) regarding food
- Taxing products according to their durability – so the cheapest products will be those who last long while expensive will be crappy ones – but then companies would make less money, the system can collapse – also people buy new products even before they are broken (new models of phones, PCs...) – should we limit producers in producing those products who do not offer substantial upgrade but only cosmetic one – and who would decide on what is substantial upgrade?
- Need to show to “normal” people that “green communities” are not just a bunch of crazy hippies but also “normal” people who reduce their energy bills, have high degree of trust among themselves and are more independent in terms of energy, food etc.
- In many places there is already awareness but it stays on awareness level – need to develop tools to recast awareness into action and focus on places that are disadvantaged regarding information and lack awareness (so not elite schools but poor/rural schools etc.)
- Students of agriculture are actually not much interested in learning anything new – they want diploma and just replicate existing models.
- There should be a tax on “luxury” items or food – like bananas in Europe in winter. Products with high carbon miles should become luxury. Agriculture should shift from industrial to organic – but can such agriculture feed the population? And it would require more people working in agriculture – not necessarily full time but few hours per week – the question is will more people want to devote time to that?
- Distribution of food is bigger problem than production – need to set up a good distribution system to eliminate food poverty
- There should be a tax for food imports to decrease food imports on large distances – but what about countries that cannot produce food and are dependent on imports?
- Finally, many of suggestions seem to be conditioned on a change of mentality of people or on restricting their liberties/individualism – how to reconcile this? Do we want change of parameters of the system or change of the system – and if the second, than what are the alternatives?