

7. TOWARDS RATIONAL ENVIRONMENTAL POLICY

The current sociological process

The previous discussion argued that, aside from the risks posed by climate change, there are no environmental issues in the scale of war, economic collapse or totalitarian development threatening the well being of present and future European or Finnish generations.

There are environmental problems such as tiny combustion particles in some European cities and eutrophication of some Finnish waters. There are reasonable means to manage these problems. New risks may emerge for example in designer chemicals, nanotechnology, and gene technology, but there are reasonable means to manage risks in these rapidly developing areas also.

Overall, Europe's and Finland's eco-balances are good and improving in many areas from the situation just a few decades earlier. Yet there has been a flood of EU environmental strategies and directives covering all kinds of issues. This flood has been channeled into complicated and multiple bodies of regulation, along with the creation of burdensome administrative structures in Finland and elsewhere. Reason has been buried. Development of society has been unnecessarily shackled and weighed down by theoretical structures and bureaucratic interpretation.

Finns and most Europeans are again facing a strong sociological process that makes us feel guilt, restricts our freedoms and threatens our basic rights. Non governmental organizations, media, professional and scientific communities all looking after their own narrow interests and agendas have contributed to this process. However, it is the environmental bureaucracy establishment that has made the decisions. Furthermore, it may be the bureaucratic sector institutions and officials rather than their political masters who have gained the real power.

Michael Shermer /58/ has written about error, mistake and self-deception in connection of the American war policy in Iraq. He approaches the so called cognitive dissonance with an example of wrongly convicting people to death. People are lying in the court but you develop a theory of a crime that leads to so called tunnel vision. Years later overwhelming evidence comes out indicating that the convict was innocent. When faced with the choice that either the overwhelming evidence is wrong or you have made a fatal error, you tend to choose the psychologically easy way out by denying the evidence. That is where the error becomes a mistake.

The Bush administration's failure to admit errors in the Iraq policy has cost the American people dearly. But turning errors into mistakes is not limited to the Bush administration. It is an impartial part of human life. The environmental administration is especially prone to this problem, since this sector organization operates in a new territory in an ideological hubris pampered by urban media. It is not concretely accountable for its actions. Using public power and resources to defend erratic positions instead of admitting and correcting errors is a major sociological problem.

An example of an error and self-deception is the European Commission's response to its environmental policy critics stating bluntly that tough environmental policies are good for

European competitiveness. That may be so in the end if those policies have a rational basis. Ideological, excessive or simply stupid environmental policies are certainly not.

We are all responsible for our own and our children's futures. If we want to avoid a crisis, we need a new approach to environmental policy. The following discussion suggests some elements for this.

Rule of law, power and justice

It is generally thought that good governance and rule of law are prerequisites for freedom, justice and prosperity. Recent history of mankind supports this view. But what exactly is good governance or rule of law? There are no clear definitions.

There is no perfect world. Our basic rights should not be taken for granted. Justice is relative and depends on the point of view. The present governance and rules in the environmental sector are the creations of the bureaucratic elite. This creation carries several weaknesses including:

- The system is very efficient in churning out rules but not good at correcting its own errors;
- The jungle of rules builds up bureaucratic power while the legal protections of those engaged in productive activities have been forgotten. Bureaucracy decides in practice what law means.
- The system ignores people's tendency to meddle into other people's business and will to power;
- The bureaucratic establishment takes advantage of the fact that justice delayed is justice denied;
- The system has a desire to make a better world but in its egocentrism and political correctness it is not good in analyzing problems and it is even worse in solving problems.

The Permanent Secretary of the Finnish Ministry of Justice Kirsti Rissanen has focused on the flood of legislation. The ability of legislation to provide predictability and justice security is under threat of being weakened. Under her view we are facing a serious problem if citizens do not know what the law in practice expects on them /52/.

A larger problem still looms ahead if officials do not know or ignore what the law expects on them. When the Finnish ombudsman Riitta-Leena Paunio was told about the scale of the Vuosaari TBT issue, her reaction was: "I can't believe in this. It violates the principle of proportionality!"

Chapter 1, Section 2 of the Finnish Constitution states that exercise of public power must be based on the law. One should strictly obey the law in public activities. Now there is no more any dispute of the scale of tributyltin problems in connection of Finnish dredging projects. Yet not a single environmental official has been charged for violation of justice. Worse still, the unofficial guidelines are still used by the administration.

The president of Finland's supreme administrative court has focused on EU development in the context of threats to the national justice system /21/. He stresses the importance of

consistency between different levels of decision making. The Union should concentrate on strategic issues and stay away from minor or local issues. The key to this puzzle could be found from the development of subsidiary principle by making off limits to areas where EU involvement is not needed.

The use of environmental details as power tools in international politics is getting more common. For example, a Finnish member of the European Parliament Lasse Lehtinen, has suggested that the environmental permitting process of the Nordstream pipeline should be used as a bargaining chip in the trade dispute over timber tariffs between Russia and Finland. While this is entirely possible, it degrades our justice system into a bargaining chip.

Environmental details are also used as domestic power tools as shown by the following example.

Case: Shutting down fur farms and the risk to groundwater

In 2002, the Finnish Council of State issued a decision in principle setting the targets for protecting water quality /72/. The decision was prepared by the ministry of environment led at that time by minister Satu Hassi representing the Green party. She is currently a member of the European Parliament. The targets included eliminating the groundwater pollution risks posed by fur farms.

The reasoning of the decision stated that the fur farms will be removed from ground water areas by the end of 2005. This meant that nearly 100 fur farms operating in important groundwater areas or other areas suitable as water sources were supposed to cease operations or move elsewhere. As of 2007, some fur farms had ceased operation, some had moved elsewhere and some had chosen to fight in the courts for their right to engage in fur farming under the existing framework.

Fur farms in Finland directly employ about 7,000 people. The industry, which is mainly owned by small Finnish entrepreneurs, generates export earnings in the range of €200–250 million a year. While the decision only affected certain fur farms, it was devastating to those particular businesses. Was this decision justified?

The facts show that one groundwater pumping station in Finland had been closed for five years due to contamination, mainly increased nitrate levels, caused by a nearby fur farm that had taken no steps to protect groundwater quality. There has probably also been other cases where uncontrolled fur farming has had an impact on adjacent groundwater quality.

On the other hand, groundwater supply build-up greatly exceeds groundwater consumption in Finland. The risks associated with fur farm droppings and urine can be easily managed.

A single fur farm has an average biomass of 20 tons (Figure 7.1), which means it generates about the same amount of excretions as 40 cows. If a plastic-lined basin filled with peat is placed under the cage sheds and emptied routinely in fields as a fertilizer, the size of the risk to groundwater is reduce perhaps as much as 99 %. The remaining 1 % is equivalent to the excretions of one moose calf or one person in nature. To be consistent, should we kill all the moose and enforce bathroom behavior on people moving around in groundwater areas?

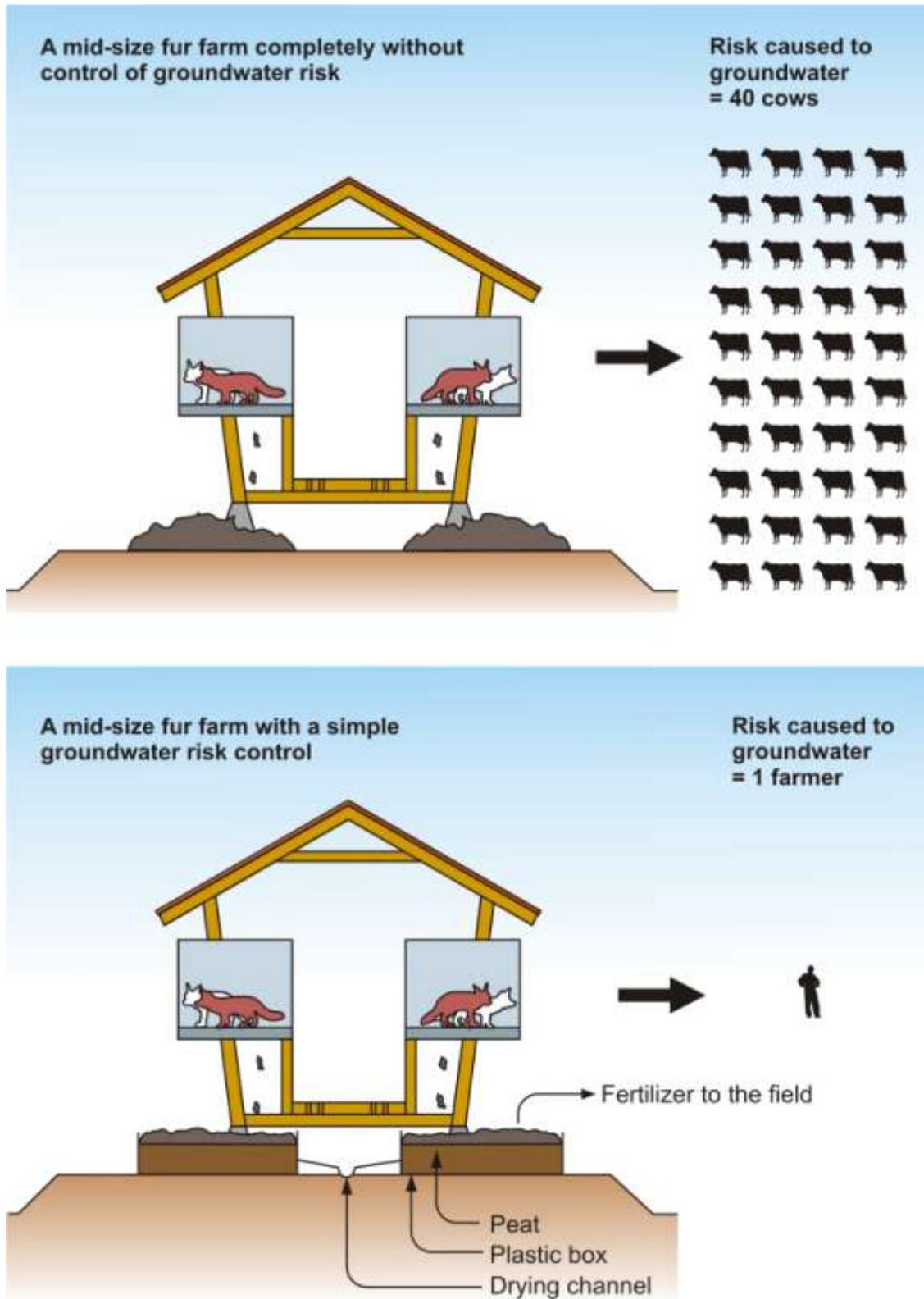


Figure 7.1. The size and management of risk to groundwater quality posed by a mid-sized fur farm.

The Council of State's decision in principle interfered in a fundamental way with right to property and the right to earn a livelihood. Even if the court process eventually provides the fur farmers full compensation, the ultimate result of the decision was deeply destructive to a segment of the rural population and rural society as a whole. It shook the foundations of the national economy and employment trends by reminding investors and entrepreneurs of the open risks of capricious decisions pushed by Finland's environmental administration.

Anyone can evaluate whether the decision to remove fur farms was proportional to the desired level of environmental protection or politically motivated aggression against a small segment of our society executed by a government ministry?

Some people think that fur farming is cruel. In a just society those interested in animal rights use animal protection legislation to advance their goals. Society protects basic rights of the people.

Do we want to build a system of oppression or a system of justice in the environmental sector? What could be done to make the system more just? Here are some ideas:

- There should be no use of power without real accountability;
- Those engaged in productive activities should be allowed to take care of their own business without unnecessary bureaucratic chains and submission;
- There should be less but better balanced environmental legislation;
- There should be clear hierarchies and priorities in legislation and in policies;
- There should be rationality behind every decision.

Above all we should be versed in fundamental matters, keep a sense of proportionality and focus on the essential.

Relative magnitudes of problems as a basis for decision-making

In considering any environmental issue, all parties involved (i.e. citizens, politicians, administrators and other public servants, productive organizations, trade and labor unions, NGOs and judges) should start by clarifying the following questions:

- 1) What exactly is the problem?**
- 2) How big is the problem?**
- 3) What is the benefit of a given measure relative to the size of the problem?**
- 4) What is the whole price of the measure in the society and who are supposed to pay it?**

In defining the problem we deal with impacts and risks, not guideline values or interpretation.

It is usually not difficult to establish the relative size of an environmental problem or risk. We have cultivated the land, built cities and infrastructure, developed an industrial base and endured two world wars. This provides us with perspective for assessment. Emissions can be compared with emissions legacy and current trends. Impacts and content levels can be considered in terms of natural phenomena and reference cases. Many risks are easy to size by studying decades of experience from reference cases.

The presented pallet of methodologies provides one basis for environmental impact comparison. Calculations are easy to understand. Anybody can calculate the relative impact of a problem and draw a conclusion. Unlike today, where black box, manipulation, emotional reactions and impressions play a role in defining the perception of a problem, here analysis and calculation is the foundation.

The magnitude calculations should be sensitive to new information, respect the arguments raised by others, and allow for comparison of calculations to better understand the basis of the problem. In the best cases, everyone's values will fall within the same order of magnitude.

If there is a significant environmental problem, there is usually a range of measures to manage the problem. In addition to prohibitions and limits one can take active measures to treat or contain the problem or compensate the damage for example by restoration elsewhere. It is possible to put all options on the table with their benefits, drawbacks, risks and price tags. Then one can make a cost benefit analysis /12/.

The question of price is, however, much larger than just a prize tag. Direct costs are usually easy to estimate and the primary payer to identify. As shown above, each action has a reaction, which may, for example, extend to the competitiveness, employment, carbon dioxide emissions, living conditions and basic rights.

In principle, the handling of the above issues should be a natural part of each party's checklist in considering various options. In practice, this has not happened nor has there been any desire to make it happen. The task is, however, rather simple as we can see in this example of protecting flying squirrel habitat.

Case: Protection of flying squirrel habitat

Flying squirrel is in the EU Habitats Directive Annex II, which lists animal and plant species of community interest whose conservation requires the designation of special areas of conservation and in Annex IV which lists animal and plant species of community interest in need of strict protection. The decision to put flying squirrel in the latter list meant among other things that deterioration or destruction of flying squirrel breeding sites or resting places is prohibited without a tightly guarded special permit.

At the time of the decision, the small circle of its bureaucratic and political creators were well aware that the main habitats of flying squirrels are located in the Siberian taiga and Finland lies at the extreme edge of the range of flying squirrels.

Flying squirrels keep several nests and resting places. Their young go out into the world to establish new home territories. A female home territory is usually less than 10 hectares. The males range over much wider area that may include several female territories. Flying squirrels are not especially picky of their habitat. They need hollow trees or man made nests and thrive in rather rich forest with conifers and deciduous trees. Sufficient tree density is necessary for the squirrels to move from tree to tree.

Finns have been told that at the time of the decision officials believed on a flying squirrel population of about 40,000 breeding pairs. It was also assumed that the flying squirrel population had diminished by about a fifth during the previous decade due to loss of habitat.

The officials in charge of EU habitats directive could have assessed the consequences of flying squirrel protection by a simple comparative analysis of three available strategies:

- 1) Highest protection strategy (placing the flying squirrel on both Appendices II and IV)
- 2) Flexible protection strategy (placing the flying squirrel only on Appendix II)
- 3) Flying squirrel does not need additional protection measures

The following illustrates how the costs of these strategies can be estimated and what could be their other implications. The estimates look at a bureaucratic risk rather than the eventual outcome or official explanations.

We assume that the area of forests in Finland suitable as flying squirrel habitat is 2 million hectares. Whether or not some of this forest is already protected is not considered. Moreover, in estimating the costs below, we make no distinction as to private or state landowners, because the price to each is the same.

Highest protection strategy	Flexible protection strategy	Present forestry practices
Increase in protected land area $A = 0.2 * 2,000,000ha = 400,000ha$ Area using special forestry methods $A = 0.8 * 2,000,000ha = 1,600,000ha$	Increase in protected land area $A = 20,000ha$ Area using flexible methods $A = 1,980,000ha$	Area of protected land unchanged New forestry practice standards remain in place
Flying squirrel population in the long term $400,000ha/25ha/p + 1,600,000ha/40ha/pair = 60,000$ pairs Eco-balance in the long term $+4,000km^2 * 5\% + 16,000km^2 * 2\% = +520km^2$	Flying squirrel population in the long term $20,000ha/25ha/p + 1,980,000ha/45ha/pair = 45,000$ pairs Eco-balance in the long term $+200km^2 * 5\% + 19,800km^2 * 1\% = +208km^2$	Flying squirrel population may recover somewhat by improved forestry practice Eco-balance in the long term $+20,000km^2 * 0.5\% = +100km^2$
Financial cost Protected areas (state taking at fair market price) $400,000ha * €6,000/ha = €2,400$ million/year Lost economic profits from protection $400,000ha * €100/(ha * year) = €40$ million/year Special forestry practices $1,600,000ha * €40/(ha * year) = €64$ million/year Additional infrastructure development costs €20 million/year	Financial cost Protected areas (state taking at fair market price) $20,000ha * €6,000/ha = €120$ million Lost economic profits from protection $20,000ha * €100/(ha * year) = €2$ million/year Flexible forestry practices $1,980,000ha * €10/(ha * year) = €19.8$ million /year	Financial cost No additional costs besides those from using new forestry methods

The highest protection strategy assumes that 20 % of the protected forest is set aside exclusively for flying squirrel habitat and that special forestry practices are used in the remaining forest area.

The strict strategy would not only benefit flying squirrels, but also preserve old growth forest and increase biodiversity in Southern Finland. This comes at a steep price, however. The investment costs alone would be €2.4 billion and the annual costs for the different parties including costs to society due to increased costs of building infrastructure and communities would exceed €100 million.

The strict strategy also has a high social price. Forestry is an important source of income for the Finnish rural population. The strategy interferes with people's right to earn a living and use their own property. It also chains the right of local communities to decide on their own development.

The flexible protection strategy assumes that the flying squirrel population and biodiversity is already largely protected under the Natura 2000 program, other existing protected areas, and new forestry practices. The measures for society's development could be implemented in a deliberate fashion, but damage to the flying squirrel population could be compensated through conservation measures and other actions elsewhere.

The third strategy acknowledges that Finland has developed new forestry methods that respect local ecological values. As the flying squirrel is not even vulnerable in the Western Palearctic region, population range shifts at one edge of the distribution area does not justify the use of EU power.

Based on the above analysis, one could have asked:

1. How much money are the EU and the Ministry of the Environment prepared to commit to preservation of flying squirrel habitat and how much are others supposed to contribute?
2. Is there any intention to compensate the rural people, property owners and municipalities for their losses?
3. Is the strict protection decision possible without informing the EU and Finnish parliaments of all consequences?

In the end, the decision was to apply the most draconian regime possible, with no-one taking responsibility for what happened subsequently.

As an example of the consequence, consider the construction of the stretch of National Highway 1 between the towns of Muurla and Lahnajärvi (a distance of about 50 kilometers). Approximately 50 flying squirrel home territories were discovered within 500 meters of either side of the proposed path of the highway that were threatened either by degradation or destruction. As a result, the planned path of the highway was moved so that only one flying squirrel home territory was likely to be destroyed (i.e. the flying squirrel would have to move elsewhere) while four more territories would be degraded.

The project was implemented with a special permit. Moving the path of the highway added about €10 million to the cost of constructing the highway segment. Thus, the value of one flying squirrel home territory to society here exceeded € 200,000.

Based on the 2003 – 2005 count by the environmental administration there are about 143,000 female flying squirrels in Finland (for some reason the total population has not been estimated). The population could be further strengthened by installing man made nests just as has been successfully done in Finland to the Ural Owl population. The annual cost of this kind of a positive approach could be € 100,000.

There is not and never was any justification in putting the flying squirrel into the EU habitat directive. It was smuggled in to promote other goals. The fact that it still is in the directive shows that the bureaucratic elite does not want to surrender power capital back to administrative subordinates or face accountability for its own actions. The elite put its own interests and problems above those of European people and justice.

What to do with the bureaucracy?

Enron and Skandia are well recognized symbols of corporate malfeasance. These companies ceased to pursue their long-term interests when their top management sought its own short-term economic benefits. Economic restructuring swiftly solved the messes.

Government bureaucracies can not go bust even if they do more harm than benefit the society. If we want to break the burden that the environmental administration is piling on the society we need a new approach.

Improving the operating climate and legal protections of productive organizations, entrepreneurs and property owners offers perhaps the least expensive way to bolster the economy. One rapid way to return confidence on the justice society would be to pay state compensation to victims of the most egregious transgressions on the part of the environmental administration. Errors in the use of public power would be confessed in a concrete manner.

The money should come out of the funding of the environmental administration. The message would thus reach also those in the administration whose will to power has overwhelmed their duties as civil servants.

The roots of the problems, however, lie deep in bureaucratic structures, culture and social-psychological health. As a matter of fact the great opportunities connected to European cooperation are being buried by bureaucratic excess. In the present setting the process of bureaucratic power may become more of a threat to the well being of European people and nations than an opportunity.

Thus extraordinary measures are called for to manage the bureaucracy problem. They could include:

- 1) Information guidance
- 2) Capital guidance
- 3) Linking power and accountability
- 4) Reforms in permitting agencies and courts
- 5) Structural reforms
- 6) Overhauling the environmental policy approach, legislation and governance

Information guidance means that any decision-making process governing environmental issues begins with the fundamental questions:

- 1) What is the problem?
- 2) How big is the problem?
- 3) What are the alternative approaches of managing the problem?
- 4) What are the benefits they offer and what is their full cost in the society?

This analysis should be public.

Environmental issues range from local issues that some people would like to have at the expense of others to international issues that may shape the future of mankind. Thus there should be priorities and hierarchies when we deal with environmental issues and they should be related to other goals in the society.

At the EU-level one could start with its waste policy with the theoretical waste definition. What is the waste problem and how big is it? What is the benefit of the policy and what is its bureaucratic burden to European people? What is its carbon balance with the centralized facilities? What would happen if EU decided to prioritize cutting greenhouse gas emissions (including methane emissions from landfills) and left the European countries, organizations and people to deal with their waste as they see reasonable?

Private sector approaches to dealing with environmental problems offer huge cost saving potential. Those should be given a chance in any serious effort to improve the environmental conditions.

Case: How to deal with eutrophication of the Gulf of Finland

People in Southern Finland feel very strongly about the eutrophication of the Gulf of Finland or more exactly the algae problem that is occasionally visible at summer cottages and beaches. The algae problem is a result of nutrients in the water mass. Nutrients originate from human as well as natural sources. However, a big part of the problem is a result of so called internal loading.

Internal loading means that after biological activity has consumed all oxygen from the bottom water layer, phosphorus is released from bottom sediments to the water mass as a result of chemical and biological processes. This loading is large, 5 tons/(year x km²) has been cited /47/.

In chapter 4 we discussed the decision of forcing Finnish rural households and summer cottage owners to invest 5,000 to 10,000 euros each or a total of 2-3 billion euros on new waste water treatment facilities. Operation, maintenance, repair and replacement costs as well as medical costs of those getting infections from the new facilities will add to this burden.

The decision was sold to the political decision makers with the sound bite “untreated wastewater of a million people” and reference to EU water policy. Somehow the proportions of the problem were lost. The annual external phosphorus load on the Baltic Sea is of the order of 30,000 tons and the internal load may be of the order of 100,000 tons. Considering

that the nutrients tend to stick to soil particles, the contribution of Finnish rural households and summer cottage owners is probably cut by 10 – 100 tons with the new facilities.

Lakes suffering from eutrophication caused by internal loading have been treated by circulating oxygen rich surface water to bottom by pumping. This same idea has also been suggested for treating the Baltic Sea. Some people in Finnish state expert institutes have ridiculed this idea by claiming that it would require 20 nuclear reactors. The supporters of the idea have orders of magnitude lower power need estimates.

In any case, bottoms suffering from the lack of oxygen in the Gulf of Finland should be quite easy to treat using air bubbling (Figure 7.2). The method is very efficient in causing huge water circulations with a reach in kilometers. It has been proven technology for half a century. Applications include pneumatic oil barriers and ice control systems (see for example /42/).

A few removable systems like this have the potential of eliminating phosphorus from circulation in the Baltic Sea with three orders of magnitude better cost efficiency than by forcing rural population and summer cottage owners to invest new waste water treatment systems. Private sector research and development efforts and experimenting would certainly find even better and more cost efficient methods to handle the eutrophication problem if there were financial incentives.

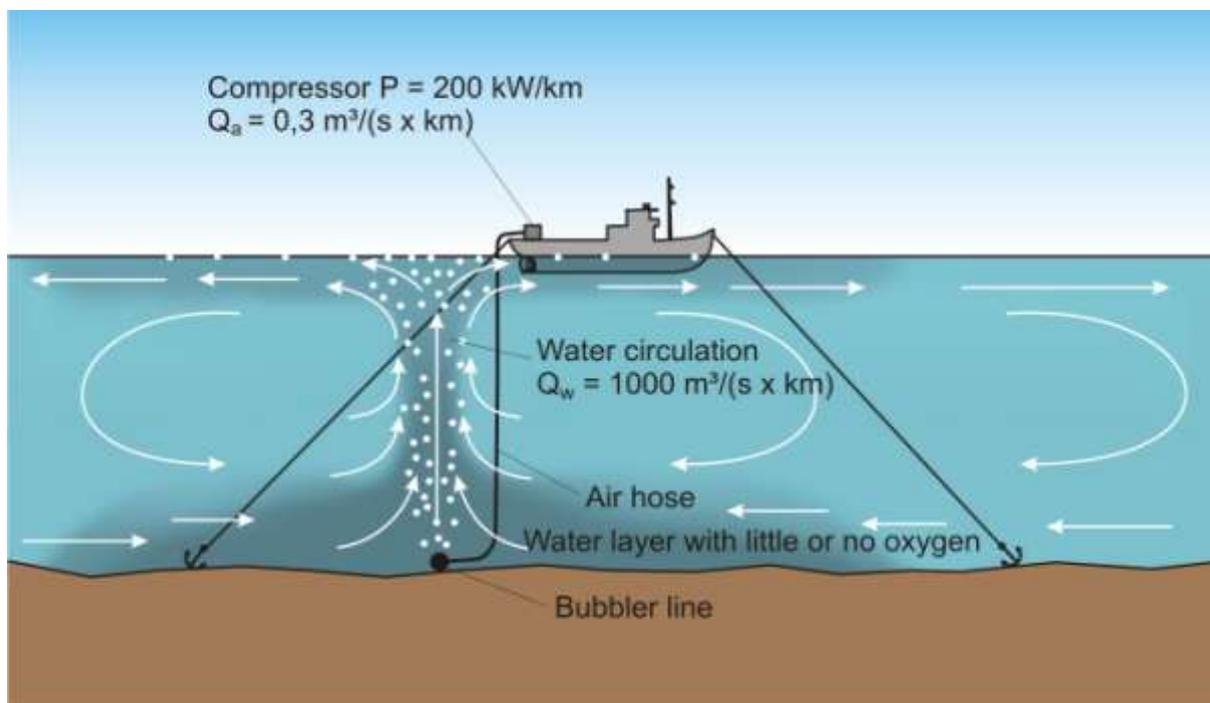


Figure 7.2. Eliminating internal phosphorus load from the bottom with a removable bubbler line.

Agriculture is the main external source of nutrients from Finland to the Baltic Sea. It is also an important industry for our food security and exposed to international competition. Only a small fraction of rural wastewater release sources have significance. These release sources should be obvious to any serious expert in the regional environment administration.

Thus information guidance approach to the eutrophication problem could yield the following result:

- Focus on measures to eliminate internal loading;
- Focus on ways to cut agricultural nutrient load,
- Encourage public private partnership and experimentation to improve the cost efficiency of problem management;
- Manage 5 % of the presently most significant rural household nutrient sources by administrative measures;
- Provide information on typical problems and reasonable solutions to the rest;
- Provide incentives for rural households and summer cottage owners to invest the saved 2 billion euros into measures that cut greenhouse gas emissions like energy renovation works.

Perhaps in the future we may find ways to turn the eutrophication problem into an opportunity. It may be possible, for example, to use algae for energy production and nutrients now stored in the bottom sediments for agricultural purposes.

This brings us to the next policy question. What is the point of the EU policy trying to define best available technology? Bureaucracy is not well suited to do this. It serves us much better when it focuses in a professional manner on problem management and on investing in our environment. Private sector is much better in finding cost efficient ways to reduce impacts and to handle problems.

Consider now the case of Finnish central environmental administration pushing for tight city structures with shopping centers located within the reach of public transportation citing ecological reasons. How much is such policy supposed to cut carbon dioxide emissions with the present energy production structure? What is the savings potential when the slow pace of community structure change and the changes in energy production profile are considered? What is the cost to the people, when the property market is artificially squeezed by tight zoning? How does this kind of Big Brother policy relate to people's right to live and work where they want and to rights of municipalities to decide on their own future with zoning decisions?

Wouldn't it be much simpler just to cut carbon dioxide emissions with prize hikes starting from those areas where gains are easiest to achieve and let the society find its own solutions and form? This approach would also allow us to react on new information and international developments in a timely manner.

Information guidance helps to control bureaucratic excess in several ways:

- In forcing the bureaucracy to quantify issues it also helps to it see priorities and hierarchies;
- It opens ways to innovations and better cost efficiency in dealing with environmental problems;

- It forces the administration to think about the broad consequences of the decisions;
- Quality of decision preparation improves, because manipulation of numbers is easy to point out;
- The decision maker has a sounder basis for the decision than in the present sound bite approach;
- When the justification of decision includes numbers and cost benefit analysis, there is less need for administrative guidelines and less room for arbitrary interpretation;
- When facts change as they tend to do with time it will be easier to alter the decision:

Unfortunately a bureaucracy determined to defend its positions will find ways around this kind of information guidance. Thus also stronger measures are needed.

Capital guidance means that the environmental administration uses its own capital resources to pay for the consequences of its actions. It is now far too easy for the sector administration to conclude that its own mission is so important that others have to submit and pay.

Consider the case of eutrophication. If the environmental administration were to pay half of the cost of managing waste water releases from rural households and summer cottage owners, the cost would be cut by 95 %. Much more cost efficient approaches and methods would emerge by necessity.

This is off course against the polluter pays principle invented by the bureaucracy. However, blind fate on this principle ignores proportionality and distorts justice. After all, the rural population plays a vital role in the society by providing us food security and other essential products and services.

Thus, if additional preservation of old-growth forest is important, environmental administration would have to pay for redemption of land through state action. If the administration feels that the concentrations of harmful substances are somewhere at alarming levels, it should participate in financing remediation works. If an abandoned industrial facility should be protected because of its cultural historical value for the society, the administration should buy it and take responsibility of its maintenance and development. If the administration wants to interfere with the renovation of a building it should also shoulder the additional costs.

In a just society this kind compensation should be automatic and not behind a court battle or an application for compensation from limited funds.

Financial guidance does not suit to all sectors of environmental administration. There are protections that we must have. Furthermore the European Union does not have the money to participate in financing its environmental policy in a meaningful manner.

In politics and civil administration there are no limits in the will to power. Thus there is a need to define another form of capital, i.e. power capital. This would measure the extent of power a bureaucratic cluster is allowed to impose its own will upon behavior of people and other organizations. It could be comparable to financial capital and there should be limits on both.

Good leadership usually requires sacrificing something for the greater good. Here, capital guidance would help in differentiating important environmental matters from less important ones and reinstate cost-efficiency as an important public goal.

This kind of an approach would also promote the development of real expertise in the environmental sector with international market value.

The linking of power and accountability should be self evident in public administration. After all officials are not mindless drones, but exercise considerable public power within broad limits in a modern society.

Why does this not work? There are several explanations including:

- Administrations are divisions in the struggle of political power, and politicians do not voluntarily surrender power;
- The environmental administration possesses vast resources and numerous ways of defending its own positions and power;
- Permanent posts in the administration enjoy strong legal protections;
- The thought of firing bureaucrats is anathema in European societies;
- The justice system seems to be toothless when facing a strong sociological process and expansion of power capital of the environmental sector is a strong sociological process.

One method politicians and bureaucrats use to weaken the link of power and accountability is to use ideology, sound bites, principles and interpretations of theoretical legal structures to justify the decisions. At the same time analysis of potential problems and risks connected to those decisions is purposefully dropped. That way it is harder to figure out, who actually meant and decided what. A vague reference to the principles of sustainable development is a buzz slogan to groundless use of power.

However, ideological madness and the abuse of public power will gradually take its toll. When problems accumulate and people loose their jobs there will be room for enforcing this link.

We have a right to demand justice. We have the right to demand that a clearly understandable and proportional basis is written for every decision. We have the right to demand consequences if the basis is wrong or misleading and those decisions turn out to more harmful than beneficial.

If the private individual or company is expected to know the law, it seems only fair to expect the same from public officials. Bending of rules and making lawless guidelines, regulations or demands should actually be punished under the law. People who use their public positions to harass administrative subordinates should go.

Thus in every legal conflict between the environmental bureaucracy and an administrative subordinate the court should consider not only compensation but also how the bureaucratic institute and individual bureaucrats are punished, if the bureaucracy looses.

Reform of permitting agencies and the justice system largely involves finding ways to speed up the permitting process. If appeals or complaints are seen as an official duty and frivolous complaints and appeals are treated as a fundamental right, then at least the courts should work to handle these cases in a reasonable time. After all permitting agencies and courts are supposed to provide justice. Now the length of the permitting process is used as a tool of power.

It is quite feasible to handle the entire permitting process, including appeals through all levels of the court system, in a year, as was well demonstrated in the permitting of the Hartwall ice hockey arena in Helsinki. This should be guaranteed.

Procedures to speed up the permitting and court processes could be developed. For example, much of the current paperwork could be replaced with a face-to-face interview. The justification for the project, as well as the basis for complaints has already been stated in the permit application. A serious expert needs a week to write up a statement for the court. The time of shuffling paper through mail could be cut at the age of the internet.

If the possibility to use the length of the court process to exercise power over the permit applicant is taken away, court case load will drop. If there are consequences in filing groundless appeals, court case load will drop further. If a private party files a baseless appeal, this party should be liable at least to the reasonable court costs of the permit applicant. If a public administration files a baseless appeal, it should be accountable as stated above. Perhaps such simple measures would cut the case load to those of merit and to guarantee a six months time ceiling for the possibly two rounds of appeals without additional resources.

The justice chancellor is supposed to be the highest guardian of legality of the use of public power in Finland. However, this position is undermined by the fact that public power nominates the chancellor. Perhaps we should elect the justice chancellor by direct vote at the same time as we elect the president. This would give the chancellor a better standing in prosecuting politicians and firing civil servants abusing their power.

The composition of the administrative courts both in the EU and in Finland should also be reconsidered. These high judges must today deal with conflicting regulations, interpretations and goals. Their decisions guide the permitting and governance at the local level.

From the standpoint of the administrative elite it is quite convenient that they come from the public sector almost without exception. But does this put theoretical structures and administration's internal values, attitudes, and ways of thinking at an advantage? Would a balanced background of judges and court experts serve the people and the cause of justice better?

One aspect of environmental policy, legislation and governance is striking in the EU as well as in Finland. Much of what has been created in the name of environmental values seems to assume that society has no other values at all. The politicians and bureaucrats powering the administration have created it from their own perspective and given themselves the greatest possible latitude.

Why isn't the vital contribution of productive activities to our society stated clearly in policies and statutes? Why isn't the legal status and rights of property owners and project promoters laid out in clear language? Where is the proportionality? The average bureaucrat

or citizen has trouble understanding the superior legal structures that are now supposed to govern these matters. What average citizens don't understand, opportunists are fairly free to exploit.

Structural reforms are natural features in the life private organizations. So those should also be considered in the case of administration. If something does not work it needs to be fixed.

The basic problem lies in the difficulties that an elite organization has in dealing with errors. Consider the case of Galileo Galilei whose scientific thinking conflicted with the official view that earth was the centre of the Universe. He was forced to admit wrongdoing and punished by the Catholic Church in 1633. It took more than 350 years for the Catholic Church to officially admit that Galileo had indeed been right and the Church wrong. This happened in 1992.

Now let us consider once more how environmental legislation in the EU is created. An isolated elite of political actors and sector bureaucrats talk together and interact with lobbyists, urban media and public institute experts far from the realities of ordinary Europeans. Then they make policies, legislation and decisions. The problem is that the system assumes these acts to be nearly perfect and to stand time.

People and organizations make errors. The European Union is engaged with several ideological and risky environmental policies. The outcome of these policies may turn from intended benefit to heavy burden to the European people if this system failure is not fixed. Europe can not afford to look as errors are turned into mistakes until crises hits.

One way to do this would be to split the European Parliament and Commission both into two parts, one located in Brussels and the other one in Strasbourg. The new entity would have the sole power to overturn policies, legislation and decisions, but no power to create these. It would have the duty to follow the outcome of legislation and governance, to protect subsidiary principle and to keep legislative and bureaucratic excess in check. It would have its own expert organizations providing critical reviews of scientific evidence, administrative decisions and policy outcomes.

At the national level the review of legislative outcome could be given to the justice ministry.

More balanced environmental policy and legislation drafting might also emerge if the Ministry of the Environment would cease its operation as a sector administration. Its tasks could be split between the Ministry of Social Affairs and Health, the Ministry of Agriculture and Forestry, the Ministry of Employment and Economy and the Ministry of the Interior.

In this setting environmental policy would be a part of a larger policy and governance. The situation Finland enjoyed a couple of decades ago would be reinstated. If people representing Finland in the EU environmental policy meetings were changed and policy targets reviewed, the environmental administration's advancement of its own agenda through the EU would end.

The issue of balancing the benefits to society and the possible harms should be raised also in any permitting process. An administrative intention to interfere should be handled first, e.g. at a Regional Employment and Economic Development Centre before any demand or appeal

is made that could endanger a project or activity. Under this scheme, demands and appeals would originate from the official collective rather than one sector official.

Overhauling the environmental policy approach, legislation and governance is required both in the EU and in Finland to improve social justice, strengthen employment and to secure the well being of our present and future generations. The next European economic crises will be partly a result of EU environmental policy decisions. It will test the very existence of the Union.

Europe in crises can't solve many problems but it has to dig into the roots of the crises to solve the basic problem. This may turn the crises into an opportunity. The schematic diagram of Figure 7.3 suggests some key elements of the overhaul. The process would start from reviewing the existing environmental legislation and overruling everything that causes more harm than benefit.

Then comes the patching work. The objective is less but better focused and balanced environmental policy, legislation and governance. Decisions are prepared based on an analysis that is public. People and those involved will be free to express their views during the preparation stage and on the preparation outcome. Furthermore, the decision maker orders an independent expert review on the preparation outcome. Then there is a political decision.

After the decision there will be an independent follow-up of the outcome. This increases the accountability of the preparation organization, reviewing expert and decision maker. If the outcome is not desirable the decision is overruled with a buffer time period that may be needed to fix problems or change course.

So what is new? There is an analysis instead of a sound bite or ideology. There is an independent follow up of the outcome that increases the accountability of the preparation organization, reviewing expert and above all the political decision maker. And finally there is an independent system for overruling the decision.

In the private sector this kind of constant follow-up, re-evaluation and adjustment is not only good governance. It is the condition for survival.

If the politicians and bureaucrats in Europe are serious about promoting the goals stated in the second article of the treaty of Rome, they could consider improving the legislation and governance by exposing it and themselves to an independent follow-up and overruling body.

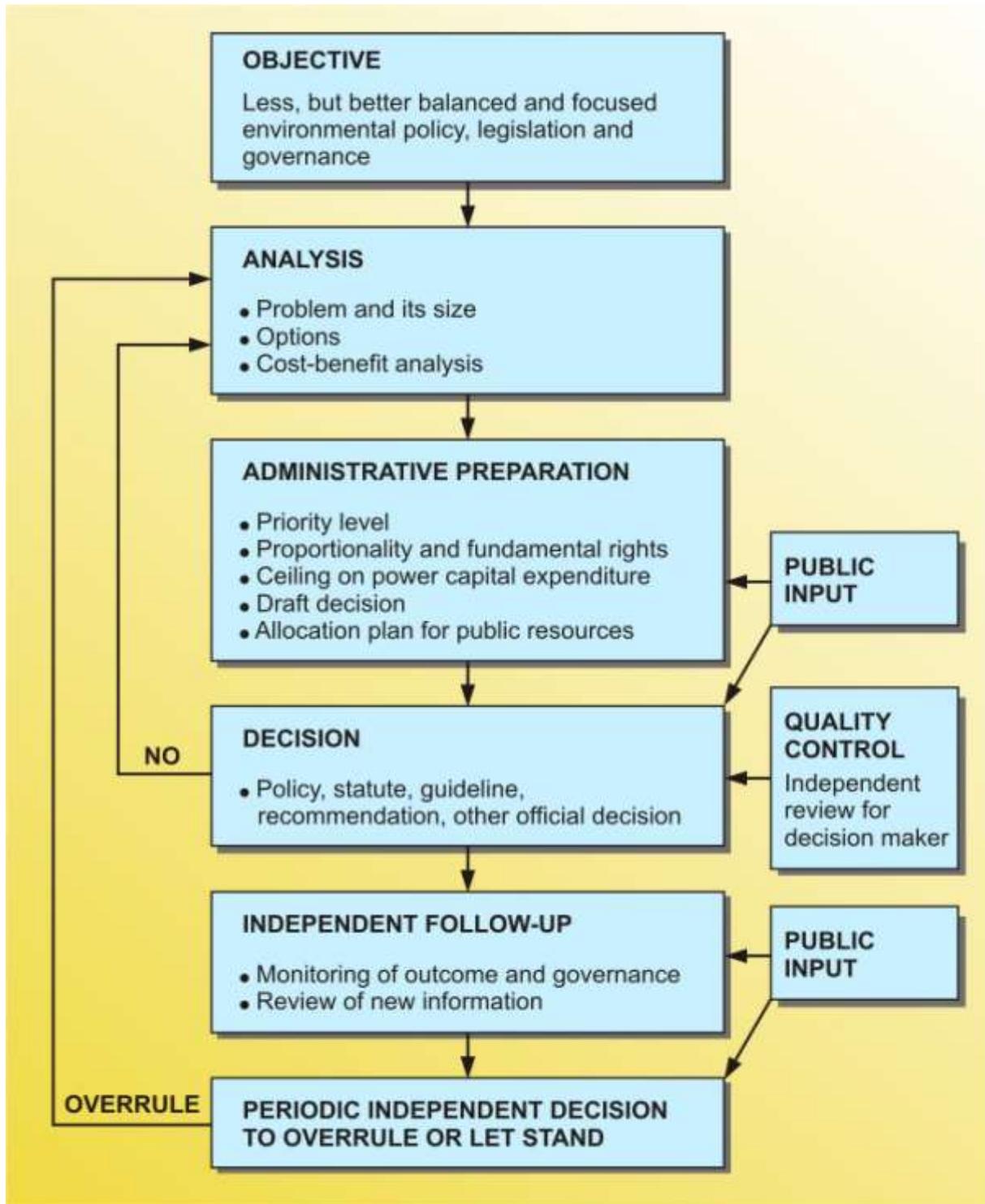


Figure 7.3. Overhaul of environmental legislation and standards.

Imagine the opportunities of rational environmental thinking

Imaging a situation where

- Environmental legislation and governance is clear, effective, focused, and proportional to other values of the society;
- The handling of environmental impact assessment process, permit issues or zoning changes takes a maximum of six months, and once the decision is made the legal appeals process would be limited to another six months;
- Rational analysis is an integral part of the decision-making on environmental issues;
- There are limits and accountability in the use of power;
- The emphasis in nature conservation shifts from protection of individual habitats, plants and animals to protecting biodiversity at a larger scale;
- Society focuses on environmental issues by husbanding its resources for the most important environmental problems and risks and making substantial environmental investments on its own.

In practice, shifting to this new regime would marshal society's efforts to confront and solve the serious problems Europe will face in the near future. Getting rid of bureaucratic excess would free resources for handling the challenges of ageing population, climate change and perhaps even for helping Africa in dealing with its multiple problems in an efficient manner.

If Finland succeeds better than other countries in channeling the flood of environmental directives into a rational and functional body of environmental legislation and governance, the perception of Finland as a justice society will be strengthened. This is a fundamental issue for Finnish society and economy. Both the national competitiveness and social well-being will improve.

If we can deal with real and significant environmental problems rapidly, rationally and cost-effectively, we will not only reap the environmental benefits ourselves, but also gain expertise and develop products for which there will be demand internationally.

As an example, consider the evolution of the energy sector. Although at this point we still lack certainty about the extent of climate change and how changes will emerge, the risks involved are huge. There are also other compelling reasons for reducing our dependence on fossil fuels, including:

- There is a need to diversify our energy portfolio for strategic reasons.
- Reduced dependence on Middle East oil and gas supplies would reduce the region's threat to global stability.
- Oil and gas are resources that are being rapidly depleted.

Finland can build its energy future through rational development of e.g. nuclear power, bio-energy, wind power, improved energy efficiency, hydropower, extraction of heat from the ground with pumps and heat exchangers, and perhaps even hydrogen technology and carbon capture. If we keep the development in our own hands, people's lives will not change much nor will our basic industries be threatened.

Other European countries have similar options available and can develop their own energy portfolios. Jeffrey Sachs /56/ has presented some views on how the threats of climate change could be tackled in a global scale.

The task ahead is considerable. The price will be paid in higher energy costs and also environmental impacts. If we build, e.g. more hydropower to deal with peak demand, this has local impacts on nature as well as on its use. However, the impacts are small compared to the risks of climate change. Thus we should prioritize this issue and proceed rapidly.

Development of new technology, construction of production capacity and energy infrastructure and new energy production involves significant challenges for the energy industry, the electrical and electronics industries, the metals industries, and the construction industries. If we operate at the forefront of the energy evolution, new technology is created. This may mean new economic locomotives and well being. This may also mean important contributions in solving the climate change problem in the global scale.

Rational environmental thinking offers huge opportunities, plenty of meaningful work, and real improvements in our quality of life. Why shouldn't we put our illusions and will to power behind us, and break the shackles of old attitudes, manipulation and direction from above? Why shouldn't we begin to deal with environmental matters using basic arithmetic and our own common sense?