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The Future of European Long Distance Transport

DELIVERABLE 6

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“The Future of European long-distance transport”

Commissioned by STOA and carried out by ETAG

Interview Meeting Synthesis Report

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Document purpose and destination

This document is Deliverable 6 of the Project on “The Future of European Long-Distance Transport”. It provides the synthesis report on the interview meetings carried out in Phase III of the project. The interview meetings are based on a scenario study in phase I and II (Deliverable 5). The objective of the project is to contribute to policy clarification by providing scenarios for the year 2047 that will meet targets for reducing oil dependency by 80 percent and CO2 emission by 60 percent in European long distance transport, both passenger and freight, without reducing accessibility. The project will be completed in October 2008.

The scenario study was worked out together with a group of experts established for this project. The methodology used is the back casting approach. The scenario study aims at giving an idea of the magnitude of change that is needed if certain targets should be fulfilled and it aims at assessing and illustrating potential options for policy measures and technologies in the light of different situation.

For further information about the project and the STOA panel and the project, please visit the project's homepage at:

<http://www.tekno.dk/subpage.php3?article=1386&toppic=kategori11&language=uk&category=11>

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Project description

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STOA Long Distance Transport

Synthesis Report

Interview meetings on long distance transport and global warming

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Preface

Between the 17th of June and the 1st of July 2008 three so-called ‘interview meetings’ were carried out in Hungary, Greece and Denmark. The interview meeting is a method that combines debate, completion of a questionnaire and group discussions. An interview meeting takes three hours and is normally held as an after work event involving 25-35 participants. The three interview meetings of the STOA long distance transport project resulted in three national reports. These national reports are the basis for this synthesis report. The synthesis report combines the results of the national reports and gives an overview of the participants’ attitudes towards long distance transport and global warming and points out the national differences. Occasionally, the report will use the terms Greeks, Hungarians and Danes when naming the participant groups from the respective countries, but these only represent the attitudes of the group, not the population.

1.1 Methodology

The organisers in the three countries carried out the national interview meetings on the basis of a predefined manual that describes the method and gives thorough instruction in how to carry out interview meetings in the context of the STOA long distance transport project – the manual can be found in Annex 1. This part of the preface will briefly address the relevant methodological issues and the value of the collected statistical results.

1.2 The interview meeting

The interview meeting is a method to gain knowledge of what a group of people think of and how they feel about complex technologies. It is not a method that claims to represent the whole population; rather it seeks to include a diverse selection of citizens selected on the basis of demographic criteria such as age, gender, education and occupation.

Using group interviews and a questionnaire, a group of 25-35 people are asked at the interview meeting about their perceptions and preferences in relation to a technology, or a technological development, challenge or problem. As a rule, interviewees do not possess any expert or professional knowledge of the technology in question. However, prior to and during the meeting, the participants are informed of the advantages and disadvantages of the technology in order to give them a balanced and factual common starting point. In the STOA long distance transport project, this information was based on the results of the scenario study in the previous phase of the project. The information material can be found in Annex 2. The methods of questionnaire and group interview complement each other well; the questionnaire ensures that all the participants are heard and that there is comparable data relating to the most important areas. The group interview, on the other hand, creates a lively debate and ensures that the participants can include aspects that are not addressed by the questionnaire and that different arguments are voiced.

1.3 National recruitment and group composition

Due to national differences, the participants for the three interview meetings were recruited in different ways. The participants in the Danish interview meeting were recruited for the purpose of creating a differentiated group. The purpose is not to have a representative cross section of the Danish population, since this would require a far larger selection of participants. The participants were selected on the background of gender, age and educational level. 2000 invitations were sent out to randomly selected people aged 18-75 in the greater Copenhagen area. A group of 40 people were selected from among the positive responses. Not everybody showed up at the meeting, so even though the final group had the expected composition of age and gender, there was a lack of people with shorter educational backgrounds, which resulted in an overrepresentation of medium and long educational backgrounds – for more details on the selection process, please refer to Annex 1.

The Greek participants were recruited by using a 'Consumers' Data Base' as statistical frame. Initially, 200 members fulfilling the criteria (both genders, aged 18-65, living in Athens) were selected from the database since, in our experience, the final participation rate is estimated to be about 30 percent. Having contacted the selected sub sample of the Consumers' Data Base by phone, 55 were found available and willing to participate in the interview meeting. 35 out of these 55 were selected for the purpose of fulfilling the gender, age and education quota and to have four times each specific profile (gender, age, education, working status), in order to be able to form four compatible groups for the group discussions after the first phase of the interview meeting. Two weeks prior to the meeting, these 35 people received a letter of confirmation and various interview materials by mail. In addition, they were contacted by phone at least twice prior to the meeting in order to remind them of the meeting, to help them understand the material sent and to confirm the final participation. Not everybody showed up at the meeting, but the final group had the expected composition of age, gender and educational level – for further details on the description of the participants' backgrounds in relation to the selected matrix, please refer to Annex 1.

The Hungarian organiser used telephone recruitment instead of letters. The methodology of the random selection of participants and telephone recruitment might prove to have a higher degree of randomness, as the human contact makes it possible to encourage people to participate in the meeting – people who would have been unlikely to reply to a written invitation in any country.

1.4 Statistical approach

This report will feature several statistics based on the collected data from the meetings. The three meetings gathered a total of 84 participants, 44 or 52.4 percent of the participants were female, 47.6 percent had children, and 16.6 percent had tertiary education.

The participants were distributed as intended between the three age groups and the two genders. However, the subset consisting of people with long education was bigger than originally intended. The figures on the composition of participants are listed in Annex 2.

The composition does not seem to influence the qualitative results significantly, as we find no indications that certain arguments were repressed in the debates. We find the same arguments presented in all three countries, which validates the findings. However, the quantitative results could be slightly biased towards a more critical view of the climate change impact of long distance transport, as this is the general tendency in the available data for people with higher levels of education.

Since the report is not based on a random selection of citizens from the participant countries, it will only rarely feature specific numbers and percentages, but rather speak of tendencies. In general, the focus is on the results and arguments that are shared by the participants from all three countries. Significant national differences, however, will be highlighted.

For the actual statistics, please refer to Annex 5.

1.5 Purpose of the report

Interview meetings are one of the crucial elements in the STOA project: *The future of European long distance transport*.

The Danish Board of Technology (along with ITAS) is conducting the project on behalf of the European Parliament's Panel for Science and Technology Options Assessment (STOA), which funds the project. The objective is to contribute to policy clarification by providing scenarios for the year 2047 that will meet targets for reducing oil dependency by 80 percent and CO2 emission by 60 percent in European long distance transport, both passenger and freight, without reducing accessibility. Citizen consultations in the form of interview meetings are part of the project. The project will result in recommendations of policy options for the future development of long distance transportation in the European Union. The views presented at the meetings are an important element in the project.

This synthesis report sums up the attitudes and arguments presented at the interview meetings in the three countries Greece, Hungary and Denmark.

Executive Summary

The participants in the three interview meetings are generally very concerned about global warming and oil dependency. The majority of the participants from all three countries also find economic growth and mobility very important, but when forced to choose their priority is on limiting global warming and protecting nature resources. Many participants, in particular the Danish, express a feeling of big personal responsibility for growth in transport and the CO₂ emissions from this. They point to their overspending of transport and goods and their welfare based on heavy energy consumption. A smaller part of the participants tend to be more worried about a decline in standards of living – especially Hungarians and also some of the Greeks – than about limiting global warming.

The majority of the participants from all three countries are not used to consider the transport history of the goods they buy. The price of the goods and the quality means more for them, and they don't think about whether the products are manufactured or transported in an environmentally friendly way. However, in the group debates they added that information could change their attitude.

There is a strong confidence in technological development among the participants, and they believe that the problems of CO₂ emissions from long distance transport should primarily be handled with technological solutions. In the group debates many suggested to make existing clean transport solutions available as soon as possible, so that citizens can choose these technologies if they wish to reduce their CO₂ emissions. Some – especially the Danes – also want to motivate citizens to change their behavior in a more sustainable direction, while the Greek and Hungarian participants did not believe in changing life style. All participants however seem to agree, that the technological options needs a push to be developed and implemented.

In line with this, the Danes may be more receptive to pricing as a way to force people to change behavior. All participants are against general increases in transport price, but many can accept higher prices in relation to the size of a goods' carbon footprint. Polluter pays principle is supported by the majority as a fair principle, though some fear that it wont have much impact on CO₂ emissions. The stick-and-carrot balance was widely discussed in the interview meetings. The Hungarians argued that they would rather reward the environmentally friendly behaviour than use duties and penalties to punish polluters.

The participants generally consider modal shift from car or airplane to train to be a good idea, but there is a major challenge in the lack of quality offered by the national rail systems. Trains have to be able to compete on price, comfort and punctuality to become more attractive. To move freight transport from trucks to rail got a major support from the participants

Even though the participants don't want a general reduction in passenger transport nor transport of goods, many of them are willing to take personal responsibility by reducing their travel and goods consumption in relation to CO2 emission.

There are many means of reducing CO2 emission from transport. Reduced speed for airplanes and cars is widely accepted in all three countries. Reliability and punctuality (arrives on time) and traffic safety will support the acceptance. Reduce traveling by introducing virtual meetings is an option but seems a bit too futuristic to be really taken on board by the participants. One of the most popular means is information. More information to the Citizens of the consequences of transport for CO2 emissions, specifically a carbon footprint label and a bio fuel label, and more research and development in CO2 lean transportation are the most popular policy measures among the participants in the interview meetings in Greece, Hungary and Denmark.

Another policy measure is road pricing which is accepted by a little less than half of all the participants. Road pricing is most popular among the Danish participants where two out of three find it to be a good policy measure. Some find the measure to be most relevant in urban and congested areas.

Individual carbon allowances and carbon tax is seen as a good measure by almost half of the participants, with the Greek and Danish participants to be far the most positive to this, with the argument that it is more equal and highlight the responsibility when given to the individual. But more than half of the participants in the three interview meetings are not in favor of using carbon taxation in order to reduce CO2 emissions. They find the tax burden to be high already, and some doubt that it will have the desired impact. It is remarkable that both the Greek participants and the Hungarian participants distrust their political leaders and the public authorities. Often they give this as a reason for not wanting to pay more taxes. The Danish participants seem to trust the authorities and political leaders more in this field.

The participants in general see a need for joint efforts in EU - and globally - in fighting global warming, and thus see EU as the most important actor for governing the transport sector towards reduced CO2 emissions. They were even prepared to move more power to the EU to enable standardization and regulation that will make the transport system CO2 lean European wide.

The group discussions reveal that many participants don't trust industry to take responsibility on reducing CO2 emission.

Even though many of the participants, in particular the Danish, feel a big personal responsibility for reducing CO2 emissions, they stress that leaving the initiative to the individual will include the risk of chaotic response to global warming. Citizens need support from politicians - role models and guidelines are asked for.

Investing in research and development of CO2 lean transport technologies is given highest priority from a very large proportion of the participants in all three countries (more than 80 percent). Second comes investments in ITS, and rail investments are third. It is remarkable that no participants - zero respondents - support investing in more airports in Europe. The support for investments in new roads is rather low as well, with the Hungarians and Greeks being a little more in favour of this than the Danes.

General attitude

2.1 Differences in general attitude to transport and global warming

Before going into details on the results of the three interview meetings, it is interesting to look at the differences in general attitude in the three countries.

In Hungary, the issues of long distance transport and its impact on global warming is not high on the public agenda. Issues such as the relationship between CO₂ emission from transport and global warming, new technologies and better conditions of travelling are rarely discussed in public in Hungary. People have experiences with traffic jams and congestion from their everyday commuting to work in the city, but the public awareness of the environment and the consequences of consumerism is rather low. However, a positive tendency can be seen in this field as the Hungarian media have dealt with environmental issues more often within the last couple of years. Though Hungarians are concerned about nature, environment and quality of life, what they fear most is a decline in their standards of living. In general, the Hungarian participants had not reflected on the connection between transport and global warming before, and at the meeting they expressed that they had learned a lot about the topic by being part of the interview meeting.

"One thing is for sure, that we are not that informed in Hungary that we could take into consideration these many opportunities" (Hungary)

The Greek participants expressed that modern lifestyle including high mobility, economic growth and access to goods from all over the world is very important to Greek people. They see this as part of their right to freedom, and they believe that Greeks in general are rather less sensitised to environmental issues compared to other Europeans and almost totally unaware of the impact on the environment of long distance transport. They mainly blame industries for CO₂ emissions and global warming, and also they find transport to be of less importance than other sources of pollution, for example from industry.

"I am aware of global warming but I could not imagine how the transport sector contributes to it." (Greece)

"I still cannot think that individuals have the main responsibility for environmental pollution, as industry and corporations don't respect the environment." (Greece)

Meanwhile, it is difficult for them to connect the transport sector with environmental pollution. They believe that long distance issues do not concern them, since Greeks rarely travel more than 150 km; so it is not a part

of their everyday life. They point out that the material they read for the interview meeting had surprised them.

The Danish participants are generally well aware of environmental problems. They are also increasingly aware that transport contributes significantly to global warming, and congestion in urban areas is often discussed in public along with infrastructure and energy efficiency issues. The Danish participants stressed globalization as an important driver for transport growth and that skipping global trade could harm less developed countries. They described the welfare of Western countries as strongly related to oil consumption. Still they were rather surprised by the close connection between consumption, transport and global warming. They expressed the view that consumption in the Western countries today is characterized by overspending and the hope that recently developed countries will not make the same mistakes regarding overspending of energy due to travel and consumption of goods.

"We have used a lot of energy and fossil fuel to reach the level of welfare we have here in the West. I guess there is also a responsibility towards the developing countries. You cannot say that they should not pollute. Well, you can say it, but then you have to give them some means, technologies, to develop to other conditions" (Denmark).

There is a general concern among the citizens about global warming and the dependency on oil, and the participants do not question that global warming must be taken seriously.

2.2 Participants travel long distance

The participants generally travel long distance quite often. One third of the participants travel long distance at least once a month and 4 out of 5 at least once every six months. The most used means of transport is car followed by aeroplane and train, and most traveling is related to vacation and visiting friends and family, not work related. Danes travel much more LDT by aeroplane than Hungarians and Greeks, who rarely travel by air. 3 out of 4 of the Danish participants travel at least once a year compared to less than a third of the Greek participants and 1 out of 10 Hungarian participants. The habits of long distance transport by car and train are more similar in the three countries.

2.3 Economic growth or limiting global warming

The vast majority of the participants (all but two) in all three countries find mobility and economic growth to be highly important and interdependent. But they are more split when it comes to how important they find it to be easily transported across Europe and they are much more reluctant about the importance of being able to buy goods from all over Europe and from all over the world.

When comparing the answers from each of the three countries, one will see some differences between the three countries. The Greeks find it more important than the Hungarians and Danes to be able to buy goods

from all over the EU and the whole world, and as an argument they point to their own dependency on export of Greek products.

"It is not only the grapes in winter, it is also the olive oil, our traditional product that has to be exported to boost our economy" (Greece)

Protecting nature resorts and fighting global warming is also very important to the participants in the three countries as almost all participants find it highly important. Furthermore, they are worried about both CO2 emission from transport and the oil dependency in the transport sector.

When they are forced to choose what is most important, there is a clear tendency to prioritize the fight against global warming and the protection of nature resorts over economic growth and mobility. About half of the participants prioritize nature protection and limiting global warming while the other half find it to be just as important as economic growth and only 2 out of 84 participants stress economic growth as more important.

The general results cover some national differences. A vast majority of the Hungarian participants consider the importance of mobility to be equal to the importance of limiting global warming, while most of the Greek and Danish participants find it most important to take action on climate change. When comparing importance of economic growth and mobility with protection of nature resorts, we find the same trend.

2.4 Overspending of goods and travel

Some participants express that they find today's consumption to be characterized by overspending. Both as far as travelling and as far as consumption of goods is concerned. We have developed habits that are not good for the environment and we must change these habits:

"It has become quite cheap e.g. to fly and we have gotten into some habits both personally and work related, and I think that we should think about how we can change our habits and only use it (aeroplane) when necessary." (Denmark)

The inhabitants of Denmark and other Western European countries are spoiled, some Danes argued:

"We have much more expensive habits compared to e.g. the Eastern European countries, they don't have the same economical means as we, so talking about who is travelling and flying most, it will be people from the old Western European countries." (Denmark)

The Danish participants emphasize that demands are created by the availability of new technologies, in particular relatively cheap electronic devices such as the mobile phone, which we tend to replace every time

a new model enters the market. Among the Greek participants, it is argued that aeroplanes and cars are convenient and comfortable means of transport that we have become used to and will find it hard to skip again. Some argue that we are governed by the technological development and not the other way around.

"I believe that technology has played a rather negative role in environmental behaviour" (Greece)

"Use of cars is part of Greek culture and we cannot understand how devastating this is to the environment, as great CO2 emissions are caused by cars" (Greece).

From Hungarian participants the arguments are more focused on the economical limits of the consumers.

"People ... cannot afford, although they know that more money should be spent on the things which are closer and make less pollution" (Hungary)

For all participants, it seems difficult to act in opposition to existing consumption patterns.

2.5 Limited awareness of the transport history of goods' transport history

When buying goods, regardless of whether it is food or non-food, the choice of the participants in the three countries are very much influenced by the quality of a product, a little more than by the price. However, the price also influences their choice quite a lot. To a lesser degree, they are influenced by whether the product (food and non-food) is produced under environmentally safe conditions, and they are only to some degree influenced by the country of origin when choosing their goods.

When it comes to the travel distance of food and non-food goods, only a minority of the participants state in the questionnaire that they are aware of how far the goods have travelled and that it affects their choice of goods. The majority of the participants are either unaware or aware but not influenced by the travel distance of the goods they consume. The same goes for the country of origin.

"When shopping, I have never been thinking: I wonder how far this sweater has been transported? No, I have been thinking: This looks good on me, I'll buy it." (Denmark)

"If I see something that costs 117 forints and the other product costs 280 forints, I don't look to see where it has been transported from, I buy the cheaper one" (Hungary)

Regarding how the products have been transported, the majority of the participants in the three countries do not think about it at all. Also the CO2 emission during the manufacturing of commodities is something that only a minority is aware of, and even less is influenced by it when consuming.

Some participants express that they find it silly to buy food that have been transported very far. For others, it is a simple question of price.

“There is no reason to buy garlic from China for example” (Greece)

“One litre of milk coming from Poland costs 160 forints, the Hungarian milk costs 220 forints. It is a significant difference. It is 25-30 percent of the price that stays in my wallet” (Hungary)

When analyzing the countries separately, we find some differences between participants from the three countries. In Denmark, a third of the participants answered that 'country of origin' had a high/very high influence when choosing their goods. This share is significantly lower than in Greece and Hungary where approx. half of the participants gave positive answers in the same category.

2.6 Conclusions

- The participants from Greece, Denmark and Hungary travel long-distance frequently – the majority at least once every six months. While the Hungarians and Greeks rather rarely travel by aeroplane and most often use car or train, it is more common for Danes to travel long distance by air.
- The majority of the participants from all three countries find economic growth and mobility very important. When forced to choose between this and limiting global warming, they tend to prioritize the latter. However, as stressed by the Danes, there is a need for solutions that will not be damaging for developing countries with weak economies and for the new member states in EU.
- The majority of the participants from all three countries are not used to consider the transport history of the goods they buy. The price of the goods and the quality means more to them, and they do not think about whether the products are manufactured or transported in an environmentally sound way. However, in the group debates they added that information could change their attitude.
- The participants are generally concerned about environmental issues, but the Hungarians and also some of the Greeks tend to be more worried about a decline in living standards.
- Many participants, in particular the Danish, express a feeling of great personal responsibility for the growth in transport and the ensuing CO₂ emissions. They point to their overspending of transport and goods and their welfare based on heavy energy consumption. Participants from Greece said that industry also has a great responsibility, and that pollution from this sector may be worse than from transport.
- Global warming and oil dependency is a major concern for the participants from all three countries.

Solutions to the problem of reducing CO2 emissions from long distance transport

3.1 Change of behaviour or technological development

Overall, the participants in the three countries believe that the problems of CO2 emission from long distance travel should be primarily handled by technological development. Change of behaviour was also mentioned and especially the Danish participants pointed to the need for a change of behaviour, stressing that it should go hand in hand with technological development.

“I think it has to be a combination because we are so far behind in developing the technology. So we have to concentrate on both, that’s what I believe. Also because I think there is connection between our behaviour and the technological development. What can you do? Where does science-funding go? And how much are things set going? That also has something to do with whether we are willing to change our behaviour because then we will push for it to happen.” (Denmark)

Many of the participants find that our behaviour today is based on a culture where we have to move fast and be efficient. And our consumption is based on force of habit; we have become used to consume what we like without the limits of seasons and geography.

“We want strawberries in January, we want bananas from Chile... Everything has to run so fast, we don’t want to wait. If a travel time of six hours can be done in eight we take the six because we have to get there. It all has to be fast and efficient.” (Denmark)

Greek and Hungarian participants point more to technological solutions, because they do not believe in changes of behaviour.

“I strongly believe that solutions will come from technology because we aren’t willing to limit our living standards.” (Greece)

"I'm sceptical about it. It doesn't matter what is written on the box or on the label of the product. You can write a text about protecting the environment, if the other product is cheaper by 2 forints, then people will buy that one. ... In most cases, comfort and routine plays so important a role, besides price, that it also strangles many good initiatives." (Hungary)

Participants also express that they are not willing to give up comfortable living for reducing CO2 emission:

“I don’t believe that if I limit my choices I will help decisively to less CO2 emissions.” (Greece)

However, during the group discussions some participants from Greece admitted that changes of behaviour could be an option:

“I would live without grapes in the winter, and I could avoid buying expensive imported products with large CO2 footprints” (Greece)

3.2 Confidence in the technological development

In general, there is a strong confidence among the participants in technological development. When asked about which three means should be emphasized if the aim is to limit CO2 emission from long distance transport, most of the participants point to further development of CO2 lean fuel and propulsion technologies, the use of less CO2 emitting transport modes and increased use of ITS (Intelligent Traffic Systems).

Some participants go so far as to say that technology is the only feasible way of limiting global warming:

“When it comes to the point, I don’t believe that any of us really will accept that we have to have lower living standards than today. This means, to the best of my belief, that we have to solve the problem technologically, so that we don’t have to do that much to solve the environmental problems.” (Denmark)

“When we talk about solutions, we shouldn’t talk about restrictions. Greeks have difficulties conforming to measures. It will be more effective if technology come to give them choices”. (Greece)

“I strongly believe that solutions will come from technology because we aren’t willing to limit our living standards.” (Greece)

Others were sceptical about the future of technological development and innovation as economic interests are also present in this field. Corruption was also mentioned as it hinders technological change and efficiency.

“The lobby pays a horrible amount of money to keep this technology. ... Consumption is the aim. They won’t allow you to use solar energy or that your car goes by hydrogen made from water. ... Ordinary people cannot do anything. Producers will force oil and the products made from it and cars will go always with these stuffs. We need to reach the point where cars and vehicles are produced in series that use these new people-friendly and environmental-friendly products, solar energy and wind energy.” (Hungary)

Some argue that technology must be prior to change of behaviour, which they see as a potential threat to the economics of the society.

“If we could make transport environmentally friendly, energy efficient and cheap, there would be no problem in driving goods around over long distances” (Denmark)

Many participants point to efficiency in transport management and use of capacity. They see the use of ITS – intelligent traffic systems – as an important means to make better use of capacity and avoid congestion, both for freight and passenger transport on road and rail.

“Intelligent traffic management is worth gold for anyone driving, even if you are on your way to work or you are transporting goods to some place. To sit in your car on the highway and being informed by the signs that now you should take this or that route...suddenly traffic becomes more smooth” (Denmark)

“In relation to the Intelligent Transport System, I could imagine that all transporters would get the information about transporting opportunities from a central database. And they would always go by loaded trucks on the roads, and the unloaded ones would not have emission. I think it would be a huge step. I don’t know the proportion of unloaded trucks going on the roads, but there may be quite a lot.” (Hungary)

In spite of many examples of CO₂ lean fuel and propulsion technologies and other technological solutions, several of the participants realise that implementing these solutions will not take place without a strong push for it.

“I don’t think that anything will come by itself. I think one should put pressure on developing and implementing technologies.” (Denmark)

Hungarian participants believe that those who use CO₂-lean technologies should be rewarded to encourage change of habits because of environmental awareness:

“It would be good if we incorporate penalties, sanctions into production. Or allowances. Because it sounds better that I disburden those who switch to environmentally friendly technologies.” (Hungary)

The costs of all these technological choices should be taken into consideration, since they serve as motives to consumers.

“I don’t want to pay a fortune to buy a hybrid car” (Greece)

3.3 Increased prices on transport

The price of transport is a sensitive issue for almost all participants. When asked which consequences they are willing to accept in order to limit the CO₂ emission from long distance transport, 4 out of 5 are against an increase in taxes and duties. They find it much easier to accept a smaller variety of goods from abroad (3 out of 4), and a third of the participants can accept fewer business as well as holiday trips.

There are a number of striking differences between the countries. In Denmark almost half of the participants are willing to accept increased prices on clothes compared to almost none in Greece and Hungary. The same tendency, although not as strong, seems to apply for increased prices on daily necessities with a large CO₂ footprint. The Danes seem to be more prepared to accept increased prices, or to be in a better economical position to do so.

In the group debates, the participants from Greece seemed to be rather negative towards increased prices for passenger and freight transport. The Hungarian participants also mentioned that if any price increase was introduced, it would fall back on the consumers, but it could be acceptable if they saw the result in reality.

“If the product is transported by trucks, then they should pay, because they don’t transport by train. ... The result is that the consumer has to pay, because the extra cost is incorporated into the product’s price. ... But if they say that they incorporate it and we will be there in a couple of years that this and that will end, then I say it’s good. Because I see it, I experience it, and not only after 50 years.”
(Hungary)

3.4 Change the mode of transportation

In the questionnaire, participants were asked to indicate how much more expensive travelling by plane or car it should be if it were to make them shift to train. It turned out, that participants can be convinced to change mode of transport in favour of more environmentally sound modes, depending on how much the price is increased. Some already mostly travel by train. And only a small minority would never exchange car or aeroplane travelling with train. But in order to make people change, you have to use both stick and carrot:

“My comment is that it has to be both stick and carrot because if cars are taxed there has to be another well-run alternative.” (Denmark)

A major obstacle for changing from car or aeroplane to train is the standards of the railways. Especially in Hungary and Greece the participants say that the condition of the trains and railways makes it a bad alternative to taking the car, for instance.

“Ok, to change from car travel to train, but what trains are we talking about? Greece has a limited and rather old fashioned railway network.” (Greece)

“The steps of the train wagons running in Hungary are 80 cm from the ground. And it is also a problem for young people, not only for the elderly to get on. ... Comfortable and usable railway should be made. ... Debrecen (the second most populated city in Hungary after the capital – E.B.) is 240 km away and it takes three hours by train and two and a half by car. ... A train is needed which would run to Debrecen in one and a half hour, there should be a comfortable railway station that can be heated, trains with comfortable wagons and prices that aren't higher than by car.” (Hungary)

In order to make people shift to travelling by the train, it must be comfortable and worthwhile – and the price is what participants from Denmark, Greece and Hungary rank as the most important argument to make them shift. Limiting climate change is the second best argument for them. Comfort on board the train and that the travel time is the same is also important to the participants.

“It is catastrophic what you can find on the trains! And also, the toilet is disgusting. No food! I don't know, we could make a long list. On the other hand, it is really great to travel by train, because it would be really more comfortable than by plane, and you sit and can stretch your leg.” (Hungary)

“One of the reasons for driving more by car is that it may even be cheaper than going by public transport and it is faster than public transport...” (Denmark)

“In my opinion, a lot of people don't take the train, because it's dirty, smells bad and it is full, they have to stand up during the whole trip” (Hungary)

“If the public transport is actually cheaper and more efficient, if the trains arrive on time – if it works, then people would probably prefer this to taking the car, if it actually pays.” (Denmark)

Travelling comfortably is important to the Hungarian participants, and they are willing to pay more for using plane and car to avoid the low standards of the train. Even if they saw higher prices for car and rail transport as a way to limit global warming, they argued that travelling by plane could save a lot of time compared to rail transportation.

"One can get there faster by plane. Let's say, in an hour. Yes, let's say, you have one week for holiday, then you don't want to spend four days travelling ..." (Hungary)

For freight transport, the train is seen as a good alternative to trucks – and with more unambiguous support than for passenger transport. However, some participants argued that, today, in many cases trucks would be the most efficient and flexible means of transport, depending on where the goods are produced and where the markets are.

"Clearly, if we could move much more of the freight transport to rail transport instead of trucks, it would be a big advantage. The problem is flexibility, since trains can only stop at certain places..." (Denmark)

3.5 Paying for polluting transport

Generally, more than half the participants support paying more for long distance transport to reduce global warming. Most of them are willing to pay ten percent more for long distance transport, while 1 out of 8 are willing to pay 50 percent more. Compared to Hungary (5 percent) and Greece (10 percent), a larger share of the Danes (33 percent) are willing to pay 50 percent more for transport that reduces global warming.

A little less than half of the participants find that travelling by aeroplane or car should be more expensive. When comparing the three countries, a bigger share of the Danes (70 percent) find that travelling by air should be made more expensive while only a smaller share (30 percent) of the Hungarians and Greeks feel it should be more expensive. The same tendency can be found with regard to increased prices on car travels although the Hungarians and Danes are more similar in this respect and the Greeks less reluctant to support increased prices on car travels.

"There is something completely unnatural about that it costs 250 DKK or so to go by aeroplane to Amsterdam, ...it cost the same, 250 DKK to go by train to Falster." [150 km south of Copenhagen] (Denmark)

The vast majority do not think that travelling by train should be more expensive.

3.6 The polluter pays principle

Almost all participants agree that the tax system should be regulated in such a way that it is cheaper to buy and run an environment-friendly car and more expensive to drive a car that pollutes a lot.

“Taxes should relate to the levels of CO2 emission, so one should pay for great levels of CO2 emissions while another should have reduced taxes for his environmentally conscious behaviour.”
(Greece)

“A more fair taxation system, so that when you really pollute, you also have to pay.” (Denmark)

“Well, I like the polluter pays principle very much.” (Denmark)

The Hungarian participants also supported the polluter pays principle, and they would not take any social considerations:

“Those who use more must pay. This is obvious. ... Compensation to the people in worse economic conditions? Those who could buy a car and can use it are not in bad economic conditions. ... Moderator: Should the system differentiate in the areas where there is no public transport? Participants: No. No. They also consume petrol.” (Hungary)

However, they were not sure what effect it would have on limiting climate change. They argued that not that many people in Hungary drive in SUV's and other cars that consume a lot of petrol, and those who did would still do it, even if they had to pay a lot for it.

“Those who pollute more have to pay. – We are not that sure about it, because the one who has an I don't know how polluting car which was very expensive, s/he doesn't care at all how much his/ her car is polluting, s/he will drive it the day after again. ... It won't prevent him/her from driving. ... But in reality, this is a rather small group of people. Not too much money would flow in from that.”
(Hungary)

Others were very critical towards the polluter pays principle:

“Ok, we will pollute environment and then we will pay for it! Is this a serious solution?” (Greece)

3.7 Paying more for goods

A little more than half of the participants are also positive towards to increased prices on food products in order to reduce global warming, but the price increase should not be too high. The pattern is the same for non-food products, although the willingness to pay more is a little higher (65 percent). And while almost no one can accept increased prices on everyday commodities in general, half of the participants can accept increased prices on goods with a large carbon footprint. In particular the Danes were willing to accept higher prices on goods with a large carbon footprint.

Many participants find that it ought to be profitable to buy local goods instead of imported goods.

“It must pay to buy Danish goods instead of buying goods from far away (...) but you can always take the Danish strawberries instead of the Spanish that is right next to them, and maybe not buy potatoes when it is not the season.” (Denmark)

Asked directly, the vast majority says no to a general reduction of freight transport. Some participants emphasize that not all goods can be produced locally and that some countries can produce specific goods very cheap and they should still do that.

“But it’s not only the grapes in winter; it’s also the olive oil, our traditional product that has to be exported to boost our economy. What happens then?” (Greece)

But then again, they want these goods to be transported by way of the least CO₂ emitting means, and they think it should be more expensive to use the most CO₂ emitting means of transport:

“I would like the most polluting modes of transport to be most heavily taxed. Meaning that if you drive a tomato in a truck from Spain then it has to be more expensive than if you drive it from Spain to Denmark on a train. Solely because you put more CO₂ into the air... They simply have to pay for it!” (Denmark)

“I believe that exchange of goods is healthy and basic need for welfare societies. The point is to tax transportation means according to their CO₂ emissions or paying more for products that have travelled many miles. This whole idea needs to be well planned.” (Greece)

When discussing the pricing of polluting means of transport, some participants feared that this would be at the expense of the consumers – in the end, they would be billed for the pollution.

3.8 Reduce travel

When it comes to reducing personal travel, the vast majority (81 out of 84 participants) do not think that there should be a reduction in passenger transport. But when they are asked, whether they can personally accept fewer holiday trips and fewer business trips, a third says yes. So while they do not want a general reduction, many of them are willing to take personal consequences in terms of reducing travelling. The Greeks, however, state that they travel mainly for vacation, for relaxing and they have no intention of changing this need for nothing. They argue that fewer trips cannot save the world.

“I am working all year in a totally polluted environment and someone comes to limit my choice of travelling away from Athens twice or three times per year? I am not willing to change this! Sorry!”
(Greece)

The argument of reducing global warming is what can make one third of the participants (approx. 50 percent of the Greeks and Danes and 10 percent of the Hungarians) accept to travel less, while longer travel time will make 1 out of 4 consider travelling less. Easier use of virtual meetings (e.g. by video conference) will make about 40 percent of the participants consider travelling less. In the group debate, ICT is mentioned as a technology that can reduce the need for travel. A Danish participant gave a personal example:

“Yesterday I had my first Skype call ever with web cam and all – and suddenly I could see my colleague in the U.S. and I kept speaking with her for 45 minutes...it was fantastic!” (Denmark)

But virtual meetings, videoconferences and the like are not an option that participants are familiar with in general.

“Technology has the possibility to limit some business trips but Greece needs more education on this.”
(Greece)

One of the Hungarian participants stated that he would be ready to travel less, if the opportunities of teleworking (working from home) would become better as this type of work is very rare in Hungary.

3.9 Reducing speed

Many participants can accept prolonged travel time if it helps reduce CO₂ emission. Reducing the average travel speed by 20 percent for aeroplanes in order to reduce CO₂ emission is an acceptable solution for a majority of about 70 percent of the participants, while a little more than half can accept reducing the average speed limit on motorways to 80 km/h.

“It appeals a lot to me, partly of course because it can reduce some of the emission, but I also think that we can get some spin off, at least if it is the cars (...) we may reduce many of the traffic accidents there is.” (Denmark)

If the transport is reliable and on time and if security is increased, reduced speed is even more acceptable, while the acceptance of longer travel time for about a third of the participants is increased by better comfort and easier combinations of different modes of transport.

“Every year many people die from accidents. We have to reduce speed for our own safety.” (Greece)

“I am willing to prolong my travel time to save the environment but mass transportation has to be more punctual to save me from additional delays!” (Greece)

On the other hand, time can be a factor when choosing means of transport:

“Time has become such an important factor in our everyday life, so often you are not willing to spend more time in order to save the environment.” (Denmark)

3.10 Better information

The participants in all three countries emphasize the need for better information about CO2 emission from long distance transport to help them in their daily doings. Long distance transport and CO2 emission is not an issue they think about daily, but if the information was there when they are shopping or travelling, many of them say they would act on it.

“There are many things that I really don’t think about when I go shopping.” (Denmark)

“That’s for sure that we are not that informed in Hungary that we could take into consideration these many opportunities.” (Hungary)

A good example of this kind of information is the carbon footprint that many of them would like to see on daily necessities as for example foods.

“It would make us think and consider what we are actually buying, but this may not change our choices eventually.” (Greece)

“I’m not thinking about how many kilometres some product has travelled before it reaches the supermarket shelf. I think it is an on-going process towards people getting more informed and aware of the significance of long distance transport.” (Denmark)

Some participants also pointed to how difficult it could be for the consumer to act on the basis of a lot of confusing information, and therefore the choice of behavioural change based on information is not that simple.

“It is very difficult to navigate, as a consumer...you think you do the right thing, and then you learn that this turned out to be wrong.” (Denmark)

“There is an immediate need for more and better information because reducing travel is absolutely beyond our intentions, for example.” (Greece)

3.11 Conclusions

- There is a strong confidence in technological development among the participants, and they believe that the problems of CO2 emissions from long distance transport should primarily be handled with technological solutions.
- The Danes also want to motivate citizens to change their behaviour in a more sustainable direction, while the Greek and Hungarian participants did not give this alternative much of a chance; it is very difficult for people to change life style, they think.
- In line with this, the Danes may be more receptive to pricing as a way to force people to change behaviour, and they argue for both stick and carrot. The Greeks and Hungarians reject the idea of increasing prices; they want more carrot than stick.
- All participants however seem to agree, that the technological options need a push to be developed and implemented.
- All participants are against general increases in transport price, but they can accept higher prices in relation to the size of the goods carbon footprint. They can also accept a smaller variety of goods from abroad.
- Modal shift from car or aeroplane to rail transport/train seems to be more attractive to the Danish participants, in particular if high-speed rail becomes an option. The Hungarian and Greek participants refer to their bad experience with national rail systems and would only shift from car and plane to train if travel by car or plane was twice as expensive as travel by train. Further comfort and punctuality would make trains a more attractive option for passenger transport.
- To move freight transport from trucks to rail was met with major support among the participants.
- Participants do not want a general reduction in passenger transport nor in transport of goods, but when it comes to their personal willingness to forgo travels and goods, they are more prepared.
- The polluter pays principle is supported by the majority as a fair principle, though some fear that it will have little impact on CO2 emissions.
- To compensate for social inequities is not supported by the Hungarians, even for people living in rural areas. They argue that if one can afford to have a car, one should also pay the same as others to use it. This attitude to road pricing is quite different from the attitude of the Danes.
- Reducing travel by introducing virtual meetings is an option, but seems too futuristic to be really taken on board by the participants.
- Reduced speed for aeroplanes and cars is widely accepted in all three countries. Reliability and punctuality (arrives on time) and traffic safety will support the acceptance.

- More information is asked for, however, the participants warned against too much confusing information.

Policy measures and responsibility

4.1 Overall attitudes towards different policy measures

The participants were asked to assess different policy measures. They were most positive towards information, specifically a carbon footprint label and a bio fuel label, and they were more reluctant towards road pricing and taxation measures. In the group debates, many participants argued against paying higher taxes – they find that the pressure of taxation is rather high as it is.

“Do we want another tax? Others say and I also say that it is enough.” (Hungary)

“I don’t believe that taxes will save the world or contribute to less CO2 emissions.” (Greece)

But some – especially the Danish participants – do support the idea of taxing for the benefit of the environment; only compensation in lowering taxes elsewhere should ensure the balance.

“In principle, I would like to pay more in tax if it benefits of the environment. Then the tax should be lowered in other places – I mean a re-distribution (re-allocation) of taxes.” (Denmark)

4.2 Road pricing

A little less than half of the participants from all three countries find road pricing to be a good policy measure for reducing CO2 emission from long distance transport. But they also emphasize that road pricing should be accompanied by a reduction in other taxations. The Danish participants are the most positive towards road pricing. Here two thirds of the participants stated that they find road pricing to be a very good or good tool for reducing CO2 emissions. The share of Hungarian participants in favour of and against road pricing is almost the same (around 40 percent). A third of the Greek participants find road pricing neither good nor bad, and slightly more participants dislike the measure.

“For me, road pricing is OK, but then we need to get rid of vehicle excise duty.” (Denmark)

“These cars that pay road pricing, a rake-off let’s say, it is incorporated into the product at the end, and we will pay more in the shop. After all, the amount of levying road pricing will fall back again to us. ... The solution is not that I impose road pricing, but that I build two new bridges.” (Hungary)

“The Greeks will always find a way to escape the law, so this measure is rather indifferent except if regulations are very strict.” (Greece)

In the group debates, some emphasize road pricing as a measure intended not only to reduce CO2 emissions, but also to reduce congestion in urban areas, saying that perhaps it is better suited for that.

“I prefer this measure for urban roads because I don’t know how it will work on long distances.” (Greece)

“I think it solves the problem in the city neighbourhoods but I don’t believe in it on long distance. But it is a good idea in the heavy traffic.” (Denmark)

Road pricing was not too popular in the group discussion at the Hungarian interview meeting. Some participants argued to improve the infrastructure rather than imposing another tax on the citizens, if the purpose is to solve congestion problems.

4.3 Individual carbon allowances

Also slightly less than half of the participants find individual carbon allowances to be a good policy measure, and here the Greek participants were most positive (64.5 percent). Some participants find it good because it counteracts the social inequality that they perceive as a side effect of carbon tax in general. The Hungarian participants are the least positive towards individual carbon allowances as a policy measure; only 1 out of 5 support it. They don't trust that it will have an effect in reducing CO2 emissions.

“An individual CO2 allowance to distribute it. Because if you only do it by tax, then the people with most money... then it will have an unequal effect.” (Denmark)

“It’s good because it refers to each one separately and forces him to be careful in relation to CO2 emissions.” (Greece)

“Individual carbon allowances... The situation is that if his/ her emission is higher than s/he will be penalized and s/he will pay the penalty, but reek remains reek and we will still not get fresh air.” (Hungary)

4.4 Carbon tax

Exactly half of the participants (from the three countries together) find Carbon tax to be a good political tool. In Denmark and Greece, two thirds answered in the “very good/good” category compared to 20 percent of the Hungarians.

Judging from the group debates, it seems that some participants find it difficult to understand carbon taxation, and whether it could have a different impact on CO2 emission than road pricing. The Danish participants pointed out that they could accept carbon tax from a polluter-pays-principle, meaning that transport with a high CO2 emission could be taxed, while there should be compensation/benefits for less CO2 emitting transport. This would leave the passengers with a choice. The argument is in line with their opinion of pricing (tax and charges) in general.

At the Greek interview meeting there was a discussion about carbon tax and both the effect and the fairness of the measure was questioned, even though a majority of the participants were in favour of carbon tax. They would rather tax corporations and industry that pollute the environment much more than individuals do. They talked about groups of people (poor people, farmers, unemployed, senior citizens etc) for who there should be an exemption, as their level of responsibility is almost insignificant or because their socioeconomic status cannot afford additional taxes.

“Industry and corporations pollute nature much more than individuals and I find it totally unfair to pay for something I have too little responsibility for.” (Greece)

“Simple and innocent citizens pay for everything. It’s time to protect them, especially some groups, from taxes that don’t concern them exclusively.” (Greece)

4.5 Carbon footprint label

The most popular tool among the participants is the carbon footprint label. The majority of the participants in all three countries find it to be a good tool.

“Maybe you could have these carbon footprint labels on goods. I, for one, am not aware of how far a product has travelled. Some things which have travelled far you have to buy, but other things you might be able to prioritize a little different if you were aware of it.”(Denmark)

In the group debates, the need for information on the carbon footprint and the transport history was widely discussed. On the one hand, participants stressed that the information on country of origin is mostly available. But this does not necessarily make consumers aware of the carbon footprint.

*“It would make us think, it would force us to react and consider what we are actually buying.”
(Denmark)*

“It would make us think and consider what we are actually buying but this may not change our choices eventually.” (Greece)

The bio fuel label was also seen as a good tool for informed consumption by more than two thirds of all the participants.

4.6 Bio fuels could be problematic

3 out of 4 participants find it problematic, if bio fuels are produced at the cost of foods. But then again, they have faith in the technological development also when it comes to bio fuels.

“I have heard that bio fuels are made from cereals. I cannot accept people dying from hunger while modern Western societies are looking for alternative ways of transport.” (Greece)

“We can cultivate goods especially for this purpose without depriving people that really need them.” (Greece)

“(…) And then they say that it is at the expense of foods that you grow fuel on the fields, but that is first generation, if it is second generation it is produced from waste and that I definitely support.” (Denmark)

4.7 Political responsibility

The participants were asked who they felt should have the main responsibility for reducing CO₂ emission from long distance transport in the future. The biggest part (almost 40 percent) of the participants indicate that the challenge of reducing CO₂ emission from long distance transport should be handled on a European level.

Considering each country in turn, the Hungarian participants' opinion is markedly different from that of the Danish and Greek participants. Half the group thinks that corporations and industry should be made responsible for reducing CO₂ emissions, and only a small part will give EU the biggest responsibility. 10 percent of the Hungarians find that the EU have the primary responsibility for reducing CO₂ emissions from long distance transport compared to 40 percent in Greece and 66 percent in Denmark. Both the Hungarian and Greek participants give the individual citizen a larger responsibility than the Danish participants do. However, the European Union gets strong support from the Hungarian participants when the question concerns political responsibility in organizing the infrastructure and making decisions in favour of reducing carbon-dioxide emissions from transport.

Participants from all three countries are very much in line when listing arguments for and against placing transport decisions at EU level. Participants argue that all of Europe must act together. It is no good that one

country reduces CO2 emission if another goes on polluting as before. They also talk about CO2 emission as a global rather than a European challenge.

“Without a proper and coordinated policy for all of EU, I find it hard to see how we can deal with the global problems.” (Denmark)

“Here is the European Union. Yes. But the authorities, the national authorities, these factories make a significant part of the GDP, so...?” (Hungary)

“I can see real changes only if joint efforts take place, without regard for personal profits.” (Greece)

“Global warming is a worldwide problem and concerns us all.” (Greece)

Half of the participants in the three countries state that decisions about European transport systems should be made at EU level rather than national level, and the vast majority believes that EU regulation is necessary to ensure efficient planning of land use infrastructure (cross-border rail network, cross-border road network, airports).

“I also think that it should be governed by the EU, that they fix it by law. There shouldn't just be a policy with some declarations of intent of the ways they want to limit global warming. It must be fixed by law so that it will have an effect and we act on it in the member states.” (Denmark)

Also the vast majority of the participants believe that it is necessary to move more power from the states to the EU in order to enable a European-wide standardisation and regulations that will make the transport system CO2 lean.

“All European politicians have the main responsibility of managing these problems that concern all humanity.” (Greece)

“I would give the politicians the overall responsibility. If we are to change society, the individual citizen, the industry... then the initiative should come from the politicians. No matter if they are red, green or black. If the question is as important as we seem to agree around this table, then the national parliament must understand it too and change attitude and say in agreement: We will go in the direction that will be the best for Denmark, for Europe and finally global.” (Denmark)

During the group discussions, a critique was raised of the responsible politicians and decision makers. Especially Hungarian participants expressed that they had not noticed any efforts by their national leaders and authorities to make improvements in this field.

“The approach of the responsible leaders, state institutions and ministries is missing. They are a bit neglectful. I mean, it cannot be noticed that they try to do anything in favour of reducing this terrible amount of truck traffic.” (Hungary)

“At state level, those who should deal with this, they don’t deal with it.” (Hungary)

“I blame politicians for all these problems; not only the Greek ones but also those of the European Union.” (Greece)

“I strongly believe that if politicians really wanted to change the situation, this could easily happen. But I don't see anything changing and I am not sure of their motives.” (Greece).

4.8 Industry responsibility

A third of the participants find that corporations and industry (car manufacturers, flight operators, freight companies etc.) must have the main responsibility and make and keep voluntary agreements to develop more environmentally sound technology. As mentioned, almost half of the Hungarians answer that corporations and industry have the biggest responsibility. This share is a quarter for Greece and Denmark.

But the majority of the participants do not believe that industry will live up to that responsibility:

“It is utopian to believe that business like that can have conscience. The politicians will have to regulate it.” (Denmark)

“I am afraid that one should push very hard before industry will do something that they will not benefit directly from.” (Denmark)

“It’s very hard to believe that industry and corporations will change their attitudes and policies. They care only about profits.” (Greece)

“Money ranks higher than environmental conscience.” (Greece)

Some suggested that pricing, taxes, charges, propositions, carbon allowances and carbon footprint label may motivate industries to do something in case the government is willing to implement all these measures.

“If politicians don’t take the responsibility to impose measures on industry, nothing is going to change.” (Greece)

4.9 Individual responsibility

Some participants are aware of their personal responsibility. A relatively large share (12-17 percent) of the Hungarian and Greek participants considers the individual to carry the main responsibility for reducing CO2 emissions. During the group debates, the Danish participants talked a lot about personal responsibility, while the Greek participants expressed that the individual does not have much of a chance of influencing big issues like CO2 emission and global warming.

“But we also have to go down to the individual citizen in the individual country, who has to make the right choices when buying cars and everyday necessities and (...) travels.” (Denmark)

“I still cannot think that individuals have the main responsibility for environmental pollution, as industry and corporations don’t respect environment.” (Greece)

Some argued for the responsibility and power of the individual as a voter and as a consumer.

“At the end of the day, the responsibility can only be our own. In principle, the politicians have to do what we tell them to.” (Denmark)

4.10 The role of the politicians is crucial

Thus, the participants do not leave all responsibility to the politicians; they see themselves as important actors too. Yet they point to a need for guidance, a need for political governance in this field. In the group debates at the Danish interview meeting, the participants talked about politicians as role models.

“I think that it is very important to have some role models, for example our ministers here and in the EU.” (Denmark)

Politicians should support changes in behaviour with legislation.

“Each individual should do what she finds is in line with her conscience. But it can seem a bit chaotic, if you think you do the best you can, but nothing really happens, there are no changes of legislation that support it.” (Denmark)

The Greek participants worry about the Greek way of thinking and acting as far as environmental considerations are concerned. They also point to a need for guidance, a need for political governance in this field, because politicians have the power to play a determinant role in environmental protection.

“Ok, I want to help to this issue but if the Government cannot give me the right directions, nothing is going to happen.” (Greece)

"As a Greek citizen, I want to ensure that I am not the only one that tries to save the world, I want to know that legislation concerns everybody without discriminations and exceptions, for the cousin of the Minister for example." (Greece)

Almost all of the Greek participants were sceptical towards the politicians' motives and they were wondering why they are so reluctant to implement strong regulation e.g. of the car industry, to make them produce more energy efficient cars. This line of reasoning was represented in all three countries.

“I strongly believe that if politicians really wanted to change the situation, this could be easily happen. But I don't see anything changing and I am not sure of their motives.” (Greece)

“Government should say: If you produce these cars, then we will do this and that and put a tax on it, and suddenly it will pay off to produce [energy efficient] cars...” (Denmark)

“Politicians must think about what is best for the country, so I am wondering what the argument is for not doing it.” (Denmark)

Also the Hungarian participants were very sceptical towards the politicians and authorities. Many Hungarians distrust national authorities and institutions, and this atmosphere of suspicion has been intensified by recent scandals where it turned out that many shopkeepers in Germany and Hungary changed the labels of the products to show that these were supportable and saleable longer than they really were. It was especially bad in the case of meat products.

4.11 How should future investments be prioritized

When asked to prioritize the future investments in long distance transport, more than 80 percent of the participants point to research and development of new CO₂ lean technology. The participants in the three countries are also very supportive towards investments in Intelligent Transport Systems (75 percent) and improvement of European railways (63 percent).

There are some differences in how the three national groups of participants prioritize regarding rail, high-speed train and road investments.

Almost all the Danish participants support investments in rail, (87 percent), while the Greek and Hungarian participants are not as supportive (48 and 58 percent). However, the Hungarian and Greek participants are more convinced of the value of high speed trains than the Danes (45, 45 and 17 percent) - altogether every third participant wanted investments in high-speed trains, and 1 out of 4 wanted investments in new roads. The Hungarian and Greek participants are more supportive of new roads, which slightly more than a third of the participants gave priority, while only 1 person from Denmark prioritized new roads.

All participants were against new airports - none gave this investment priority.

When asked more specifically what they are willing to pay more in taxes for, the pattern is the same but the willingness is not as high, and 1 out of 3 state that they do not want to pay more in taxes. Confidence that the individual contributions, and not least paying taxes, would make a difference in limiting global warming was mentioned as a precondition.

"I think we lack some information that could help us make our choices. As a starting point, I would be prepared to pay more for the goods, if I felt confident that this would actually help reduce CO2 emissions or pollution in general." (Denmark)

"I am willing to pay more for goods or to change my behaviour if someone can convince me that global warming will be reduced." (Greece)

"We pay all the time for something but I really doubt about the right investment of my money." (Greece)

When asked what the revenue accrued from road pricing should be used for, there was a little higher (a third) proportion of the participants giving priority to new roads. None of the Danish participants, but almost half of the participants from Hungary and Greece, prioritized spending the revenue from road pricing on new roads. However, investments in research and development of CO2 lean car technology is given the highest priority, followed by ITS and rail ways – in line with what solutions they believe most in.

In the group discussions, the Greek participants pointed to the need for more roads, bridges and tunnels in Greece.

"If we want better transport in Greece, we have to focus on improvement of national road network. In this case, I would be more positive to be taxed." (Greece)

The participants were also asked what the revenue from carbon taxation should be spent on, and here the options of prioritizing research and development of CO2 lean sea or air technology were both supported by

two thirds of the participants. Half of the participants also wanted to spend money from carbon taxation on ITS and railways.

Many participants stressed, that the different modes should play together in an efficient way – and this should also be a focus for investments.

Some - mainly Danish - participants saw high-speed rail as a good alternative to travelling by aeroplane, but most of the participants stress the need to improve the European railway system in general.

“... A (high-speed) train that connects the larger cities of Europe, that would be very flexible compared to air transport. I could see huge benefits in this.” (Denmark)

“I am disappointed that the EU has not been more far-seeing when it comes to transport on railways. It is something they should prioritize much more, rail transport.” (Denmark)

“We talked today about shifting from aviation and car to trains. We are in Greece! Railways are too slow and old fashioned to meet these needs.” (Greece)

The Hungarian participants complained about the standard of national railway services in the group debate as a reason for not prioritizing investments in this mode of transport. Some of them also expressed their worries that railways use a lot of power and people do not know if this power was produced in a way that is totally environment-friendly.

"Railways should be improved, but it does not solve the problem of CO₂-emission and wastage, because railways also need a certain amount of power. There is nuclear power and then nuclear waste that we cannot dispose anywhere. We are in a situation where there is always something wrong." (Hungary)

Some of the Hungarian participants also mentioned that the governments should pay more attention to improving the road network and the highways than to develop the railway system.

"They are constructing highways with a huge effort. If water and railway transport could be developed by this, then basically, everybody would choose these." (Hungary)

Finally, more information to raise awareness of long distance transport's contributions to global warming was strongly emphasized by the participants.

“...Yes, and information, it is also an important investment.” (Denmark)

4.12 Conclusions

- More information to the citizens on the consequences of transport for CO₂ emissions, specifically a carbon footprint label and a bio fuel label, and more research and development in CO₂ lean transportation are the most popular policy measures among the participants in the interview meetings in Greece, Hungary and Denmark.
- Road pricing is accepted by a slightly less than half of all the participants - two thirds of the Danish participants consider it a good policy measure. Some find the measure to be most relevant in urban and congested areas.
- Individual carbon allowances and carbon tax is seen as a good measure by almost half of the participants. Here, the Greek and Danish participants are by far the most positive; with the argument that such measures are more equal and help highlight responsibility.
- In general, the participants in the three interview meetings are not in favour of using carbon taxation in order to reduce CO₂ emissions. They find the tax burden to be high as it is, and some doubt that it will have the desired impact. However, when asked specifically about different types of taxing and pricing measures, around half of the participants tend to support it, the Greeks and the Danes being the most positive.
- The participants in general perceive a need for joint efforts in the EU - and globally - to fight global warming. Thus, the EU is seen as the important actor in governing the transport sector towards reduced CO₂ emissions. They were even prepared to move more power to the EU to enable standardisation and regulation that will make the European transport system CO₂ lean.
- When asked whether national governments or the EU should take decisions regarding reducing CO₂ emissions from long distance transport, half of the participants point to the EU. The role of the EU is stressed even more when it comes to cross border infrastructure planning.
- It is noteworthy that both the Greek participants and the Hungarian participants distrust their political leaders and the public authorities. Often they give this as a reason for not wanting to pay more taxes. The Danish participants seem to have better experience in this field.
- When pointing to who has the main responsibility of reducing CO₂ emission from long distance transport in Europe in the future, the European Union is picked as the most important actor. The Hungarian participants, however, find that industry carries the main responsibility. The group discussions reveal that many participants do not trust industry to live up to its responsibility.
- Many of the participants, in particular the Danish, feel a great personal responsibility for reducing CO₂ emissions. However, they stress that leaving the initiative to the individual will include the risk

of a chaotic response to global warming. Citizens need support from politicians - role models and guidelines are asked for.

- Investing in research and development of CO2 lean transport technologies is given highest priority from a very large proportion of the participants in all three countries (more than 80 percent). Second comes investments in ITS, and rail investments are third.
- The Hungarian and Greek participants are more critical to rail investment, arguing that the current conditions are very bad and thus that it thus does not seem to be an attractive alternative. Furthermore, they are not convinced that it will be a solution to the problem of reducing CO2 emissions; some fear that nuclear power will be used for electrification of trains.
- Both the Danes and the Hungarians are critical of the negligent attitude on the side of the authorities as far as maintaining and improving the rail network is concerned.
- It is noteworthy that no participants - zero respondents - support investing in more airports in Europe.
- The support for investments in new roads is rather low as well, with Hungarian and Greek participants being more in favour of this, in particular for using the revenue accrued from road pricing.

Additional points

5.1 Change in attitude towards long distance transport

The vast majority of the participants state that they have changed their attitude towards long distance transport by being part of the interview meeting. While most Danish participants in the questionnaire answer that they have not changed their attitudes, in the group debates several participants stressed that they had learned a lot and that they wished more people could be engaged in this type of debate.

*"It has opened my eyes a little towards how these global problems should be tackled politically."
(Denmark)*

3 out of 4 of the Greek participants and two thirds of the Hungarian participants answer in the questionnaire that they have changed their attitude.

Most of the Greek participants felt more worried about what they have read and learned from this interview meeting. Specifically, they said that there was a lot of information they had never heard of. They felt very

lucky that they had been given a chance to participate in this interview meeting and wished more people could be engaged in this type of debate. Global warming is a rather complicated issue and concerns all of us individually, nationally and internationally.

"I was really surprised by what I heard today and I really feel more worried about my own responsibility." (Greece)

"But I still believe that the transport sector is only a part of the problem." (Greece)

Half of the Hungarian participants had become more worried about global warming and the transport contribution to this, and many felt they needed more information on the issue. They find it difficult to be aware of the problems of CO2 emission if people do not know the reasons and connections behind the key words and campaign slogans.

"I am quite certain that I will be shopping totally different from now on and that I will think more about from where goods were transported." (Hungary)

"My opinion has changed, I learned certain things. But not too many people are aware of this, or why it happens. They can hear about global warming, they note it and then life goes on." (Hungary)

Annex

6.1 Annex overview

The following is included in the annex:

- Annex 1 – Method handbook
- Annex 2 – Information material
- Annex 3 – Questionnaire and interview guide
- Annex 4 – Frequency tables