

INTERVIEW WITH HANS WOLDENDORP

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[continuation after authorization for recording]

HANS:

The first part of the publication is about information about the plastic problem explains about the plastic soup, numbers... How do you say? Facts.

LUISA:

Yeah. Data.

HANS:

So, I explain it's nothing new. I just summarize what I have made reference to, because as a lawyer I cannot add any information to it. I've not done an assessment on it... So, it's just a summary of the information that is available in the Dutch reports. And I'll explain later about the reports, because the topic of the publication is that if we have all this information about the problem and possible solutions, how should we organize legislation, then? We have no concrete plans for legislation, but if you develop your policy, finally you will take measures, and among them also legislation. And our experience in the past with environmental legislation is that we make the legislation for every problem that we discover. So, every discovery of air pollution problem, has air pollution law, if we have problems with energy use in certain problems, we have special legislation... So in the end we had many legislations with different scopes and different objectives. So, for example, we have a practical approach for one problem, for example waste, and we also had legislation for farms, also for waste. So, we had to organize what was happening on the cross point. But we also had all the legislation like this... So, it was very complicated... So, in the end politicians said we must integrate legislation. And we have had a lot of integration. A huge project, and finally, we have water legislation for all the aspects of the water framework directive, so safety, water quality, drinking water... Everything is in it. Spatial planning, nature conservation, and a general environmental law, but that's what I call playground for children. With the little balls in it. Environmental integrated, environmental law, is like such a thing with the balls, because the balls have nothing in common, they are just within the edge of environment, but they are all different. So, this is not really integrated, because we have so many different topics in the environment. But it wasn't integrated with permit procedures. So, if you need a permit, you have to organize that you get one permit covering the whole field of the spatial planning, water, environment, everything. And now, for this general permit, was really integrated legislation. So, we have this project of one permit, but the problem is that we don't have so many permits anymore, because we work with general rules, and that's very different from Belgium. In Belgium they work with permit, and I think with most countries they work with a permit. But because of the administrative burden of all those permits, for the application and for the government, the permits were more and more

replaced by a type of super permit, and the super permit is a general rule. So, if you take the activity, you must behave according to the rules, and then you don't need the permit anymore.

LUISA:

So, you just start working?

HANS:

Yeah. And you just apply the general rules.

LUISA:

But how do you monitor?

HANS:

Because people must inform authorities when they start, so the municipality – which is the competent authority in most cases – know that the activity is taking place. They must give information about what they are doing, substances that they use, and energy, and so on and so on. And if necessary the municipality can go to the place and check if the activity is according to the rules.

LUISA:

And that's less trouble than giving the permit?

HANS:

Yes, because the general rules are adopted once, and then they are updated from time to time. It sounds strange, but in fact in the past we had a lot of permits. For example, a permit – that's why it's started – for bakeries. And later it was discovered that all the permits for bakeries were almost all the same. So, if we make general rules, based on the permits, we know we have everything in the rules, because we have what you should expect. So, we make rules and replace the requirement of the permit and we have rules in place, and you can just start any procedure, and so this is the super permit. Based on our experience. But then, later, it was for the batteries for example, flower shops... Later it was discovered what they have in common. So, then the general rules was about all activities in shops. So, it was broad, more and more, so now 80 or 90% of all the activities doesn't need any permit at all, because it is covered by the general rules. Only if you have special activity, that cannot be standardized, then the rules are not applied. For example, if you have a football stadium, with many visitors, is very specific for the location... You cannot apply the general rules.

LUISA:

And when you have also really big enterprises...

HANS:

Yes... Chemical industry, and so on...

LUISA:

Then it's specific.

HANS:

Yeah. So, we were busy for a long time to reduce the administrative burden, reduce permits by general rules. And to integrate the rules. So, our law... We had so many different laws. So we had all those laws, more and more concentrate in water, space planning, nature law, and environmental law. So, more or less four laws, and now we are busy with one law, integrating other laws, for monuments, for building law, construction, and so on. And they have in common the effects on the physical environment. So, if I do something with an effect for physical environment, because you cause noise, you cause pollution, something like that, it's all in that on law. And then the idea is if you start activity, for example, industrial activity, you go to the municipality in general and you ask for one permit, or you have to do with one rule, which explains exactly what you have to do with that activity with all the aspects that have to do with the environment. So, the idea is that it make it easier because this was such a dense part of the rules, that nobody couldn't find his way anymore. But this is the idea, that it's more practical. Of course not proven. In the case, this huge operation for the legislator, that's very... I would be surprised if it enter into force, but it has such a political priority, that I think it will happen.

LUISA:

So, it's going on right now?

HANS:

Yes.

LUISA:

All this work is done and you are trying to approve it?

HANS:

Yes. But, of course, you have law, but you have also [inaudible]. This is called environmental law, environmental act [a Dutch name]. Now we are working for the [inaudible]. One is for building, one is for environmental quality, one is for general rules, as I explained to you, for activities, and then we have the fourth one for requirements, for the local governments. So, one is for authorities, one is for activities, one is for the objectives, environmental policy, quality... and building law, construction law. Separate. And that is the situation now, I'm contributing rules for one of these decrease. For example, for the use of sludge building materials, and soil. And many others have similar projects, to integrate into one law. So, we have many people working. Perhaps, I think, one of the ministries is working on this law. So, it's a huge project...

Yes... And that was the start of my publication. I said we are developing legislation. Not now, but we will develop legislation to tackle the plastic problem. That's a new problem, but we have learned a lot from the past, from our approach to environmental law. So, I said what could be learned from the past, that we don't need to go to all those phases before we have our final legislation that we wish to have in the end. And, so I said the characteristic in the past is that we have a problem and we make a law for it. Then we have this picture in the end [shows the drawing he made during the explanation]. So, that's the subject of the publication. If we look to the plastics, how can we go for this situation and what should be the integration theme of the legislation, if you want to have

it well organized, in all your measures and legislation. Put the plastic problem in one law. That is the subject.

LUISA:

And that would also be integrated in the big one?

HANS:

That's one of the questions.

LUISA:

Ok. If you should or not.

HANS:

Yes. Because if I step to the conclusion already... My conclusion is that this situation is preferable for the plastic problem [shows one of the drawings]. You should expect that we've learned a lot of it, that we make it perfectly, but I have concluded that it's not desirable, not practical, and that it doesn't work. But I'll explain later why. Because it was a bit surprising. You would say we have learned a lot from the past, and that now we should do as we did in the past. But...

Now I'll see... Yes, then I explain about the history of the development of the environmental legislation. Why I have this question... How to organize the legislation for plastics, then I tell something about complex issues... Primary plastics, that you add to products. And we have secondary plastics, that are related to the use of the product, the waste... Yeah... That's explained here [going through the paper].

There are some numbers and figures about the amount of waste. So, for example... So that's for you not so interesting, because you know it already, that situation of the number of plastics going around in the seas. So, that's just to explain, because I am already in the board for 20 years, in this magazine, and this subject has never been treated, so I must give some basic information. Then I have about... This number 9 is interesting for you. This is the board of our health primary advisory institute for health [expression in Dutch]. It's advisory, consultant for the government. And they made a report about what is known of health risks of microplastics. And because I am not writing about plastics, but only about microplastics. And in fact it's just because I have a colleague working with that, and I dealt with the subject for one month and I liked it, and I liked this question of how to organize legislation. So, it's not my topic, and therefore it's not about plastics, because that's not my topic either. Just by accident that I had to do something with this, and then liked the subject.

Then... So... this is number 9 [going through the paper], and the other one is later. It's a bit strange. I go to the report... But it's not mentioned in the note. But I mean those two. 20 and 21. Those three are most important for you, because I refer to the report that I mention in the next page. I will show it later to you on my laptop, this report. I can do it now. Because it shows what is known about the problem of plastics is going to the report. But I will show you [inaudible].

According to the health council, the health problems caused by microplastics are not well known. Not known at all. So, the issue that they bet for the environment, but what they

do and how serious is the problem is not known. It's a bit strange... So, the precautionary principle is very important. We think it can never be good if such amount of plastics... For example, I... Where was it? ... Here. One ton is a thousand kilos, so the waste of tires... Not the tires, the plastic that they toss because of the movement, is 7,300 times 100,000 kilos. That's a huge amount.

LUISA:

And in how much time? A year?

HANS:

A year.

LUISA:

Yeah... And the Netherlands is a small country... Uses a lot of bikes...

HANS:

Also cars, of course.

Oh yeah... So, it's assumed that the plastics don't belong in the environment, and their effect is persistent, so they don't disappear. They become smaller and smaller, but they not disappear, don't degrade. Sometimes they have dangerous substances in it, but that's not the main problem, because the consequences of the dangerous substances are better known than the problem of microplastics as such. So, what they want to know is what are the dangerous of microplastics if you don't take into account the dangerous of substances that are contaminating.

LUISA:

Just the plastics itself.

HANS:

Yes. And that's not well known. It's well known that you can find it everywhere, even in honey, and that is eaten. So, the microplastics is in our body, but the effects of it are not known. It's also not known whether it's dependent on the substances in the plastics, or the plastics as such. And there is another field, about nanomaterials, very small materials. They also don't know the effects of nanomaterials compared to normal substances. So, if they know the effect of normal substances, they think the effects of nano presence of the same material is different than the material itself, because the surface of the small part is very... it's much bigger. And it has different reactions with the environment. This is the idea, but has not been proven, and in the primary reach there is the chemical legislation in the European Union. They have also discussed the problem of the nanomaterials, and they are developing research to find out whether the nanomaterials have special problems or not. And the same with microplastics. Based on the precautionary principle, we say such a big amount of plastics cannot be good for the environment, even if we don't know the exact effects of it, we must try to prevent the effects of plastics ending up in the sea. So, that's not such a good stage of scientific information, I think.

I'll try to find the report...

So, that's about health organization, and then those reports, I'll show you... I hope I can find it...

Is your thesis in English or in Portuguese?

LUISA:

First in English, and then I have to translate.

HANS:

Is this not difficult? To do it in English?

LUISA:

Yeah... it's a bit more difficult than writing in Portuguese, but I think the biggest problem is translating.

HANS:

Back into Portuguese?

LUISA:

Yes. Because you read everything in English, you have the technical words in English...

HANS:

You know... I ask the question because I saw... Where did I see it? You have the texts, for example, for REACH, and REACH is about chemicals, and there are a lot of examples on how they formulate texts. And for example, you know that site of the European Commission?

LUISA:

Yes.

HANS:

That you can find legislation. And then you also have Portuguese texts.

LUISA:

Yeah... Because they have Portugal. But I usually download them in English... I find it easier to...

HANS:

Yeah, but if you need to cite official texts, then you can use the official translation.

LUISA:

Yeah.

HANS:

This is one of the reports... Yeah... There is this table, and the priority scores for sources of microplastics, based on five criteria. The amount of the emission, the question if it's replaceable by other things that don't cause microplastics, the possibility for quick

measures – even if it's not important, but you can take measures that can have immediate effect, it can be a priority for the policy, of course –, risks of the plastics in different cases, and whether you have possibility that it will be effective if you take the measure, for example for the tires... If it's not effective, or if you are completely dependent, [inaudible], then of course the measure is not possible.

LUISA:

So, they weight the different criteria? And then you have a final priority?

HANS:

Yes. They give one to... Zero, 45 things, and then you have the list on the scale of 10. They have priority... For example, packaging material, is a big amount, so, 2 points... You can take measures to reduce the plastic packing materials, you can make legislation for plastic bags that is prohibit to use them anymore, so 2 points... It's urgent, it's a priority now in a scale of 10. So, one of the first measures this green deals for packaging, prohibition for plastic bags, you must pay for them at least... So it's high on the scale. Then it's lower. Sometimes you have, for example, low in the list of priorities... Because ... This play things for children, and festivities and festivals... Everything uses them.

LUISA:

Decoration stuff?

HANS:

Yes. But apparently it's difficult to take an effective measure, unless you prohibit children to play with plastic things and so on. So, it's a huge amount, so 2 points, but the other things are less successful, so as a policy objective it has a priority only 4.

LUISA:

How come it's 4 if it's 2 on one? Isn't it a sum?

HANS:

Strange...

LUISA:

Because they add as 3... And also this one...

[both mumble about different aspects and numbers, pointing at the table]

HANS:

Can be, but I don't remember, that there is an special weight of the criteria.

LUISA:

Ah... Ok.

HANS:

I don't know... But, you see? A lot of sources. You have waste collection, cosmetic, painting, clothes that are washed in the washing machines, [inaudible], and streets and

so on, that goes with rain... this is cleaning products, this is plastics used in agriculture, this is even treated water is a source of microplastic because part of the microplastics remain in the water. So, if you discharge clean water, it is still a source of microplastics. Here are the tires, this is what is coming from other countries, this is insulation materials, food, garages, chemical cleaning, ... This is golf fields, because they have artificial grass, and because it can hurt you if you fall on it, they have particles from rubber, that you can make slide and you don't hurt yourself, that you don't stop in it, that you can make a slide, therefore they use the material, but they also contribute to microplastics. So you see... There is a lot of things.

Here they explain every different source... Why it's not effective to take measures, or why it's important, more effects...

So, this is one of the reports, and then the second report I think it could be in English, and this would be interesting for you.

So, for example, our minister said because of the producer of cosmetics, which is an important source, they are willing – because they already have green deals to take measures – so, I concentrate measures on cosmetics, because they are very important source. But that's a green deal measure. But for the rest, we had this information and the minister didn't know what to do, so we produced the second report. We have three we look more into details. This is in English, so we looked more into details for cleaning agents, paint, tires. There is the tire problem again. That's not the most important problem, but it's good example, and this study you can read, because it's in English. It's dealing in detail what measures can be taken and then it appears that some measures are concentrated on the production. For example, if you add microbeads, plastic beads, to the product that can be avoided, replaced for other materials, for example, I remember nanomaterials that are cheaper than to add sand, because the sand must be transported, it must be pure, and so on... Not contaminated. So, even sand is more expensive than adding microplastics and nanomaterials to products, but in the green deal said not to use the nanomaterial, and to replace by sand, so they are more expensive.

LUISA:

And it's valid for everybody in the same industry? Or just for one company?

HANS:

Yeah... That's always a bit of a problem with the green deals, that it's not binding. The minister speaks with the organizations and with the enterprises, but individual enterprises. And the organizations cannot legally bind the enterprises. So, it's not legislation, but they say if we have a green deal, we invent the measures that we take ourselves, that's better than if it's in real legislation from the government, because our measures are more in conformity with the production methods that we use.

LUISA:

So, they are cheaper than something that...

HANS:

Yeah... Are more practical and the minister says we give you the chance to prove that it works, so that's the essence of the green deal. So, it's not binding for the individual

enterprises, but the organization of the enterprises has interest to make it a success. That's the idea. So, they will make arrangements with the individual members to take measures. And one of the things is that everybody understands that you don't have the disadvantage of extra costs, and sometimes it's even better, for example, if you save energy is cheaper, but you have to develop the methods and the measures. And if it's well organized, you have successful measures that can be made available to everybody, but if you have to develop them as an individual enterprise, it's too costly and you do the same work in every enterprise.

LUISA:

So, they develop it together.

HANS:

Yes, that's the essence of the green deal.

LUISA:

And does the government pay for something?

HANS:

No, normally not.

LUISA:

The companies pay for it?

HANS:

Yeah.

LUISA:

They pay for themselves, so they do it together, so it's cheaper.

HANS:

Yeah. That's the idea.

So, that was the reason because the green deal for cosmetics, to take measure. But, for example, for the cars on the road [drawing]. You cannot avoid that the microplastics will be produced. So, you cannot take products measures for tires. If you say they must be of wood or concrete tires, it would be impossible. But it must also function, the product. So, no alternative for tires as such at the moment. And then it appears that you have different options. One option is that [drawing] all the water goes to a canal system, and all the water is collected to one place and cleaned. That's one measure. But then, the government must pay for the measure, because they are the manager of the road. But that's perhaps the next measure, that we make those canals, and we have extra tax, for example, because of course, it must be paid, it must have finances then first. But also, it's explained in this report. You can read it in English. The behavior of the car driver is also one of the things that can be a successful measure. Apparently, if you have good tension in the tire and you replace it in time, and you are not going too fast. There are different measures that can be taken by the driver, then the microplastics can also

significantly be reduced. So, we have measures for driving, we don't have measures for the product, but we have measures for the road, and we have measures here for cleaning of the waste water arriving with the canals. So, that's explained in the report also for payings. It's funny, because if you read the report, then you already think this is really complicated, so many sides to reduce the number of plastics here already. For example, the weight of the car can be reduced, this also contributes. Many different sources. With the painting is exactly the same. The behavior is relevant, the paint is relevant, the substances in the paint is relevant, the [inaudible] of the building painted is relevant, the measures that you are struggling with the paint layers is also relevant. So, you have a lot of focus point, with all those measures contribute for only a small percentage to solve the problem. Most of it is still going to the environment. For example, the cleaning of waste water reduces the number of microplastics. In the table we saw that clean water is also a source of microplastic, but with the waste water cleaning it reduces 95%, or even more. So, very successful measure, but it's still on the list, because 5% of a huge amount is still a considerable amount, if you have here at [inaudible] thousand time 100,000 kilos, and you take 5%... I think it was here...

LUISA:

And you have 865 tons, still.

HANS:

Yeah. Still... There is considerable amount. But in that English report they mention it. So, you see that it's still a problem. So, this is not enough, but it helps.

I'm explaining, summarizing this report...

Then here starts in fact. 5 is the real topic of the publication. And then I say... Oh... This is still a bit about the policy measures, that starts really here... Yeah... We have a policy cycle...

The minister for environmental protection said we have our policy [inaudible] for life cycle, and I look... [looking through the papers' pages] Here. This is the first phase. We acknowledge that there is a problem, we accept that there is a problem, that it can be a difficult phase already. For example, we have still people that don't believe that climate change is a real problem. Trump, for example. So, Trump has not acknowledged in phase 1, there is a problem. You cannot take measures if you don't acknowledge there is a problem. So, that's the first phase. You discover the problem, for example, microplastics, was not known anything about until recently, but now the plastic soup has been discovered and after that also the problem of nanomaterials and microplastics. So, I say we are now [inaudible] of the problem, this phase one of the problem, the policy life cycle, we have had for part, but we don't know about the effects of the problem. In fact, we are partially in phase one, we don't know exactly the problem, how big it is, how serious... We don't know. But then in the second phase we have a policy development, where measures are developed, legislation, and so on. Then the third phase is that you implement those measures and then the fourth phase is that you evaluate the programs, you see whether they work or not, and if the evaluation shows that the problem is solved, it's the end of the policy cycle. If you see that you still have problems, you think about it again and you start again the policy cycle. Additional measures, the implementation of the measures, you evaluate them again. So, you can go around several times until the

problem is solved. So, I explain in topic 5 that we are now in the second part of the cycle, and partially in the first part, but the first measures for the... For example, the government has [inaudible] for those studies. It's a measure for part one to have more information about the problem, but now we are developing also measures for cosmetics. And we have green deals for fisheries, for examples. They have fish nets, which are also plastics and remain in the sea and in the end it also contributes to the microplastics, so we have a green deal, I think they are working on it, with the fishers. So, it's a bit explaining that we have taken the first steps in the second phase, the policy development, and in the Netherlands on certain areas is more or less here. We have, for example, the green deal in the Netherlands. But, for example, for the same topic there is also a green deal on the European level. So, Europe is still here, and for other subject, we are still here, because they are still assessing the problem. So, for the different sources, we can be in different parts of the life cycle, and on the priorities was how can we make a quick start measures, quick measures. So, they are here, in the end of the second part of the life cycle. But most important are still some are here, and the European Commission is behind, and many member States are even more behind, because not all the member States think that it is a problem.

So, I am explaining the difference between the European policy measures and the Dutch measures, and that we are somewhat further in the second part of the life cycle, but not so far. So, and then, here starts the legal point. Then I'm looking already into the future. I say if we show that we are already through the first part of the cycle, we know the problem and sources, and here we have develop measures, now they must be taken. So, in the end they must be implemented measures, but here you have legislation. Sometimes it's on the philanthropy basis, sometimes it's profitable, but sometimes you need legislation. And here you have the question "can we learn the lesson from the developments of the past?"

So, first because we don't have so much literature about this topic, I discuss about integration, and I say it's not so clear about the integrated legislation what it is. For example, we have the Water Framework Directive, and it covers all the aspects about water quality and water quantity problems. So, you would say this is integrated legislation, because everything what has to do with water is covered by the Water Framework Directive. You have already exemptions for drinking water and waste water, but the management of ground water and surface water is all in the Water Framework Directive. But in the Netherlands they say it's not integrated legislation, because it's only about water. And if you have an activity, you have to do with water, with air quality, soil contamination, and it is saving. So, we say if it's in one permit or in one general rule, than it's integrated legislation. So, I explain, it's not so obvious from which angle you must look to the problem, and when you can qualify legislation as integrated or not. For example, we have general directives in the European Union and they have all of the water problems or all the products [inaudible]. And in the Netherlands they say it's only the policy view point, but the citizens view point. The citizens view point is the activity, that he wants to know all rules that apply to this activity, but then the European Commission says this is not integrated legislation, because it's only one activity of the water problem. So, we have already big political discussion in the Netherlands what is the right angle for integration. Is the activity, the view point of the citizens and enterprises? Or is it the organization of the government, the policy objective? Because the policy objective and organization of the government is in fact not relevant for the

activity. So, the political priority in the Netherlands is the citizen. We must offer all our rules in one procedure for one activity or one set of rules for one activity, so that the citizens are not the victim that we cannot better organize it. But that's not European legislation because they have more the policy objective. So, our big environmental law that is being developed now has this view point.

So, I discuss here that it's difficult to say what are the criteria for integrated legislation, because it depends on the view point and the political choice behind it. So I can only say in the integration process. That's clear, if you have five laws and you make one law for all the subjects in the five laws, then you have integration process. But I have no criteria to say this legislation as result of the integration process is more integrated. For example, the activity legislation, that is more integrated than the Water Framework Directive. I cannot say it, because for the activities is contributing to the pollution is only one subjective for the framework directive, but you have many different management aspects, for example, if you have a canal, a river like this and you make a canal of it and to restore in the original state because it has better ecological functions, this river management is not a part of the framework directive. So, the amount of water used for agriculture, and the water level drops is not a problem, is not a part of the framework directive. Put safety measures along rivers, also part of the framework directive. But this integrated framework... I'm only explaining that it's difficult to say.

So, then...Then you have the microplastics. If you see the microplastics as a policy problem, you will develop such a legislation, policy legislation, and it covers water treatment, it covers waste in general, it covers activities using products, it covers the development of products, for example, eco-design, how you can develop the product that no waste is produced, something like that. That could be a choice, to make a plastic act, for example, and all the measures are in the plastic act. But I explain if you have the integration process, the legislation reduce the situation. You can make some choices, but not all choices. You know the kaleidoscope?

LUISA:

Yes, the thing that you turn...

HANS:

A legislation structure is not a kaleidoscope. You cannot have different view points and have a nice picture again. You make that choice, or this choice, but you cannot have all choices. So, if you make a plastic act, what I say is that integration is also disintegration. Because if you make a plastic act, for example, to treat waste... Waste water treatment, for example, and you have rules for waste water treatment, then you take out the plastic aspect from the waste water treatment legislation. And I say it's more practical if you have the waste water treatment, because it's one activity that must reduce plastics, but also reduce phosphate, and take away the waste that has contaminants, or medicine remainents [?], and so, and make drinking water of it. So, you have so many objectives in the waste water treatment plan, that if you have to deal with plastic legislation, drinking water legislation, phosphate legislation... It would be very difficult to bring it together in the activity. It's better that the government gives an overall picture with all the requirements for waste water

LUISA:

And then it's integrated in this perspective.

HANS:

Yeah.

LUISA:

So, you want to make it more useful for the citizens and not for the government.

HANS:

Yes.

So, what they say the plastic act is not a good integration theme, because we have other better integration themes and we cannot choose them altogether at the same moment. So, you must make choices, and then it means that the plastic [inaudible] must be integrated in all the integration themes that we have at the moment. So, if you have waste water treatment legislation, then we must do something that the plastics can be integrated in the waste water legislation. And we must combine it with all the legislation so that it is not contradictory to each other. You cannot sometimes do two things altogether, then you must make a choice. So, waste water treatment legislation, we add plastic [inaudible], and, for example, with cosmetic, we have European legislation dealing with everything that has to do with cosmetics, so the producers of cosmetics have only to deal with that legislation. So, if we want to do something with the microbeads added to the cosmetic for the functioning, it should not be in the plastic act, it should be in the cosmetic act. It's not only for the content, but also for the process, because you are discussing with the producers of cosmetics but tomorrow you are discussing with the treaters of waste waters, and another time you are with traffic rules... How people should behave, or with the garages, what tension of tires should be, and so on.

LUISA:

So, it also makes it faster, because you can start from different approaches and don't have to wait until you have the whole perspective...

HANS:

Yeah. Yeah. Yeah.

We cannot bring together the whole world in one rule. So, you cannot do everything together and, of course, people can say "I'm having to take measures, but the producers from paint are doing nothing". Of course, that's a bit not well balanced. But otherwise, it will be too difficult to take any measure at all. So, that's why we have the priorities to place and one of the criteria is if we can take quick measures which are certainly effective. So, you must try to find the balance between all the different angles... What is most effective. So, in my conclusion plastic law is not most effective, not for the contents and not for the process. So, we have to plug it in all the other legislation we have already.

And then I have this paragraph. This is about assessment. This is done by Marjan Peeters, because it's about climate change, because we have taken already a lot of measures for climate change and we must take measures for plastics. So, we are behind. The government asked Marjan Peeters to assess which legislation do we have to contribute to the problem of the climate change. Because the government didn't know

what legislation do we have and is it effective. For example, that list of priorities, for climate change the government didn't know which part of the list have we covered. Have we big gaps in it, in the measures? Or not? And so, the question was to Marjan was of the effectiveness of the legislation. So, that gives an impression how effective legislation is. Then Marjan concluded in her report that we have so many legislation that contributes to the policy for the climate change that she was not able to give complete overview. Because in members legislations effective also for climate change, but the climate change objective is not mentioned at all for example, or there is not facts or figures or numbers about the relevance for climate change of certain legislation. For example, if you have legislation for this activity and it is for water but not climate change for sometimes is not even mentioned - it contributes to it but it is not mentioned you cannot mention everything - so the overview possible to give and, therefore, it's also impossible to say whether your policy is effective or not. So, that was the problem with climate change. I said I cannot integrate legislation plastic act – that's not a good idea – but of course from a policy viewpoint we must know what we do about which plastic measures we take. You must have overview to see whether the policy is consistent and that it did take the measures that we need and that we don't forget things and so I advised /you must not/ so in fact we learned no lessons from the development of legislation but I said we can defend; we can learn from the policy development because we let happen this and we couldn't reproduce our policy anymore from our legislation so if we start making legislation for plastics – and we have already a lot of legislation that is effective with plastics problem is not mentioned because the problem didn't exist - and then the change was developed - we must also have a policy plan with all the measures linked to the legislation that contributes to the Nationals, so that we have a policy overview. So this is not the idea of the plastic/ the plastic act that's not ideal for legislation but it should be the ideal for your policy, that you have a plastic plan and the plastic measures program and the fact that this the effect will devote framework at all the European legislations doing because they always say first analyze the problem, try to find facts, make plan what, then develop the objectives. So, for example this is the contamination or this is fact, then we say that we have scientific information it should be this. The next phase then we have a plan how do we reduce the contaminants and then we have measures program with concrete measures in it then we implement it and then we monitor it and if it is necessary – because the problem is not solved – we add new measures to the management program. So, that's the idea also for the plastics that also you have not a special legislation for it to have special policy for plastics and to link all your measures to your legislation, so that you can monitor the effectiveness of your policy.

LUISA:

So, just to make sure that I'm following... You would have the legislation integrated in this perspective?

HANS:

Also waste, and other things that we already know.

LUISA:

From the citizens' perspective you would have an integrated legislation but then it would be hard to access from the governmental level, then you would have policies that would

follow and keep track of what's going on in here, so you would have a more integrated aspect also here. Okay.

HANS:

Yes! To avoid Marjan's problem that we couldn't reproduce all the legislation as well as produce effective policy. And now I mentioned that we are developing climate act and what's in the climate act and climate activities we have established objectives here. We have obligation to make climate plan, measures program, monitor and evaluate, so in fact this approach is exactly what is in climate act. What's not in the climate act is the concrete measures because the concrete measures must be taken on the different fields, so plastic measures mentioned in the measure program, if we would have a plastic actor, would be implemented in the cosmetic regulation, for example, or in the waste of the treatment legislation. So any climate act is being developed at the moment, it is not yet adopted, but for example in the United Kingdom they already have such a legislation. So, I say: we can make a plastic act saying: try to find more indicators for your policy what should be the objective and it's already difficult plastics should be left out an amount of waste arrive in the sea it's not well-known, so indicators for the success of your policy must be developed that it is difficult I think but that should be done, otherwise you cannot say whether the policies are effective or not; and then the you should do the same in climate act that you have planned in the program and monitoring evaluation so in fact it is back to the policy cycles, combination policy cycle and the idea for the framework directive that you have (you try) at the policy cycle that first to try to find defects then the actives and you know what should be done and then you think about your plan, how to cope with the problem, which measures you take small concrete. I'm only [inaudible] evaluation and then we had program starts again with next measures. I think this is for plastic could be the approach and for the legislation, we must admit that the legislation will not be perfect because we have no plastic actor so we cannot explain this system legislation for the plastics. So, that's what I think we know about what will happen just as for climate but we should foresee problem that we cannot reproduce the policy and the legislation that we have for tackling the problem so we can do something on that.

Oh, yeah, and if anything with this integration process all the time, now I conclude that we have [inaudible], we have climate act, plastic act, everything with the plan-program, plan-program, plan-program... But in the past we had the national environment plan for everything, so if I said we will have a lot of legislation we try to come from this burden of legislation and try to reduce it but now we are developing again legislation for plastic, for climate, for circular economy and so on and so on. And then we have another burden of legislation and that legislation has to say model of the policy cycle and that could be integrated from the beginning, and then you can have a national environmental plan and national environmental program and specific plans of programs under the general plan or program. But the funny thing is that we had that national environment plan long ago and that was abolished. Not really abolished, it was never implemented anymore for 20 years, or 15 years, and parliament even didn't ask why we don't implement our planning legislation. My final conclusions are that to avoid all those different legislations, we should take again our original national environmental plan act with the program and to integrate all the policies from the beginning with special partial plans for these partial problems. So it's funny that we have this integration process, but in the end I conclude that for the planning we are not integrated at all. This was the past and we are going that

way now, that should be avoided. So I was a bit surprised to discover, in the end, that it was more integrated in the past while we think we are integrating everything with parcels integrated and for suggesting it created all the time. So, I think this is the difference between the legislation on the one hand, this disintegration process and the policy integration.

LUISA:

So, if you move in one direction, you are naturally moving the other one to the other direction... You cannot have both ways.

HANS:

Not for everything and in any case not for this problem. That is what I think. But I say more or less the theoretical publication, of course, because we don't know which measures we will take and what legislation we need. It is not known at the moment because we are only in this part of the cycle, we are developing measures and later we discover which legislation we need. And there are green deals and... if they are successful then it's not necessary to have legislation so we are not... So, perhaps things will develop in a different way (can be, of course). So it's a bit theoretical problem that I'm jumping already to this face and asking myself how should we organize it.

LUISA:

Yeah, because maybe you don't even need.

HANS:

Yeah, perhaps we don't need legislation because we add the rules for measures in the already existing legislation. And perhaps this is only the climate act or plastic act for the programmatic approach and planning process, but without any concrete measure what should be done while you undertake certain activity? So, the climate acts directed to the government, the government says "I'm going to make a plan and monitor, evaluate, a measure program", but it is not for the citizens, because for the citizens we have other legislation. So, part of the government acted the climate act could be we need energy measures, and then we think about energy measures and then part of the energy measures is for example the government buildings, (must be) it must save energy, this is a factual measure, we don't need legislation, but for example we will need legislation to say that all the existing buildings should take isolation measures in the roof (and then you need legislation). So, then we have here the general act for the planning with the result of the planning is state measures for isolation of houses, and then we need specific legislation for this measure. The result can be specific legislation in the end, but not everything is in the climate act then, because the test only the few points of the policy. In short, this is the publication. Has it some resemblance with your topic?

LUISA:

Yes, that's very useful actually. My perspective is not national, it's international. But it's pretty much the same problem, because in the end I want to know which characteristics and which ingredients should you take into consideration when deciding. Should we have legislation? How could we work together with companies? Or how would things work

towards plastic in an international perspective? So, yes, it's pretty much the same problem in a different level, so it helps a lot.

HANS:

It does not stop with the publication. I realized afterwards I could stress a bit more that you have legal solution for the problem, that is the organization of legislation, but you have also the process with the stakeholders, different viewpoints. What I explain that you can concentrate the discussion with the cosmetic producers, they are willing to take measures. That's of course relevant and that is one of the criteria in the priority list.

LUISA:

Yes, because if they're willing to, then it is easier, and you can give a higher priority to it.

HANS:

Yes, and then you have that thing. Ahn... the measures – can be legal measures and then you need legislation –, but most of the time there are other measures that the government can take themselves so as advantages for citizens. So, if you develop new products are poster days. You have perhaps you can have an investment program for research in the government policy, and then the research perhaps is such a good product or method to undertake certain activity that the citizens are convinced immediately. For example, if they can use the mobile, it's not necessary to print paper, so the break problem is solved, falling, cutting of trees. So, if the government says that it's more efficient that we develop alternatives for the use of paper, so we contribute to computers or mobile that can be no legal measure of course. So, this is only about legal measures if necessary. So, you must take into account the organization of legislation, but also the stakeholders, and also the non-legal solutions. I've once wrote a review of a book and book was by Delft University, this Technical University source, not legal at all, and this was about... The problem was what makes infrastructure projects difficult. Is it legal? Is it technical? Is it the costs? And they assessed it in different countries and they said: "no, I think that there are six relevant factors: legal, technical - for example if you have technical problem of infrastructure projects, for example we had a tunnel that was not on the ground level, and we develop new technique that was cheaper, that was efficient in long term, but was not [inaudible] their own so we have technical problems; does it work? We have the costs, we have the management that you have the right people in the right organization. (No, I don't know anymore) but in education at 5, I think the 6 factors that makes infrastructure projects difficult and complicated, and then in the three counties, in different projects, the legal problem was contributed 5 until 8% of the complexity.

LUISA:

Oh, only that?

HANS:

Yes, only that. Technical, twenty. Costs, twenty. The management problems of the group of people, ten (I think) were procedural things, I don't remember. But what I can prove in my review and were discussed with the authors of the report was: so the politicians concentrate on the legislation, so determined on the radio and I tried to have pure sound but only for 5 for 8%, so it's not very effective. And they said that those things out of the

reach of politicians, they can make legislation, but in fact this is project management and technical development can be stimulated of course with subsidies. But politicians have people expect that they solve the problem, that they can do a little bit with the legislation and a bit of other things, so I concluded that affect the project management is very important, and that was explained in that report. How you deal with stakeholders... I don't know... How you organize the process... That's much more important. So, the incremental approach, if something happens in the project, to discuss it with everybody again, you will discuss with all the people with this new information means for our project, or we change this and this. What do you think of the stakeholder of this solution? So you make small steps all the time in a good direction and you discuss it with everybody and that is project management, that has to do with the organization of the project, and not with the legislation. So, if we concentrate on the legal point of plastic, it probably is around. So, the stakeholders in any case, how do we get the [inaudible] in tomorrow? All the stakeholders, otherwise [inaudible] project implemented, so that's very important and effective on the financial things, as well. So, it will be the same here. You have to deal with stakeholders, the other measures are possible ... We know where the plastics are, the plastic soup...

LUISA:

In the gyres.

HANS:

Yes, but how can we get the plastic out of the sea? That's a technical problem at the moment and a financial problem. So, if we would have very effective method to discover all the plastic in the environment and we can take 100% out of it, that would be a better solution than to take difficult behavior or product measures. Or other treatment. But that's apparently not the case.

LUISA:

No. It's difficult to go there. That's how I'm assessing it. Like, that's the division of the thesis, but in each of those stages here... Because first, it's the overview, so pretty much how you started the paper: so which problem do we have?; which information and data is already available on the plastic pollution?; and then what do we have on public international instruments? But here is mostly the related instruments because we have nothing on plastic. But, yeah, the ones that could do something. So, for example, with the ones that I analyzed, those and those... So, for example, MARPOL deals with pollution from ships. So, what do they say about plastic? Is this being used at all? And then I do an assessment. Are they referring to it? What are they their strengths and weaknesses and so on...

HANS:

By the way, the water framework directive, the maritime strategy directive in the European Union...

LUISA:

Yes, but is more for, I think, to assess what you are going to do with it...

HANS:

No... One of the things is that I mention... The microplastics that I mention in it. The plastics as well. In the Maritime Strategy Directive it's said that this first phase of the policy circle is also covered by that strategy – maritime strategy - because the member states must take measures to assess the problem to find out which are the sources of this relevance, so to find out all the facts that you need in the first part of the policy cycle. And to collect all the information that is needed to know in the next second phase which measures you must develop. The text simply mentioned the maritime strategy.

LUISA:

Yes. Because after that, the focus is international, so I look mostly to international instruments. Then, also here... The *ex post* - the recoveries - and the *ex ante* - how do you deal with production, consumption, and disposal issues. And the *ex post* is how do we recover plastic that is already in the ocean. And the two that you mentioned are precisely the two problems that we assessed so: financial obstacles and legal uncertainty. So, how could you address those? And then I will do the same with the private initiatives, and this is mostly CSR. So, yeah... Understanding what CSR is, how is it working, what current private initiatives you have on plastics. Because for private you have a few already. Unlikely with the public legislation. And which role the different actors are playing, because sometimes government is not legislating but it's putting actors together to discuss the problem or they're playing different roles. So... How is it going... To, in the end, have part four, that is supposed to point the way ahead. So, what have we learned from public initiatives, what have we learned from CSR and how could we put them together, trying to tackle the main challenges and starting with the right foot. Because otherwise we just go all over and it's not efficient. So, in that sense, I think that will be incredibly useful in this part, because then I have to say how do you assess ... [Hans and Luisa Speak together] And legislation is one of them them, and this reasoning is very useful because it's already organized... You have to look for this and look for this, and those are the integration problems; and then I can combine those findings with the findings specific for plastic and how to deal with all of those in the international scenario. And the European part and the national part will be inside the international part. Because although this is for public international instruments, I also want to know how regional and national initiatives related to the form that you address internationally. So, for example, if European would be the international scenario and the Netherlands the regional one, sometimes the regional is trying to do something but the international is preventing it. So if you don't have something at the European level, the member states sometimes cannot do everything that they would. So, how do you deal with that? Because you also don't want the international scenario to be an obstacle to other initiatives.

HANS:

That's for example, the free market is a problem for product measures. But, for example, fishery is also exclusive you'll be in their competence. So, the fishing nets mentioned something cannot be the subject of national measures because it's exclusive European power. And also, for example, the trade agreements with countries outside Europe Union is exclusive for European competence. So, if you want to take measures to avoid plastic packaging or something like that with China It must be done on the European level.

LUISA:

And that is a similar problem that happens with the international, especially with the WTO, because you have a lot of trade regulation and... Yeah... What's fair trade, and what is balanced or not? And then sometimes you take an initiative and then you have problems in the WTO because they say it's not equal.

HANS:

Yes, that is the specialty of the _____.

LUISA:

Yes, we talked a little bit about it.

HANS:

I think I saw in his publications. So, it's very useful for this. And what other things can I do... I can send to you the English version of that report.

LUISA:

Yes, I would love that.

HANS:

And there is also an English summary of the first report. I don't send the first report, because you have that list of criteria and all the sources and the points. Just to have an idea. And then the second report takes out only three of the sources, so that it's in the summary, it's mentioned and dealt with in the first report, and then it's working out and put the sources, and that is in English.

LUISA:

But that is also a very useful even with the Dutch one, because now I know what that is about, and to translate two words, it's much easier than dealing with the whole report.

HANS:

And then I call again with Ludo. Yes, you can ask him to translation, or a translation of the most important parts.

LUISA:

Yes... Because then it is just a few things and I already know the context.

HANS:

I can also send you the advice of the Health Organization, that mentions the effects, but that is not for plastics but for microplastics. I think that the legal problem for microplastics and plastics might be more or less the same, but the scientific information is different. So, that is not dealing with the plastics, just the microplastics.

Do you have other questions?

LUISA:

No... I think we covered. I did some notes of what I wanted and I think we covered.

Also, now I understand a little bit better where the Green Deals go. Like, how they interact with the policy-making as a whole...

HANS:

And, for example, our Green Deals cannot be legally enforced. We had different green deals in the past, but the enforcement by the civil judge was never used, because it is not the way to solve the problem in the green deal. The Ministry says if the green deal doesn't work, I prepare legislation.

For example, I think we had a green deal for adding sugars to food, and it didn't work because there was many sugar added to food, more than necessary... So the Ministry said "this is your last chance, otherwise I will make legislation about the percentage of sugar in it".

LUISA:

So... Now you have the legislation?

HANS:

No, not yet. It's their last chance

For example, we also had with discrimination by job organizations. Of course they are not allowed to discriminate, but there was a lot of proof that if you asked a client that you don't want to have Turkish people, then the organization said "yes, of course, you can exclude Turkish people". So, this was discrimination against the law and it was already for a long time, so it was discovered again that it was still the same, not less than in the past. So, now the minister said "the green deal doesn't work, so now I start with legislation and other measures".

LUISA:

And do you know which green deals you already have related to plastics, circular economy, or...?

HANS:

No... I don't know. I know they have been working with the fisheries, ...

LUISA:

I know about the circular economy one...

HANS:

There is the cosmetical, scrubbing materials one... But that was not really the subject of the... [flipping through pages] Ahn... Shipping apparently... With the boards sector, what's happening in the boards... The recreation in the beach... Those are examples, but they are mentioned, but in Dutch... Because the Ministry gave an overview of all the initiatives taken at the moment.

LUISA:

So, maybe that is why I didn't find. Because there is a website for the green deals, but all information is in Dutch and you have a few of them in English. And the ones that I

could find they end in 2015, and it is like a general report of two pages saying the numbers. 185 until 2015. So, probably by now you have maybe twice as much.

HANS:

Yeah... Once I saw a little farm in the city of Rotterdam, in the city center, and the man said it was the subject of a green deal.

LUISA:

So, sometimes it is really specific...

HANS:

Yes, but then perhaps it is a combination of social object, because children in the cities don't see animals, and don't know anything about them... So, if you have a little farm in the city, it is under the condition that children are allowed to play with the animals... And it contributes to several policy objectives. So you have all kinds of big and small, and important and less important deals.

LUISA:

And who starts those? The governments? Or also the sector can come...?

HANS:

There is a policy cycle... If you have discovered you have a problem and you have some facts about the sources of the problem... Normally, that's is the role of the government, to discover social problems, and to acknowledge that it must take measures. For example, I wrote a publication about asbestos problem and I was very surprised that asbestos is used in all types of building materials, and it is very good product, in fact, because it is resistant to humidity, to fire, to temperature, and so on, and it is very cheap. It was developed in 1897, in Austria, and then around 1905 it was already discovered it had some health problems, and more and more proof, and in 1965 there was the final conclusion that it is very dangerous and it causes specific forms of cancer, and so... That cannot have any other cause... And then, in the Netherlands, to solve the problem, this was the end of the phase one, in fact. It was discovered that it was really a problem. It was from 1905 to 1965, so 60 years in the first phase of the policy life-cycle. And then the result was that we knew we had a problem, and we must take measures. And then we had stakeholders, that produce asbestos, and people that didn't believe it and thought it was very useful, and so on... That took 30 years to convince them that measures should be taken, so only in 1993 it was prohibited, the use...

LUISA:

Almost a century...

HANS:

And 90% of all the asbestos material is supplied in the 70's and the 80's, so the problem... Now we have only in [inaudible] 120 millions square meters of asbestos products. And it is not resistance to weather and so on. So, a little of asbestos' particles ends up in the environment, and that is dangerous.

So, we had that problem, only for [inaudible], because it is huge also in many other things. In the 70's and 80's, after the end of the first part of the policy cycle. Because there was political pressure, of employment arguments, costs, and so on so on.

LUISA:

That should not do anything about it...

HANS:

The political found resistance against the measures... Only in the end of the 80's it couldn't be denied anymore by the most conservative politicians, that measures were necessary, that [inaudible] had to pay for them, and that the product couldn't be allowed anymore. So, then it was political process of convincing stakeholders.

LUISA:

90 years...

HANS:

Yeah... 90 years...

And that problem could have been avoided because in 1965 it was already known about the effects... And even before.

LUISA:

And if you applied the precautionary principle in 1905...

HANS:

Yeah... But that is the problem with the precautionary principle... There is always some discretion, people have different interests... Even some people say that facts are only opinions... And sometimes people have different opinions... Sometimes it is lack of information, or there is no scientific proof. So, that makes it all very difficult, you cannot...

LUISA:

You cannot pressure people to do anything because you don't have the proof.

HANS:

You don't have the proof, and scientific opinions differ, and interests differ...

So... It was the end of the scientific debate, in fact. And then this was the end of the debate between the interests before the politicians dare to take the measures to prohibit the use of asbestos. And now we are in this part of the life-cycle. We take different measures and now. And to discuss measures is one of my things at the Ministry. We want to prohibit asbestos roofs after 2024. So, all the asbestos roofs must be taken on the ground. This is a measures program that need legislation, because people don't... If they are not obliged to do it, they don't do it. So, we are making legislation and we need 20 years to implement the legislation, because not all the roofs can be taken at the same moment. If the roof is new you don't want to replace it immediately, it's of course expensive to replace it... And you need time... So, then, by 2024 we did already with our roads, because asbestos is also... The products of asbestos that were banned were

used in our roads. But that was already earlier in the measures program. That is probably finished already now... And now we are in the roofs. So, by 2024 we have taken more or less all measures for taking away all sources of exposure to asbestos. But still, it's in ships, private ships, so everywhere... So, now for example, it was discovered that we have asbestos also in cosmetics. And last month it was... If you clean houses, you... There is small particles... Not stone... You have to clean with a certain material, sand... And sand was also asbestos discovered. So all the time it is discovered new sources. We had the gas masks... In masks imported from Russia, and it was a nice play for children... In the 80's and 90's, and apparently there were a lot of masks from Russia... Hundreds of thousands in the Netherlands alone. But then it was discovered that it contained asbestos.

So, the third phase can also take several decades. And then we are only in the fourth part of the policy-cycle: if the problem is solved, you must avoid that the problem arises again. So, it is not possible to abolish all the legislation then, because there may be reasons to start again.

LUISA:

And to you feel continuance in those policies? Because what we feel, at least in Brazil, is that sometimes you change people in the government and you walk several steps back, because they...

HANS:

Yes, but less obviously. We have had liberal ministers, probably because of economic consequences, they wanted to keep more under control... But my impression is that those liberal ministers were the best ministers from the environmental perspective, because if they are ministers that want you to do something, they get more and more information, so... Many reasons because they were more effective. For example, it was discovered that they have more positive perspective of life. More optimistic. And that was apparently better than the socialist ministers, that had a more negative feeling, and had less social capacities, and they didn't know all the right people in the right places. So, there were little things that made liberal ministers more effective. So, perhaps you heard about the gas problem... The gas extraction and the earthquakes in the North? Now we have a liberal minister and suddenly everything goes much faster than decades before, because he is very effective. He has a positive, optimistic feeling... The liberal ministers are mostly from successful families, that have a more positive results in their lives, that have a more positive view... That is one of the reasons. And in this case, the liberal minister he takes more measures, he is energetic, he goes to the people and has more confidence in people. So, that gives a more positive outcome.

If you have a serious minister that wants to make a success of his Ministry, after a while he gets more and more informed... Also the environmental minister. I remember that once were a minister that... And I think that was our best minister for environment... Who didn't know anything about the environment and became minister. There was a problem in the liberal party, that they wanted to get rid of their party leader, and they promoted him to minister. And he became our minister. [inaudible] So far we never heard him speak about the environment, but he became so enthusiastic and well informed that after his ministry became the chair of ... natura ... how do you say? The world organization for

nature protection. And he made many things in that direction, because he became personally convinced that it was important.

So, we have lots of [inaudible] effects, because you don't abolish everything what has been done before.

We have had once for nature conservation, that the minister... He was not personally convinced of... He was minister for the protection of nature, and he said he had nothing like nature. And his policy was like that. He abolished everything, a bit like Trump. So, it was a complete disaster, and those were the black years for nature conservation.

LUISA:

When was it?

HANS:

It was in... After 2000... 2004 until 8. Or perhaps even later. If you ask the nature conservation people, that was really the... And Blake was his name. He was a farmer from the North and he was referential in the Christian Democratic Party. So he became minister for the topic, perhaps because it was not his preference, but you have to make arrangements between all the parties, and then he became minister for nature, while he didn't have anything with nature. And then he started to build a Trump-like policy... But that is the only example that I can imagine, that I can remember.

I try to take the train of six, if it's possible, because I have to bike...

LUISA:

Can you, afterwards, forward me the contacts for the people?

HANS:

Yes.

[audio is disconnected]