

Transcript of Ottmar Edenhofer Webinar on January 26, 2021. Presented by the Harvard Project on Climate Agreements

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00:00:05.879 --> 00:00:19.110

Robert Stavins: Hi, I'm delighted to welcome all of you to this session of conversations on climate change and energy policy, a virtual forum from the Harvard project on climate agreements.

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00:00:19.650 --> 00:00:30.390

Robert Stavins: I'm your host Rob Stavins a professor here at the Harvard Kennedy school and the director of the Harvard environmental economics program and our project on climate agreements.

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00:00:30.750 --> 00:00:43.980

Robert Stavins: As many of you know, in this series of webinars we feature leading authorities on climate change policy, whether from academia, the private sector, NGOs or government.

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00:00:44.430 --> 00:00:57.570

Robert Stavins: And today I'm very pleased to say, we have someone with us, who certainly lives up to this because he is truly a leading authority and someone who is also greatly respected.

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00:00:58.200 --> 00:01:04.890

Robert Stavins: By diverse audiences in academia private industry government NGOs around the world.

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00:01:05.430 --> 00:01:14.670

Robert Stavins: But before I turn to today's guest to introduce them, let me remind you, and especially for those of you who are new to this series about the logistics.

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00:01:15.240 --> 00:01:28.260

Robert Stavins: We record the seminars, the webinars and the recording will be available within a day at the website of the Harvard project on climate agreements.

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00:01:28.800 --> 00:01:37.890

Robert Stavins: If you wish to pose a question at any time whatsoever as soon as our speaker begins, you could begin to post questions or, at any time.

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00:01:38.340 --> 00:01:56.970

Robert Stavins: it's only when he has finished his presentation, which will be about 30 minutes long that I will begin to turn to your questions if I can't get to all of them, which is typically the case I apologize, in advance, I may aggregate some of the questions for purposes of brevity.

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00:01:58.410 --> 00:02:10.980

Robert Stavins: And then we will wrap up the seminar will adjourn promptly by 945 in the morning Eastern time that's Boston time in the United States.

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00:02:11.700 --> 00:02:22.620

Robert Stavins: So with that i'm very, very pleased to introduce today's guest, Mr. Ottmar Edenhofer Professor of Economics at the Technical University of Berlin.

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00:02:23.010 --> 00:02:38.610

Robert Stavins: The founding director of the mercury or MERCATOR research institute on global Commons and climate change and co director and chief economist at the Potsdam Institute for climate impact research.

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00:02:39.510 --> 00:02:49.830

Robert Stavins: He has been and continues to be a major contributor to scholarship to academic research on the economics of energy and climate change.

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00:02:50.250 --> 00:03:09.660

Robert Stavins: And also, is very involved in other spheres, in particular, he served as Co chair of working group three of the fifth assessment of the inner governor mental Panel on Climate Change, where I had the distinct pleasure of working closely under his direction.

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00:03:10.680 --> 00:03:22.290

Robert Stavins: is a key advisor of the German Government and also work closely with the European Union, our holds a PhD in economics and a bachelor's degree in philosophy.

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00:03:22.920 --> 00:03:37.920

Robert Stavins: A pairing which i'm delighted to say that I share with him, if I were to list just a small share of his other honorary degrees positions and other types of service, I would exhaust our time together.

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00:03:38.520 --> 00:03:55.170

Robert Stavins: So, instead, I will turn to say that i'm very pleased to welcome admire hayden hoffer who's going to speak to us about the European green deal reform or regulatory tsunami, I admire it's all yours.

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00:03:59.220 --> 00:04:01.080

Ottmar Edenhofer: Thank you very much, can you see my screen.

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00:04:01.830 --> 00:04:02.730

Robert Stavins: Yes, perfect.

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00:04:03.000 --> 00:04:10.050

Ottmar Edenhofer: Wonderful rob thanks a lot for this kind words and for this introduction and for inviting me.

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00:04:11.130 --> 00:04:27.060

Ottmar Edenhofer: it's a very good time to talk about the European green deal because now, the prospects that United States and Europe could work closer together on climate change or climate policy and energy policy on now very good.

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00:04:28.530 --> 00:04:44.190

Ottmar Edenhofer: So what I would like to do is in this lecture today to explain you what's at stake in in Europe in order to explain you the reform options and the opportunities but also the risks at the same time.

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00:04:45.360 --> 00:04:49.170

Ottmar Edenhofer: Now let me start with the state of the Union speech.

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00:04:50.850 --> 00:04:53.400

Ottmar Edenhofer: delivered by was enough on the line.

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00:04:55.260 --> 00:04:59.310

Ottmar Edenhofer: So she announced basically two very important.

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00:05:00.960 --> 00:05:03.600

Ottmar Edenhofer: aspirations of the European Union.

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00:05:04.680 --> 00:05:05.550

Ottmar Edenhofer: The first one.

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00:05:06.660 --> 00:05:20.970

Ottmar Edenhofer: She announced that they you will tighten the mission target from 40% to minus 55% and what this will imply I explained you in a minute, but secondly.

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00:05:21.540 --> 00:05:42.570

Ottmar Edenhofer: She highlights also that the Commission will review and propose to revise the necessary all relevant climate related policy instruments so she announced now the options for a reform of the emission trading scheme, and also the related climate and policy packages.

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00:05:43.680 --> 00:05:53.070

Ottmar Edenhofer: And let me explain a little bit the minus 55% So this is the you pass towards climate neutrality, and this is the old target, so to say.

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00:05:54.060 --> 00:06:12.540

Ottmar Edenhofer: which basically was not carbon neutrality by 2050, but this is now the new target and the new target basically implies, we are here now in 2020 minus 55% by 2030 and net cognitively.

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00:06:13.200 --> 00:06:20.910

Ottmar Edenhofer: The trinity by 2050 what other requirements for that an acceleration of the power sector decarbonisation.

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00:06:21.540 --> 00:06:45.150

Ottmar Edenhofer: Accelerated electrification of end users bio energy investments incentive semi synthetic fuels to cover residual non electric fuel demand carbon dioxide removal to offset the remaining emissions that is a huge task, and in particular the net negative emission issue is now on the table.

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00:06:47.700 --> 00:06:58.890

Ottmar Edenhofer: Now, what are the institutional settings the institution of means to implement such a target and whenever you want to learn something about the you.

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00:06:59.340 --> 00:07:08.970

Ottmar Edenhofer: It is always worthwhile to read impact assessments and I am no, I do not know if you are a passionate reader of the impact assessment, admittedly, I am not.

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00:07:09.420 --> 00:07:20.460

Ottmar Edenhofer: But this impact the service assessment is a worthwhile read it has two dimensions, the first I mentioned, is that distinct scenarios outlined by the Commission, the.

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00:07:21.180 --> 00:07:34.110

Ottmar Edenhofer: difference in the in the role they assigned to the carbon price the carbon price as a backstop role and the carbon price as a centerpiece of future climate and energy policy.

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00:07:34.950 --> 00:07:45.540

Ottmar Edenhofer: In the second dimension are the complimentary policy measures, and let me explain a little bit, so what kind of scenarios that you have here in mind.

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00:07:46.380 --> 00:07:55.890

Ottmar Edenhofer: And these are the three really important scenario, so let me start with the first scenario, this is the scenario which relies heavily on the regulation.

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00:07:56.910 --> 00:08:08.610

Ottmar Edenhofer: The scope of the ETS, the European admissions trading scheme will not be changed the current Emission Trading Scheme consists of power industry, in fact, you have the Asian at navigation.

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00:08:09.930 --> 00:08:18.480

Ottmar Edenhofer: But this regular terrorists scenario intends to regulate all the other sectors industry building and so on.

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00:08:19.200 --> 00:08:33.150

Ottmar Edenhofer: In particular, the you intense to implement, or at least to announce energy efficiency policies renewable policies and in the transport sector, this in our lives heavily on technology standards.

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00:08:34.860 --> 00:08:44.130

Ottmar Edenhofer: So then, there is a second scenario which is called the mix tonight, and I will talk a little bit about this scenario, because there's a lot of ambiguity.

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00:08:44.550 --> 00:08:59.790

Ottmar Edenhofer: around this scenarios definitely the price the CO2 price will play a much larger role it is open to debate how exactly the ETS will be extended by road transport and buildings.

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00:09:00.330 --> 00:09:12.000

Ottmar Edenhofer: But still, this mix in our lives very heavily on standards and direct regulation and then there's a third scenario, the see price scenario, which is the most radical one which.

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00:09:13.890 --> 00:09:29.430

Ottmar Edenhofer: consists of an extension of the whole ETS, but then it will abundant all the complimentary measures in energy efficiency, renewable energy policies and in the transport policy, so this is roughly the outline.

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00:09:30.450 --> 00:09:39.660

Ottmar Edenhofer: Now let me explain a little bit and this seems to me, is quite important Before I continue, with the institutional reform proposals.

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00:09:40.350 --> 00:10:03.090

Ottmar Edenhofer: to inform you a little bit about the marginal abatement costs and Admittedly, the marginal abatement cost is based on our calculation at the Potsdam Institute, and I do not highlight on, I do not claim that this numbers are exactly right, but what I am saying is they give some orientation.

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00:10:04.230 --> 00:10:10.110

Ottmar Edenhofer: And and and to define reason ever focal points for future proof for.

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00:10:11.820 --> 00:10:17.730

Ottmar Edenhofer: Now, before I explain this, the EU target minus 40%.

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00:10:19.260 --> 00:10:36.000

Ottmar Edenhofer: Basically, has been translated as a reduction target in the European emission trading scheme, which I call this the ETS into minus 43%, and this leads to a carbon price between 30 to 60 euros per pound CO₂.

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00:10:37.050 --> 00:10:44.700

Ottmar Edenhofer: Now you might now ask the question what the hell is this asr the European effort sharing regulation.

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00:10:45.420 --> 00:10:50.910

Ottmar Edenhofer: The European effort sharing regulate regulation is not an admission trading scheme in the usual sense.

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00:10:51.450 --> 00:11:03.060

Ottmar Edenhofer: The effort during regulation defines obligations of all the Member States and if the Member States can not fulfill this obligations, up to now, they can trade.

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00:11:03.720 --> 00:11:15.270

Ottmar Edenhofer: Some of the permits can buy and sell permits between States it's not the usual emission trading scheme, but nevertheless this sector has its own model abatement cost curve.

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00:11:15.750 --> 00:11:28.830

Ottmar Edenhofer: And a reasonable calculation shows, they are between 102 hundred euros petronzio to, but the minus 40% target is already water under the bridge.

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00:11:29.400 --> 00:11:48.060

Ottmar Edenhofer: And the reason for this wide range of CO2 prizes we use multiple models multiple calculations multiple assumptions about the underlying technologies and this range is very much in line but official authorities, like the chairman environmental ministry and economic Ministry has calculate.

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00:11:49.440 --> 00:12:02.310

Ottmar Edenhofer: Now, what about them you institutional setting instead no institutional setting the crucial question is, what is the future division of Labor between ETS and ears are.

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00:12:03.420 --> 00:12:11.250

Ottmar Edenhofer: And they are basically two fundamental often see other one is that the current division of Labor will will will continue.

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00:12:11.940 --> 00:12:18.450

Ottmar Edenhofer: And when the current division of Labor beaten ETS and ears are which basically means the current division of Labor.

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00:12:18.720 --> 00:12:30.390

Ottmar Edenhofer: We can the power in the industry sector, on the one hand, building transport and heating, on the other, so this would lead to a wide range of carbon price differentials.

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00:12:30.690 --> 00:12:46.470

Ottmar Edenhofer: Between the ETS sector and the aperture and regulation sector so in the ETS sector, it is 80% to 150% in building in in transport in and heating is between 350 to 500 euros cut on CO2.

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00:12:47.910 --> 00:12:57.180

Ottmar Edenhofer: What you can see here is basically this is, from an economic point of view, not efficient at all, because there is a white difference of the marginal abatement costs.

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00:12:57.930 --> 00:13:08.130

Ottmar Edenhofer: So when the ETS will deliver the whole reduction one advantage would be that the marginal abatement costs converge roughly.

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00:13:08.730 --> 00:13:21.510

Ottmar Edenhofer: To the same number, but from a political economy point of view, it is very unlikely that this scenarios will be implemented, why because industry and the power sector in the European Union is.

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00:13:22.050 --> 00:13:30.030

Ottmar Edenhofer: resists to implement such a proposal, because they feel the transport sector, the heating and the building sector should do more.

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00:13:30.720 --> 00:13:48.690

Ottmar Edenhofer: However, and this should be noted, it is open to debate how the European Union as a whole can live can manage can handle such a wide range of marginal abatement cost curves and marginal and prices across the different sectors.

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00:13:50.940 --> 00:14:02.040

Ottmar Edenhofer: Of course, such high carbon prices comes also with another challenge, this is the distribution of challenge among the Member States and also the distribution of challenges.

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00:14:02.640 --> 00:14:14.100

Ottmar Edenhofer: For the low income households, how to compensate them, it seems to me that the current Commission is quite confident that they can manage the distributional challenges among the Member States in particular.

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00:14:15.180 --> 00:14:30.600

Ottmar Edenhofer: to handle the negotiations with the eastern Member States but still carbon prices above 100 euros petronzio to ask for significant compensation schemes, because uncompensated carbon prices are quite.

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00:14:31.020 --> 00:14:42.660

Ottmar Edenhofer: Progressive which basically means that they a burden and over proportion they burden the low income households in an over proportional way.

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00:14:44.400 --> 00:14:58.590

Ottmar Edenhofer: Now, given this carbon price scenarios what What does this mean for the institutional setting and for the institutional reform, so we are now at the status quo, and we have the impact assessment with these scenarios.

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00:14:59.310 --> 00:15:15.720

Ottmar Edenhofer: In the first scenario, the regulatory scenario is a high risk scenario, why is this a high risk scenario, there are two reasons, the first one is the huge carbon price differentials, or at least the huge differential across the sector's.

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00:15:17.190 --> 00:15:35.550

Ottmar Edenhofer: According to the mouse on the pavement costs, the second is that the regulatory framework does not allow the European Union necessarily to incentivize the Member States to implement what the Commission might decide, so therefore.

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00:15:36.630 --> 00:15:52.770

Ottmar Edenhofer: I think we need an intermediate step the see price scenario of the uniform carbon prices imposed on all the relevant sectors is probably as an intermediate step not the right way, but the crucial question is, what is the pathway from the current state to school.

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00:15:54.150 --> 00:15:59.580

Ottmar Edenhofer: Through the an intermediate step towards a uniform carbon price.

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00:16:01.140 --> 00:16:08.430

Ottmar Edenhofer: So the crucial question therefore is, how can we designed this intermediate step, and this is really the most important debate.

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00:16:09.060 --> 00:16:13.020

Ottmar Edenhofer: around this reform proposal, and let me highlight this a little bit.

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00:16:14.010 --> 00:16:32.700

Ottmar Edenhofer: The intermediate step has to address the distributional issues and to guarantee the stability and has to manage also the political economy challenge between the sectors, on the one hand, the power, the industry sector, on the other hand, the transport the building and eating sector.

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00:16:34.560 --> 00:16:38.280

Ottmar Edenhofer: Now they are basically for the mixed scenarios two options here.

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00:16:38.820 --> 00:16:47.940

Ottmar Edenhofer: This is the status quo, where we have the European eds the admissions training scheme, here we have the Effort Sharing regulations scheme, which is.

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00:16:48.360 --> 00:16:58.830

Ottmar Edenhofer: A quiet regulatory approach, with one exception, that the Member States can trade some permits when they cannot fulfill not fulfill their obligations.

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00:16:59.340 --> 00:17:11.010

Ottmar Edenhofer: And it is quite clear about the the see price scenario means they are to intermediate steps, the one is that, basically, the the allocation of the European.

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00:17:11.910 --> 00:17:25.560

Ottmar Edenhofer: Effort Sharing regulation means completely intact, which is then the initial endowment of permits and then the MP would have one ETS as an intermediate step and then over time, basically, we will.

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00:17:26.130 --> 00:17:34.770

Ottmar Edenhofer: The effort chatting regulation will disappear, this might lower the price a lower pressure from from the Member States the power sector in industry.

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00:17:35.190 --> 00:17:45.630

Ottmar Edenhofer: But still it's very unlikely that this will happen by because I mentioned this, that there is this political debate among the different sectors, it seems to me.

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00:17:46.170 --> 00:17:53.520

Ottmar Edenhofer: That another option is much more feasible, on the one hand we have the on the ETS, the current ETS.

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00:17:54.060 --> 00:18:03.390

Ottmar Edenhofer: Including the energy and the industry sector, and then we could implement the second emission trading scheme for transport building and heating.

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00:18:04.110 --> 00:18:14.010

Ottmar Edenhofer: And meanwhile we could define gateways between this two systems and this defining and creating such gateways might have a two fold effect.

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00:18:14.640 --> 00:18:28.500

Ottmar Edenhofer: The first one is that market participants already anticipate that they are gateways and they anticipate this enterprise expectations, and this could lead to a convergence of the different prices across the sectors.

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00:18:29.190 --> 00:18:47.850

Ottmar Edenhofer: And secondly, this is a starting point to manage the division of Labor among the sectors and then this could be a credible pathway store with a seat price scenario we have one ETS with one credible CO2 price scenario.

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00:18:49.380 --> 00:18:53.310

Ottmar Edenhofer: Okay, this is something which, which is on the table, and at this debate.

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00:18:54.390 --> 00:19:02.610

Ottmar Edenhofer: In order to understand the European debate, you should have in mind another very important aspect of European policy.

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00:19:03.060 --> 00:19:11.370

Ottmar Edenhofer: which has nothing to do with climate and energy policy, but a lot with the fiscal union and fiscal policy last year they.

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00:19:12.030 --> 00:19:26.670

Ottmar Edenhofer: The European Council has announced or has basically formulate an aspiration that the Union will, over the coming years of work towards reforming their own resource system and interviews you own the resources.

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00:19:27.570 --> 00:19:32.040

Ottmar Edenhofer: You might a little bit surprised by this burning own resources means.

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00:19:32.520 --> 00:19:44.640

Ottmar Edenhofer: The EU, the European Union wants to have its own tech space that's the fundamental thing, and they have identified three candidates for the tech space a plastic text digital detects.

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00:19:45.150 --> 00:19:55.140

Ottmar Edenhofer: The cut the carbon border adjustment mechanism and the additional revenues from a reformed European emission trading scheme.

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00:19:56.010 --> 00:20:01.620

Ottmar Edenhofer: I will not go to the details about the digital text the plastic texts and.

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00:20:02.190 --> 00:20:12.390

Ottmar Edenhofer: The financial transit transaction tax, because the revenue potential seems not very high, the same is true with the carbon border adjustment mechanism by far.

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00:20:13.110 --> 00:20:25.950

Ottmar Edenhofer: The largest potential for revenue generation is the ETS and he, I would like to just to provide you with a scenario which has been carried out by caymans food and others.

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00:20:26.640 --> 00:20:36.570

Ottmar Edenhofer: assume that 80% of the allowances would be auctioned off and half of the transport and agricultural sector would be covered, which is a relatively conservative.

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00:20:37.800 --> 00:20:51.000

Ottmar Edenhofer: estimation, and the carbon prices are consistent with the aspirational goals what you can see here, basically, from now on, over the last until.

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00:20:52.500 --> 00:21:04.230

Ottmar Edenhofer: This might be a revenue potential roughly around 800 billion euros which can be used for the repayment of the recovery fund.

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00:21:04.890 --> 00:21:15.270

Ottmar Edenhofer: Reducing the revenues for the Member States, and then there are remaining net revenues for the you and the nice thing, according to some economists who.

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00:21:16.320 --> 00:21:27.990

Ottmar Edenhofer: Trust the you is that this is not a stable tech space so and this declining tech space might be used to tame a little bit the European Leviathan.

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00:21:28.350 --> 00:21:36.900

Ottmar Edenhofer: As some people correct arises Others feel this is not the appropriate way, how to deal with the net revenues, because the you needs.

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00:21:37.380 --> 00:21:51.030

Ottmar Edenhofer: In the long run a stable tech space in here, you can see, the composition of the va to tax the tax revenue, that is not really important for our discussion and what I am saying here is this.

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00:21:52.620 --> 00:22:03.420

Ottmar Edenhofer: This this this debate about the own resources, which is completely driven by the fiscal federalism changes might change the incentive for the Member States.

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00:22:03.900 --> 00:22:17.760

Ottmar Edenhofer: To a certain extent, the Member States had an incentive to extend the ETS, because then we have higher prices even to introduce minimum prices at auctioning the permits, because then they had this.

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00:22:20.100 --> 00:22:24.630

Ottmar Edenhofer: revenues under the national control under the control of the Member States.

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00:22:25.020 --> 00:22:32.550

Ottmar Edenhofer: So we're now the own resources coming to place this might change the incentives, of the Member States to think about a reasonable.

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00:22:32.820 --> 00:22:39.480

Ottmar Edenhofer: An economic reasonably reform of the ETS, and this is something which we have to take into account and, by the way.

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00:22:39.900 --> 00:22:51.900

Ottmar Edenhofer: I think at this calculation overestimate the revenues by because the revenues or this revenue calculation ignore fundamentally the need for net negative emissions.

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00:22:52.200 --> 00:23:04.650

Ottmar Edenhofer: Net negative emissions has to be subsidized, and this has to be paid by the revenues from carbon pricing and therefore this is something which has to be taken into account, quite seriously.

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00:23:06.930 --> 00:23:09.240

Ottmar Edenhofer: Okay, this is where we are and.

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00:23:10.530 --> 00:23:17.490

Ottmar Edenhofer: be aware that turning a forward looking reform agenda into a status quo preserving mess, is the real risk.

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00:23:18.030 --> 00:23:27.270

Ottmar Edenhofer: Instead of uniform prizes unleashing a regulatory tidal wave at tsunami and excessive focus on technology standards is a real risk.

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00:23:27.690 --> 00:23:38.790

Ottmar Edenhofer: The conflict over revenue generation between the EU Commission and the Member States prevents might prevent the implementation of consistent and fully integrated emission trading schemes.

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00:23:39.240 --> 00:23:57.570

Ottmar Edenhofer: This is not necessarily the case, but we have to think carefully about this investments and the notorious under investment in negative emission technologies, it has to be acknowledged, because some of the auction revenues has to be used for this investment.

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00:23:58.920 --> 00:24:10.500

Ottmar Edenhofer: Now let me highlight and this I come know very close to the end, in Germany we have already implemented a national emissions trading scheme for transport for building and energy.

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00:24:11.130 --> 00:24:32.160

Ottmar Edenhofer: And this initial trading period starts with a fixed price the fixed price will be increased and then after 2025, we will see basically freely fluctuating prices and this prices should help or has to help to fulfill the quantity target imposed by the Effort Sharing regulation on Germany.

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00:24:33.180 --> 00:24:42.270

Ottmar Edenhofer: So that's that's where we are and that this is a huge challenge for Germany, because we have now a National Emissions Trading Scheme.

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00:24:42.930 --> 00:24:48.810

Ottmar Edenhofer: and Germany would be very well advised if Germany invests its political capital.

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00:24:49.200 --> 00:25:03.480

Ottmar Edenhofer: That we will have a second European emissions trading scheme where the German National Emissions trading scheme of the so called emission the effort and regulation sectors might be transformed.

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00:25:03.990 --> 00:25:13.260

Ottmar Edenhofer: But this is something which is also under the table and let's see to what extent the new government, which will be elected in September this year.

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00:25:13.770 --> 00:25:20.700

Ottmar Edenhofer: has an incentive to invest its political capital in at the European level, along these lines.

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00:25:21.540 --> 00:25:30.180

Ottmar Edenhofer: This is something which I would like to show how we address the distribution of challenges in Germany here, you have the poorest and the richest households.

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00:25:30.630 --> 00:25:43.080

Ottmar Edenhofer: And our CO2 price around 55 euros per ton you too, if it is uncompensated the low income households will be impacted highest it's a quite.

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00:25:44.730 --> 00:25:50.820

Ottmar Edenhofer: regressive tax, so if a even equal per capita recycling would.

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00:25:51.960 --> 00:26:02.520

Ottmar Edenhofer: Would would basically use the text burn it would even transform the text burn into a benefit for the poor households in the richer households have to pay the bill.

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00:26:03.240 --> 00:26:15.300

Ottmar Edenhofer: When equal per capita recycling is introduced at the German Government has decided not to do this, instead, they have reduced the electricity prices and have increased the social transfers.

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00:26:17.040 --> 00:26:28.320

Ottmar Edenhofer: Okay, let me conclude I reform opportunity for Europe, there is a reform opportunity within the European Union because of its ambitious targets and the regulatory efforts.

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00:26:29.190 --> 00:26:36.570

Ottmar Edenhofer: It is crucial to avoid turning a forward looking to reform agenda into a state of school per serving regulatory mess.

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00:26:37.230 --> 00:26:44.640

Ottmar Edenhofer: And the comprehensive carbon price or form at all levels or bait institutional a very demanding is a worthwhile endeavor.

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00:26:45.180 --> 00:26:53.460

Ottmar Edenhofer: A dialogue between policymakers and expertise meters experts need to map out possible pathways and hybrid solutions.

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00:26:54.120 --> 00:27:04.980

Ottmar Edenhofer: greet increase the political feasibility of reform options in Germany, basically, without this fixed price system which works like a text in the combination of an ETS.

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00:27:05.310 --> 00:27:10.890

Ottmar Edenhofer: There wouldn't be a carbon price solution for Germany hybrid solutions can work.

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00:27:11.220 --> 00:27:24.870

Ottmar Edenhofer: But again, habits solutions have to be transformed into something which increases economic efficiency and allows also, at the same time to redistribute revenues, you know socially fairly.

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00:27:25.470 --> 00:27:30.630

Ottmar Edenhofer: CO2 pricing sends a clear signal that climate policies taken seriously by governments.

141

00:27:31.080 --> 00:27:42.150

Ottmar Edenhofer: We are in Germany, at least in the middle of a paradigm shift in our climate and energy policy from a regulatory approach to a CO2 price based approach let's see if.

142

00:27:43.140 --> 00:27:58.440

Ottmar Edenhofer: Europe could follow this pathway, I hope we will do, and I hope also that the European Union and the United States could find a way that we cooperate in a much better way and to some extent.

143

00:27:59.100 --> 00:28:10.740

Ottmar Edenhofer: If I share with you the dream I dream of achieve three where Europe, the European Union us and even China could cooperate in a much better way than we did in the last.

144

00:28:11.100 --> 00:28:19.110

Ottmar Edenhofer: Four years with that, I would like to conclude, and thank you very much again for the invitation and I look forward to your questions.

145

00:28:21.270 --> 00:28:26.400

Robert Stavins: Well, thank you very much admire that was great, and now we do have quite a few questions.

146

00:28:26.820 --> 00:28:31.050

Robert Stavins: And again, if I apologize in advance if I don't get to all of them, and I will.

147

00:28:31.050 --> 00:28:34.050

Robert Stavins: aggregate some possible first question is.

148

00:28:35.640 --> 00:28:50.250

Robert Stavins: How does and how will the ETS interact with other you climate change policies, I, I think the reference here is to what environmental economist in Europe have characterized as the waterbed effect can you comment on that.

149

00:28:53.430 --> 00:29:08.370

Ottmar Edenhofer: yeah Thank you very much, so of course there is beaten the ETS, the current ETS and what I call the effort cheating regulation sectors transport building and eating, there is no waterbed effect because there is no connection.

150

00:29:08.970 --> 00:29:14.580

Ottmar Edenhofer: Between these two systems, but within the ETS, there are a lot of water bad effects.

151

00:29:15.720 --> 00:29:24.510

Ottmar Edenhofer: All the complimentary measures Member States undertake are vulnerable to to this kind of of waterbed effects.

152

00:29:26.040 --> 00:29:36.330

Ottmar Edenhofer: So the the to a certain extent double double effect has been reduced because of the detected titled emission target, but again.

153

00:29:36.840 --> 00:29:51.900

Ottmar Edenhofer: The only way, how to avoid bought a bad effects at large scale, from my point of view in the European Union into respect to a certain extent, the preferences of the Member States is a minimum price a minimum price will not.

154

00:29:52.950 --> 00:30:10.800

Ottmar Edenhofer: Use the ball to pay defect to zero, but as long as the minimum price is binding, to a certain extent it mitigates at the board of a defect in LAU and allows the Member States, to a certain extent to to to implement their own preferences in climate and energy policy.

155

00:30:12.180 --> 00:30:31.290

Robert Stavins: Thanks, so another question is I guess it's a question of clarification um were you saying there is trading under currently under the asr and, if so, is that trading among firms in different countries, or is that the governments of the different countries carrying out trading.

156

00:30:31.980 --> 00:30:38.220

Ottmar Edenhofer: yeah thanks to vote for this mission that allows me to purify this point, I apologize, I was ambiguous about this.

157

00:30:38.790 --> 00:30:53.550

Ottmar Edenhofer: that the trade in within the efforts and regulations can is exclusive exclusively among governments so it's not among firms, and it is a very thin market and even the government's already decided.

158

00:30:54.390 --> 00:31:00.810

Ottmar Edenhofer: To hide all the prizes and all the compensations which, for it, for obvious political economy reasons.

159

00:31:01.410 --> 00:31:11.700

Robert Stavins: yeah the way you describe it then it's not a training program that we would have great confidence in it's it's essentially parallel to article 17 of the Kyoto Protocol, which was government government trading.

160

00:31:11.940 --> 00:31:16.860

Robert Stavins: Yet for variety of reasons that I wrote about with Bob on must be 10 or 15 years ago.

161

00:31:18.030 --> 00:31:19.440

Robert Stavins: it's not a sound approach.

162

00:31:19.800 --> 00:31:30.840

Ottmar Edenhofer: it's not a sound approach at all and and we all know about the the unsuccessful way how this Kyoto type of trading evolves.

163

00:31:30.900 --> 00:31:39.180

Robert Stavins: Right right so with that here's a question which is really on a political economy, or perhaps politics in the European Union.

164

00:31:39.630 --> 00:31:47.820

Robert Stavins: Can you tell us which economic interests in Europe will favor a gradual movement toward a uniform carbon price.

165

00:31:48.330 --> 00:32:02.940

Robert Stavins: and which economic interest would favor regulation plus technology standards, and let me tell you that, because the questioner sends you greetings and says great presentation that question comes from Bob cocaine.

166

00:32:03.840 --> 00:32:09.630

Ottmar Edenhofer: Oh, Bob great wonderful yeah So what does the political interest.

167

00:32:11.550 --> 00:32:24.720

Ottmar Edenhofer: I would argue in the following way it's it's it's that the aspirational goal and the minus 55% is such a huge transformational challenge.

168

00:32:25.740 --> 00:32:41.700

Ottmar Edenhofer: That I cannot conceive a situation where a government or the Commission at the youth level and the Member States can live with this huge price differential so there must be some way that there is a there is a conversion so that's that's number one.

169

00:32:42.870 --> 00:32:46.590

Ottmar Edenhofer: it's about the the aspirational goal, and the second thing is.

170

00:32:48.180 --> 00:32:59.850

Ottmar Edenhofer: Technology standards did a good job and we all know that the combination of an output texts and technology standards could replicate some kind of CO2 prizes and I do not believe.

171

00:33:00.210 --> 00:33:10.020

Ottmar Edenhofer: That we will abundant the technology standards but carbon neutrality, which means net zero emissions by 2050 cannot be achieved with standards.

172

00:33:10.470 --> 00:33:21.960

Ottmar Edenhofer: We need you have to compliment the standards with the pricing and the only way to get rid of this debate would be from the Commission let's say in 2013 they announced sorry.

173

00:33:22.590 --> 00:33:32.670

Ottmar Edenhofer: We, we cannot, we cannot achieve this goal, but this is something which, in particular the industry in Germany and the industry in the European Union.

174

00:33:33.630 --> 00:33:48.810

Ottmar Edenhofer: Now is is in the driving seat, they are now investing in hydrogen, they are investing in a hydrogen strategy in hydrogen infrastructure and they don't want to create stranded assets and the industry because of of.

175

00:33:50.010 --> 00:33:50.790

Ottmar Edenhofer: Of its.

176

00:33:52.980 --> 00:34:04.980

Ottmar Edenhofer: Concern about investments is now in the driving force in that sense, I see some some interest and political interest in the European Union to to move forward here.

177

00:34:06.240 --> 00:34:12.240

Robert Stavins: So thanks another question that's also associated with politics but local politics in this case.

178

00:34:13.980 --> 00:34:26.310

Robert Stavins: Are do you anticipate that the EU carbon border adjustment will lead to a ripple effect, whereby more countries would adopt carbon pricing and border adjustments.

179

00:34:26.700 --> 00:34:37.440

Robert Stavins: And then, if so, is that, is there a potential there for a climate club among the major economies, such as the European Union United States and China.

180

00:34:39.750 --> 00:34:50.340

Ottmar Edenhofer: yeah that's a very, very good question I think when when the carbon border adjustments are used as a as a threat point.

181

00:34:51.960 --> 00:35:02.280

Ottmar Edenhofer: for enhancing cooperation among the States that might be a useful thing, but when carbon border adjustments are the main thing without.

182

00:35:02.700 --> 00:35:12.750

Ottmar Edenhofer: Trying to enhance international cooperation at least among the main emitters, like us, like like China, like the other Southeast Asian countries.

183

00:35:13.170 --> 00:35:21.300

Ottmar Edenhofer: I don't believe that that's the right way, so creating carbon clubs, enhancing cooperation among among this group.

184

00:35:21.690 --> 00:35:29.700

Ottmar Edenhofer: In dying them with carbon politics adjustments might be a good thing, but for me the most important thing is the most important thing is.

185

00:35:30.150 --> 00:35:41.970

Ottmar Edenhofer: To start enhancing international cooperation and forming that climate cup and this coordination means, from my point of view that minimum prices could be a good tool to.

186

00:35:42.390 --> 00:35:54.450

Ottmar Edenhofer: for coordination and to a certain extent conditional transfers might also help countries to increase the the cotton prices, I know it international scale, this is.

187

00:35:55.440 --> 00:36:02.460

Ottmar Edenhofer: Almost the taboo, but after my experience over the last five years in Germany in in the EU.

188

00:36:02.850 --> 00:36:17.700

Ottmar Edenhofer: I like to break taboos, a little bit, because when I started talking about carbon pricing in Germany a few years ago, and also in the European Union, people said, this is completely impossible at now meanwhile we made some progress.

189

00:36:18.720 --> 00:36:30.240

Robert Stavins: So far that naturally leads to another question, one in which I know you're interested and that's about the new Biden's administration in the United States, the question is.

190

00:36:31.050 --> 00:36:45.960

Robert Stavins: In in what area within climate change should there be a priority for cooperation between the United States and the European Union and let's focus on the short term, over the next two to four years.

191

00:36:46.320 --> 00:36:56.790

Robert Stavins: The two years I say because that's the period over which the Biden administration will be have control in the US Senate and then four years because that's the term of the Biden administration.

192

00:36:58.800 --> 00:37:06.570

Ottmar Edenhofer: yeah I should answer that question Europe, so you should use it to help me to to probably you might might say something about this.

193

00:37:07.470 --> 00:37:13.500

Ottmar Edenhofer: I think the good thing is is they are now pick in the Paris Agreement that's good.

194

00:37:14.280 --> 00:37:32.160

Ottmar Edenhofer: Announcing to be on only the announcement of cognitively by 2050 helps has helped your the Ukraine deal a lot because meanwhile so two years ago, everybody says something something like the Ukraine deal you is a alone and an island.

195

00:37:33.270 --> 00:37:48.090

Ottmar Edenhofer: In an ocean of of the unveiling, but this is no longer the case in that sense that that was good, I don't believe that you will implement the national carbon tax, about still cooperating with you, with.

196

00:37:49.110 --> 00:37:53.700

Ottmar Edenhofer: California and so might be a good thing in the short run.

197

00:37:54.900 --> 00:38:03.090

Ottmar Edenhofer: This is something which I think the the announcement alone, and then you basically are committed, the US is now committed.

198

00:38:03.570 --> 00:38:18.750

Ottmar Edenhofer: Is has all of the help and then in the midterm we might think about how how such a cotton club climate club could look like, but there are probably you have here much better and much more elaborated insights and I.

199

00:38:19.290 --> 00:38:23.430

Robert Stavins: know I think what you said, makes a lot of sense, I would just add that the.

200

00:38:24.240 --> 00:38:35.940

Robert Stavins: Current administration what they can do on climate change, for the time being, as essentially through executive actions out of the White House, but to really accomplish a great deal, the kind of targets that were.

201

00:38:36.360 --> 00:38:47.760

Robert Stavins: Put in the end DC in the Obama Administration year is going to require legislation and for legislation, this administration has a window, not a four years, not a two years but one year.

202

00:38:48.180 --> 00:38:55.770

Robert Stavins: And the reason I say that is the one year from now, the campaign's begin for the new Congress and once the campaigns are in place.

203

00:38:56.160 --> 00:39:02.490

Robert Stavins: Democrats are going to be much less likely, particularly in the House of Representatives, in many cases.

204

00:39:02.760 --> 00:39:10.830

Robert Stavins: To vote for aggressive climate policies if they're in districts, that are not heavily weighted towards democratic voters so there's a one year.

205

00:39:11.070 --> 00:39:24.360

Robert Stavins: period if they're going to move quickly, and I think where we're going to see it is not climate legislation, per se, but as a bit of greening of an infrastructure program a bit of greening of an economic recovery package.

206

00:39:24.990 --> 00:39:30.660

Robert Stavins: That leads to another question which is really going all the way back to the beginning of your presentation.

207

00:39:31.860 --> 00:39:53.070

Robert Stavins: And when you laid out very aggressive targets taking you know emissions down to net zero and the question is, are there technologies in place to get to these new targets, for example, the huge growth in what I think was labeled as bio and carbon capture and storage.

208

00:39:53.130 --> 00:40:08.550

Ottmar Edenhofer: yeah yeah yeah I would say that they are basically this this let let me, let me distinguish a bit down to two huge chunks or classes of technologies, one is hydrogen and also if fuels.

209

00:40:09.810 --> 00:40:18.330

Ottmar Edenhofer: And and there's a lot of investment and at least a lot of interest of the industry to invest now in hydrogen and in sin fuels.

210

00:40:19.020 --> 00:40:28.650

Ottmar Edenhofer: And so we did some calculations and over the next two decades, we might see a significant decline in costs so that sin fuels.

211

00:40:29.100 --> 00:40:49.590

Ottmar Edenhofer: might be feasible around 200 euros petronzio to then be can decarbonize other sectors, so this is what we call indirect electrification and then there we have direct electrification like the mobility and such kind of things hydrogen will become a very scarce resource and therefore.

212

00:40:51.300 --> 00:41:02.670

Ottmar Edenhofer: I think this is a two fold policy on the one hand, we have to subsidize to a certain extent industry to implement them to invest in in hydrogen strategy, but on the other hand.

213

00:41:03.780 --> 00:41:16.470

Ottmar Edenhofer: Also to do research and development for for sin fuels well that's that's something which, which I think will lead us to carbon neutrality so negative emissions is another another game and thea.

214

00:41:17.100 --> 00:41:26.820

Ottmar Edenhofer: There are a few pilot projects implemented for director capture, because if you want to produce in fuels it's crucial, we have the CO2 comes from when it comes from.

215

00:41:27.390 --> 00:41:37.980

Ottmar Edenhofer: Burning oil and gas so and cold, so this is not carbon neutral at all, so you can also use either CO2 from director capture over biomass.

216

00:41:38.520 --> 00:41:46.320

Ottmar Edenhofer: And this brings me now to the biomass issue the bio mass in combination with carbon capture and storage, so there's a cluster.

217

00:41:46.710 --> 00:41:56.520

Ottmar Edenhofer: of technologies available, and there is now also an increasing interest, not so much like in hydrogen, but an increasing interest in this kind of negative emission.

218

00:41:57.180 --> 00:42:08.790

Ottmar Edenhofer: technologies at least policymakers, are aware that there is a significant investment required in in this technologies and, by the way, it's quite interesting in Germany.

219

00:42:10.200 --> 00:42:22.830

Ottmar Edenhofer: tesla is now changing the the German car industry, the German car industry was in the south and i'm now living in the North East part of Germany and tesla is now invested a lot.

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00:42:24.060 --> 00:42:33.870

Ottmar Edenhofer: Very close to puts them, and now we see a shift now already in in the European and then the German car industry so that's that's also quite interesting.

221

00:42:35.280 --> 00:42:55.680

Robert Stavins: There, there are several questions that ask different aspects of the following, and that is given the sovereign rights of the Members States of the European Union, how are monitoring and enforcement and verification of the ETS or, for that matter, other climate policies carried out.

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00:42:58.140 --> 00:43:09.540

Ottmar Edenhofer: yeah so for the ETS it's it's quite simple, because this is now enforcement and monitoring and the whole trading infrastructure is now in place.

223

00:43:10.440 --> 00:43:27.390

Ottmar Edenhofer: So the only thing is what what is in under the national jurisdiction is auctioning the the permits and also to administer the revenues, but, but all the other things in the trading scheme is already at the European level so and it is, it is functioning.

224

00:43:29.070 --> 00:43:44.310

Ottmar Edenhofer: And for the European epigenetic regulation in channel that that wouldn't be a big a big deal to rely on this on this trading monitoring and verification infrastructure, so in that sense.

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00:43:45.270 --> 00:43:54.780

Ottmar Edenhofer: The Member States have accepted that the ETS is the cornerstone of the European policy, and this is the reason why I believe that the regulatory.

226

00:43:55.290 --> 00:44:03.150

Ottmar Edenhofer: scenario, the wreck scenario will not work because in the regulatory scenario, the yo can only announce.

227

00:44:03.870 --> 00:44:12.720

Ottmar Edenhofer: directives can announce goals, but they have absolutely no instruments at hand to implement this in the Member States, so in that sense.

228

00:44:13.170 --> 00:44:25.020

Ottmar Edenhofer: Enhancing the emissions trading scheme would give the European level, much more competencies and much more influence and would lead to a change in really European climate policy.

229

00:44:25.710 --> 00:44:39.780

Ottmar Edenhofer: In direct scenario when when basically in a in a in a let's say the decade from now we have decarbonize the power sector there's not much left with the ETS, and then we would fall back in the regulatory scenario.

230

00:44:40.380 --> 00:44:59.490

Ottmar Edenhofer: In a in a purely national in a in a in a network of national climate and energy policies, so in that sense of there's also a decision between a national climate and energy policies in Europe or a real European perspective on climate and energy policy in the future.

231

00:45:00.540 --> 00:45:10.080

Robert Stavins: Well, you know we have about 200 participants with us, and we have a few dozen remaining questions I apologize.

232

00:45:10.500 --> 00:45:23.880

Robert Stavins: But we're not going to be able to take any more of the questions because we've come to the end of your our time and So the first thing I want to say is, thank you very much admire, for having taken time from your busy schedule to join us today.

233

00:45:25.170 --> 00:45:31.140

Ottmar Edenhofer: And I would like to thank Europe, it was a great pleasure to join you in this wonderful event.

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00:45:31.860 --> 00:45:37.530

Robert Stavins: So our guest speaker today has been Otmar aiden hoffer Professor of Economics at the.

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00:45:37.530 --> 00:45:38.820

Robert Stavins: Technical University of.

236

00:45:38.820 --> 00:45:53.370

Robert Stavins: Berlin director of the Mercator research institute on global Commons and climate change and co director and chief economist of the Potsdam Institute for climate impact research remember a recording of this entire.

237

00:45:53.820 --> 00:46:04.110

Robert Stavins: event, including of course the slide presentation will be available at the website of the Harvard project on climate agreements either later today or tomorrow at.

238

00:46:04.440 --> 00:46:16.380

Robert Stavins: The latest please join us again for the next episode of conversations from the Harvard project on climate agreements will announce the date time and speaker for that shortly.

239

00:46:17.070 --> 00:46:28.740

Robert Stavins: But remember you need to register separate leave for each one of these webinars via zoom finally i'm your host rob stephens thanks for joining us.