The Climate Show – Episode 33

Transcript

00:00:04 Linnéa Nordlander

Hi, and welcome to the Climate Show, a podcast that explores the law and politics of climate change. This podcast is brought to you by the University of Copenhagen.

00:00:16 Beatriz Martinez Romera

Hi, we are Beatrice Martinez,

00:00:18 Linnéa Nordlander

And Linnéa Nordlander

00:00:19 Beatriz Martinez Romera

And we are your host at the Climate Show

00:00:27 Beatriz Martinez Romera

Welcome to The Climate Show.

00:00:28 Beatriz Martinez Romera

Today we talk about environmental impulse assessment, EIA, and climate change. For those less familiar, EIAs are procedures designed to evaluate the environmental consequences of projects before they go ahead. Increasingly, they are being used or debated as a way to assess the climate effects of proposed projects.

00:00:48 Linnéa Nordlander

EIAs raise many important questions.

00:00:50 Linnéa Nordlander

How do we measure a project's climate footprint?

00:00:52 Linnéa Nordlander

And what counts as a significant impact?

00:00:55 Linnéa Nordlander

To help us answer these questions, we are joined by Professor Benoit Meyer from the University of Reading, who is a leading scholar of international and comparative climate law.

00:01:03 Beatriz Martinez Romera

Professor Mayer has just published a book, Environmental Assessment as a Tool for Climate Change Mitigation, which we're going to discuss in this episode. He's also preparing a special issue in the Climate Law Journal on this topic.

00:01:23 Beatriz Martinez Romera

Hello and welcome back to the Climate Show. Today we are exploring a key instrument in environmental protection and its relation to climate change law.

00:01:30 Beatriz Martinez Romera

We will discuss the role of environmental impact assessment as a tool for climate change mitigation. I am delighted to be joined by Professor Benoit Mayer from the University of Reading in the UK.

00:01:42 Beatriz Martinez Romera

Benoit is a leading scholar of international and comparative climate law and his research spans issues such as climate migration, state obligations in climate mitigation and the role of environmental impact assessment.

00:01:53 Beatriz Martinez Romera

His work has appeared in top journals like the American Journal of International Law and the European Journal of International Law and in books with Cambridge, Oxford and other publishing houses.

00:02:02 Beatriz Martinez Romera

Benoit, welcome to the Climate Show.

00:02:05 Benoit Mayer

Thank you for having me today.

00:02:08 Beatriz Martinez Romera

To begin, could you tell us what drew you to focus on environmental impact assessment as a subject for climate law research? You published last year a book with Oxford, I have it here, and you are preparing a special issue as well on climate law on this matter.

00:02:22 Benoit Mayer

I've heard about some cases about applying EIA to climate change, and I was of a dividing mind as to whether it makes sense at all to apply EIA.

00:02:35 Benoit Mayer

One part of my brain was thinking an EIA aims at looking at the impacts of a project to determine whether to implement it or not. And therefore, the EIA should document all of the impacts, including greenhouse gas emissions that the project may cause.

00:02:52 Benoit Mayer

But the other side of my brain, if you will, was thinking that an EIA is really about the local community discussing with the government whether to implement the project. And there are provisions about having the affected community being represented in decision making. And when you look at greenhouse gas emissions, who is the affected community by the greenhouse gas emissions of a coal mine?

00:03:27 Benoit Mayer

In a sense, climate, I mean, the greenhouse gas emissions of a project have an impact. But unlike air pollution or water pollution or the typical environmental impacts in an EIA, the climate impacts are more diffused, more abstract in a sense, more global. They are less tangible.

00:03:47 Benoit Mayer

And what I wanted to look at is whether an EIA framework can meaningfully address those climate impacts or whether that would just result in some kind of formalistic implementation of the EIA, you will have a study of the greenhouse gas emissions, so you have a decision and there will be no influence of the former on the latter.

00:04:13 Benoit Mayer

And so, I had those questions in my mind, and I kept them aside for a number of years until I had time to write the book you just mentioned. And currently I'm also working on a special issue with Matthew Slovic for Climate Law that you are editing, inviting other people to think further into those issues.

00:04:37 Beatriz Martinez Romera

And you argue that environmental impact assessment has now become a global practice for climate change, even if some jurisdictions remain reluctant. For listeners who may not be familiar, what does it mean to include climate effects within environmental impact assessment, and why does it matter for climate change mitigation?

00:04:56 Benoit Mayer

So, before a government can approve a project likely to cause environmental impacts, so in most countries around the world, before the government can approve a project liable to causing environmental impacts, there are some requirements.

00:05:14 Benoit Mayer

Those requirements are that there must be a scientific study documenting the potential impacts of the project. There must also be a phase where the public can have a say about those impacts.

00:05:30 Benoit Mayer

And all of this aims at considering the pros and cons of the project that it is, but also at looking at potential ways of reducing environmental impacts by altering the project in any way.

00:05:45 Benoit Mayer

Now, traditionally, this has applied to local environmental impacts. But what I'm looking at in this book is how this has been also applied to greenhouse gas emissions.

00:05:56 Benoit Mayer

So, if you look at a power plant, your typical project among those discussed in the book, a power plant will have local impact on air quality. And typically, the EIA will look at how this impact on air quality is going to affect the public health, how many people will have lung cancers as a consequence of the power plant, and whether this is an acceptable impact or not.

00:06:25 Benoit Mayer

Here, if you start applying consideration for climate impacts, you're also going to look at the amount of greenhouse gas emissions from the project. You're going to have a scientific study suggesting, predicting the impact that the project will have on global greenhouse gas emissions.

00:06:44 Benoit Mayer

It can be quite straightforward if you look at it in a very narrow way. But sometimes you will have difficulties in determining what kind of greenhouse gas emissions are to be assessed. You will have difficulty determining who has to be consulted about the significance of those impacts.

00:07:03 Benoit Mayer

And you will have difficulties in determining what is a significant climate impact, what is the amount of greenhouse gas emissions that would be considered as excessive, requiring additional scrutiny and potentially preventing the approval of the project.

00:07:18 Beatriz Martinez Romera

So, as you were saying, one of the challenges that you highlighted in the book is the difficulty, this difficulty of determining the significance of a project climate effect.

00:07:28 Beatriz Martinez Romera

Could you unpack this for us? What makes it so complex and how are different jurisdictions approaching this matter?

00:07:35 Benoit Mayer

So, in some national court decisions, the courts have sometimes decided that a project is not causing a significant climate impact on the ground that the greenhouse gas emissions from the project are only a drop in the ocean, a very, very small contribution to global greenhouse gas emissions.

00:07:55 Benoit Mayer

Societies have caused 2 teratons of carbon dioxide emissions since the industrial revolution, and a project is only causing usually a few megatons, at most a gigaton, but far, far less, a very, very small contribution indeed. And if you were to assess the global warming, the temperature increase caused by a single project, you will have thousands of a degree at most. So, on that basis, some courts have decided that the climate impact of a project was negligible.

00:08:28 Benoit Mayer

However, if you look at the consequences of climate change, a very, very small contribution to climate change is still significant because climate change itself is such a big issue. A very, very small slide, very, very small slice to a very, very large cake will still be a significant portion of food, if you will.

00:08:49 Benoit Mayer

So, I think the regulators and courts have had three ways of looking at significance in relation to climate effects.

00:09:00 Benoit Mayer

The first one is just to adopt a threshold of significance, a magnitude threshold. So, for instance, in some jurisdictions, there is the assumption that anything above 100 kilotons of carbon dioxide emissions per year would be significant and would require an EIA. That's a very simplistic approach because you have to look at the scale of the project.

00:09:23 Benoit Mayer

If you have a very, very large project causing 100 kilotons of CO_2 emission per year, you might find it quite acceptable. If it's a very small project, it might be unacceptable. But that might be a way to decide where you need to have an ERA at the first place.

00:09:40 Benoit Mayer

Then when you have an ERA, there's another question of significance as to whether to accept the project or not. And here you may want to look at the amount of greenhouse gas emissions from the project in comparison with the total emissions of greenhouse gases in the relevant region.

00:10:02 Benoit Mayer

It could be at the national level it could be at the local level. So, for instance, for a power plant, you will compare the greenhouse gas emissions caused by the power plant with the greenhouse gas emissions that will result from other activities within the city that will use the electricity from the power plant.

00:10:23 Benoit Mayer

What's important here in terms of benchmarking is to look at the same scale when you look at the benefits of the project and at the cost of the project, if you will.

00:10:36 Benoit Mayer

So, some jurisdictions have considered the greenhouse gas emissions from the project in comparison with global greenhouse gas emissions. And of course, in such perspective, the emissions appear to be negligible but so would be the benefit of the project.

00:10:55 Benoit Mayer

The electricity generation from a power plant at a global scale would be extremely small. The electricity generation of the power plant is an important benefit if you look at it at a local scale. So, you also have to look at local scale at the significance of the greenhouse gas emissions compared with the amounts of emissions at that same scale.

00:11:17 Benoit Mayer

So those are two ways. You can look at, you have a fixed threshold of magnitude to decide whether to look at the project or not, and you may have a benchmarking comparing the emission of the project with the local emissions.

00:11:32 Benoit Mayer

A third way of assessing significance would be to use an evaluation of the social cost of a ton of greenhouse gas emissions. So, you will have to have a study at the beginning that you can reuse for every subsequent EIA.

00:11:53 Benoit Mayer

And that study will tell you that each ton of carbon dioxide in this particular year will have an economic valuation of 20 or 100 EUR or whatever cost you want to use and that's a very difficult thing to do.

00:12:07 Benoit Mayer

But once you have done it, it's quite straightforward to apply it once you have a prediction of the amount of greenhouse gas emissions from the project and you can compare this kind of climate cost in quotation marks with the benefits of the project. That becomes a much more straightforward comparison.

00:12:28 Benoit Mayer

Now, I don't know which one is better between benchmarking and economic valuation. Each of them has advantages and disadvantages, but what I show in the book is that there are ways to assess the significance of a climate effect.

00:12:42 Beatriz Martinez Romera

But then there's the issue of assessing the indirect effects, right? What are these effects and why is there so much litigation on this matter at present?

00:12:54 Benoit Mayer

So, a lot of projects have indirect effects on the climate. If you think of a coal mine, a coal mine will produce a bit of methane and carbon dioxide just because you are moving a coal that contains some of those gases.

00:13:09 Benoit Mayer

But most of the impact on the climate, the reason why a coal mine would be of a concern for someone interested in climate change is that the coal, or most of it at least, will be burned at the end.

00:13:22 Benoit Mayer

So that's downstream combustion of the coal would be an indirect effect of the project. And the same happens with, the same applies to any other fossil fuel production project, whether it's oil, gas and so on.

00:13:38 Benoit Mayer

So, there has been a number of cases in Europe recently and other parts of the world on whether those indirect effects have to be assessed as part of the EIA.

00:13:49 Benoit Mayer

And the Supreme Court of the UK in the case of Finch and the EFTA court in the case brought by a Norwegian court, both of them found that in relation to oil and gas

projects, the ERA had to look at the downstream emissions from the combustion of the fuel.

00:14:15 Benoit Mayer

Even so, the combustion may occur in a different country. It could be possibly years later. It will be after refining. It is quite predictable that at least a lot of this oil being produced will be burned. So that's the argument for assessing indirect effects.

00:14:35 Benoit Mayer

However, there are some limitations. How far can you look at the indirect effects?

00:14:41 Benoit Mayer

The combustion of the oil is quite straightforward, but you can look further into the consequences of this.

00:14:48 Benoit Mayer

If you increase production of oil from one project, this oil will increase supply, that will decrease price, that will increase demand. So, there will be an increase in consumption, but there will also be a substitution from the production of other oil projects. So, there is bound to be some kind of market substitution.

00:15:14 Benoit Mayer

The oil that will be produced by a new oil project in the UK will partly replace oil produced somewhere else by some other projects. So, this market substitution effect is real, but difficult to assess.

00:15:28 Benoit Mayer

And then you may have intermodal substitution where the oil will substitute for natural gas or from coal or from biomass or from any other source of energy. You may have other technology effect, you may have complex effects.

00:15:45 Benoit Mayer

An example discussed in the Supreme Court judgment in the UK in Finch was a steel mine, project mining steel.

00:15:55 Benoit Mayer

If you are to produce more steel, this steel is going to be used for something. It is going to be used for post-naturally cars, and those cars will produce emissions with the combustion of fossil fuel.

00:16:10 Benoit Mayer

So, the question here is how far into indirect effects do you have to extend the assessment?

00:16:18 Benoit Mayer

And there have been other cases in Europe. The Supreme Court of Ireland in the Kilkenny cheese factory case decided that the EIFO cheese factory did not have to assess the greenhouse gas emissions relating to the production of milk that will be used for the cheese.

00:16:41 Benoit Mayer

And the court's justification was based on the unpredictability of the effect. The court was saying that it's not really clear what would be the increase in production of milk, to what extent the milk used by the cheese factory would have been produced anyway.

00:17:01 Benoit Mayer

But again, I mean, here again, I think there will be a market substitution effect, but this market substitution effect will be incomplete and there will very likely be an increase in production of milk. So, the question here is how far into those indirect effects should the assessment go?

00:17:18 Benoit Mayer

And I think regulators are still really struggling with, or courts are really struggling with giving a coherent, comprehensive answer.

00:17:29 Beatriz Martinez Romera

Linked to that in the book, you highlight the need for more clarity. Do you think that by clarifying these items, environmental impact assessment could play a bigger role in bridging the implementation gap between climate commitments and actual emissions reductions?

00:17:47 Benoit Mayer

I think the climate impact assessment can really play an important role. As we have seen a number of studies recently, states have made a lot of commitments. They have adopted a number of NDCs, long-term strategies, net zero goals and so on.

00:18:08 Benoit Mayer

And they're not always acting consistently with those. So, one big difficulty is to determine how to force national governments or even local governments to comply with their commitments.

00:18:23 Benoit Mayer

And there are different ways of doing that. Litigation really has to play an important role. In some jurisdictions, you can have judicial reviews challenging the inaction of the government at kind of a policy level.

00:18:38 Benoit Mayer

But sometimes it can also be useful to assess on a project basis, one project at a time, whether this and how this project can be consistent with the national policy. Very often, one project could be found consistent in isolation. You can always add one coal mine or one power plant if you reduce emissions somewhere else.

00:19:01 Benoit Mayer

But having an EIA, in a sense, forces the government to explain how they believe this project is consistent with a global, with a national strategy of mitigating greenhouse gas emissions.

00:19:17 Benoit Mayer

So, if you will, instead of just saying, yes, it's just one power plant and we will reduce emissions somewhere else, the ERA may be a process to force the government to explain how they will reduce emissions somewhere else and to provide a strategy that will achieve their target or their commitment?

00:19:39 Beatriz Martinez Romera

We've also seen in recent times major international advisory opinions on climate change from different tribunals, the Tribunal for the Law of the Sea, the Inter-American Court of Human Rights, and the International Court of Justice.

00:19:53 Beatriz Martinez Romera

How do you see these opinions influencing the way states and courts interpret obligations around environmental impact assessment?

00:20:01 Benoit Mayer

Each of those three advisory opinions have highlighted the role that EIA could play in reducing greenhouse gas emissions and implementing the obligations of states to mitigate climate change.

00:20:15 Benoit Mayer

And that was kind of a surprise. I mean, I didn't really expect EIA to be so prominent in each of those advisory opinions.

00:20:23 Benoit Mayer

I think it says something about the level of recognition that mechanism is receiving at the moment. Most jurisdictions, as we said before, are now implementing EIA as a tool

for climate change mitigation and that's relatively new. It was not the case ten years ago, or it was not clearly the case five years ago.

00:20:46 Benoit Mayer

But I think you could also see it in a different way. When you start trying to understand what a global due diligence obligation to mitigate climate change means concretely, it's quite difficult.

00:21:00 Benoit Mayer

Does that mean taking measures with the view of achieving the NDC as required under the Paris Agreement? What precisely does that mean? What are states required to do?

00:21:13 Benoit Mayer

And in this regard, I think courts have been struggling to define really the content of due diligence under international law.

00:21:24 Benoit Mayer

The Uganda decision in the Netherlands tried to impose a target on the government, but I think that was not very convincing because this target is not an objective assessment of the content of a due diligence or obligation.

00:21:41 Benoit Mayer

You might say the court is going a bit too far into policy making. A court might find that the government is not doing enough, but I find it a bit difficult for the court to then impose on the government a target. And that may be counterproductive because the court might not have enough information to determine what exactly a state can achieve.

00:22:04 Benoit Mayer

So, in this regard, when trying to determine the content of a due diligence obligation, I think ERA is kind of a low-hanging fruit that the ICJ in particular, or ICLOS, had identified before in regard to transboundary environmental harm as an implication of due diligence.

00:22:24 Benoit Mayer

It's a very basic thing that if a state is being diligent, if the state is trying to reduce emissions, then the state should consider emissions before proving a project liable to causing a lot of greenhouse gas emissions. Not doing so will be basically a sign that the state is really not trying to reduce its emissions.

00:22:48 Beatriz Martinez Romera

In your talk this morning at our climate breakfast, and by the way, thank you so much for coming to Copenhagen to visit us. We're super thrilled at CLIMA to have you here.

00:22:57 Beatriz Martinez Romera

You suggested that functionalist comparative analysis can help us move this field forward. Could you explain what do you mean by this approach and why it is useful for advancing climate law?

00:23:08 Benoit Mayer

Well, climate change is really challenging the capacity of states to regulate. It's challenging, you know, how can we address climate change?

00:23:18 Benoit Mayer

There are so many sources of greenhouse gas emissions in different sectors. We know that we cannot avoid all of them. There's a social and economic cost of trying to reduce those emissions.

00:23:31 Benoit Mayer

There are questions as to what the most effective or efficient tool is. And those are very complex questions.

00:23:39 Benoit Mayer

Now, those questions are being faced in every country at the same time.

00:23:47 Benoit Mayer

Therefore, I think it's quite an obvious case for comparative research, because countries have, jurisdictions have the same issues, and they tend to come up with different solutions.

00:24:00 Benoit Mayer

Sometimes they have similarities, sometimes they are very different. The way the EU and China try to reduce their greenhouse gas emissions are very different.

00:24:11 Benoit Mayer

Now, looking at those different approaches is potentially quite interesting. It can show sometimes that there are reasons why states or jurisdictions address climate change indifferently.

00:24:23 Benoit Mayer

It could be because they have different legal and political circumstances. But sometimes just looking at what has been done in one jurisdiction can shed light on what can be done in a different jurisdiction.

00:24:40 Benoit Mayer

On EIA, for instance, a number of jurisdictions have said, well, you can't apply an EIA to climate change mitigation. Well, other jurisdictions have shown you can do it and you can do it efficiently.

00:24:54 Benoit Mayer

There are cases where it is possible to show that the climate impact assessment has led to a reduction in greenhouse gas emissions. So just comparing the policies or the laws of different countries can provide a lot of food for thought for what can be done in other jurisdictions.

00:25:17 Benoit Mayer

Now, there are clear limitations as well. Just comparing what is being done in different jurisdictions doesn't immediately tell you what should be done. It just tells you what has been done. But that itself, I think, is quite interesting.

00:25:34 Benoit Mayer

And again, especially for climate change, where you have a new issue being faced by every jurisdiction in the world. And so, you can compare different approaches.

00:25:48 Beatriz Martinez Romera

And before we wrap up, in a nutshell, what do you think is missing in climate assessment frameworks at the moment?

00:25:56 Benoit Mayer

Well, I think that returns to the issue of indirect climate effects. Those indirect climate effects are not properly addressed by EIA frameworks in most jurisdictions. For instance, there is very little clarity as to what indirect climate effect should be assessed.

00:26:16 Benoit Mayer

And what is often missing is a consideration for indirect climate effect at the screening stage. That is, when deciding whether to have an EIA at all in relation to a project that may not have any other environmental impact.

00:26:32 Benoit Mayer

If you take the case of a data centre, a crypto mining facility, for instance, consuming a huge amount of electricity from a nearby coal-fired power plant, the project itself may not trigger an EIA under the EU directive, for instance, because it doesn't have any on-site environmental impact.

00:26:55 Benoit Mayer

It doesn't even have any greenhouse gas emissions on site. But the implementation of the project has very predictable indirect effects which are to trigger the generation of electricity from fossil fuel power plants.

00:27:16 Benoit Mayer

So, in a few states in the US, Minnesota, Hawaii and New York, those centers now, those data centers have to go through an ERA with the view of assessing exclusively the indirect climate effect. And I think that's something that should be considered in other jurisdictions as well.

00:27:35 Beatriz Martinez Romera

Benoit, thank you ever so much for joining us today.

00:27:39 Beatriz Martinez Romera

We're really happy to have you here. Thank you for being part of the Climate Show.

00:27:44 Beatriz Martinez Romera

And hope to see you very soon back in Copenhagen.

00:27:47 Benoit Mayer

Thank you very much.

00:27:48 Beatriz Martinez Romera

And to our listeners, thank you for turning into the Climate Show. And until next time.

00:27:57 Linnéa Nordlander

Thank you for listening to this episode. You can find more information on Professor Meyer's book and the forthcoming special issue in Climate Law in the show notes.

00:28:05 Linnéa Nordlander

Stay tuned for our next episode.