I would like to thank the organizers, especially Natalia Kobylarz, for this important conference; and all the other speakers for sharing their excellent insights. Thank you also for inviting me. It is a great honour and privilege.

In this talk, I will focus on the climate dimension of human rights obligations. I will present the argument that in order not to violate their positive obligation to secure human rights to life and well-being, states must take all adequate and appropriate measures to globally phase out GHG emissions around 2050.

I will divide my talk in four parts:

1. The factual linkages between climate change impacts and human systems

2. Climate change as a matter of human rights law

3. The substantive (climate) content of human rights obligations, esp. under arts. 2 and 8 ECHR

4. The wider “normative environment” of this positive obligation

As a caveat, I will not address matters of legal standing, jurisdiction, exhaustion of national remedies or other procedural issues.

Let me start with, first, the factual linkages between climate change impacts and human system.

Projected climate change impacts pose significant risks to natural and human systems. The higher the temperature increase, the higher the risk.

The Intergovernmental Panel on Climate Change (IPCC) in its Special Report on Global Warming of 1.5 Degrees projected significantly higher risks at 2°C warming compared to 1.5°C. The risks include: human exposure to increased flooding, water stress by up to 50% (depending on the region), smaller net yields of crops, loss of live-stock, reduction in food availability from fisheries and aquaculture, negative impacts on human health, impacts associated with sea level rise and changes to the salinity of groundwater, severe precipitation and damage to infrastructure, increased likelihood of extreme weather events (torrential rainfall, storms, hurricanes), extended droughts and, as a result, forest fires.
In addition to these “direct” impacts, climate change interacts also with and intensifies poverty, conflict, instability and unrest, resource depletion and food insecurity, loss of livelihoods, infrastructure breakdown and loss of access to essential services including electricity, water, sanitation and health care, as well as relocation and migration.

Each one of these impacts is deeply worrisome. Yet it is first when we look at the sum, the accumulation, of those impacts that the entire alarming picture emerges. Addressing the causes and finding remedies to these adverse effects to human systems is an unprecedented challenge in scope, scale and urgency.

**Now, second, let’s turn to the question whether this makes climate change a matter of human rights law.**

These climate change effects have a major impact on a wide range of human rights already today and could have a cataclysmic impact in the future unless ambitious actions are undertaken immediately. Among the human rights being violated or threatened are the rights to life, health, food, water and sanitation, a healthy environment (where it exists), an adequate standard of living, housing, property, development and culture.

Now, the matter of climate change is being addressed in separate treaty systems. On the international level, we have the Paris Agreement, adopted under the UNFCCC, and in domestic law we have – often – special climate regulations. But these treaties and laws do seldom, if ever, address the human impact of climate change. They look at solutions to the problem – the reduction of greenhouse gas emissions (“mitigation”) or technical solutions to adapt to the adverse effects. Human rights are largely outside their scope. The laws and regulations to address climate change and human rights exist in different “silos”. This is aptly expressed in the Paris Agreement, which in its preamble acknowledges that “Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights”. The formulation “[t]heir respective obligations” refers to existing treaty or customary law obligations on human rights that state parties already have – in other words, the Paris Agreement throws the ball back into the human rights court. Not necessarily into this court, but metaphorically speaking...

But there are linkages, of course. Not just the factual ones highlighted above.

States have the obligation to ensure – or protect, respect and fulfill - human rights to everyone within their jurisdiction. The foreseeable and potentially catastrophic effects of climate change on the enjoyment of a wide range of human rights, everywhere in the world – but also here in Europe! - give rise to extensive duties of States to take immediate actions to prevent those harms.
Moreover, approaching climate change from a human rights perspective highlights the principles of universality and non-discrimination, emphasizing that rights are guaranteed for all persons, including vulnerable groups. A human rights-based approach could serve as a catalyst for accelerated action to achieve a healthy and sustainable future.

Importantly, and different from the international climate regime, the observance of those rights can be ensured by a specialized court, which makes a human rights-based approach a sought-after avenue. (I will address the question whether climate change is an issue of human rights courts in the end of my talk.)

I will now, third, turn to the content of human rights obligations with respect to climate change.

There are both procedural, substantive and special obligations towards vulnerable groups. Much has been said and written about this, and I will focus only on the substantive obligation: the climate dimension of human rights obligations.

The European Court on Human Rights has long recognized parties’ positive obligation to securing human rights. This imposes the duty on national authorities to adopt reasonable and adequate measures to effectively protect rights and to provide deterrence against threats, including proportionate measures against risks that may materialize in the longer term, such as some climate change impacts.

A central question therefore is: when have states fulfilled their positive obligation? And the relatively easy answer is: when the measures they have adopted are aimed at and effective to prevent dangerous levels of climate change. However, given the current trajectory of global warming, which is projected to exceed “safe levels” of climate change by several degrees, the adopted measures so far must be presumed to be inadequate. In other words, there is a presumptive responsibility that states prima facie are violating their human rights obligations.

Let me specify a bit further which climate mitigation measures would be reasonable and adequate. In answering this question, the Court should take into account elements of international law and, thus, interpret the obligations consistently with the legal environment in which they exist. This applies, in particular, to the Paris Agreement to which all member states are a party. Art. 2.1(a) of the Agreement sets the goal of holding temperature increases to well below 2°C, and pursuing efforts to limit increases to 1.5°C. This goal is informed by best available science, which is provided by the IPCC. The IPCC is clear that in order to not overshoot that goal, global net CO₂ emissions need to be reduced by 40-60% from 2010 levels by 2030 and need to reach net zero around 2050.

To this extent, Parties have committed to that each Party’s nationally determined contribution will reflect its “highest possible ambition” (Art. 4.3). This is a due diligence obligation according
to which Parties need to take all appropriate and adequate measures to achieve the temperature goals of the Agreement. This includes a duty of conduct to use all measures at their disposal, especially the adoption and implementation of laws and regulations, including to address private behaviour, monitoring as well as their enforcement. In light of the magnitude of the risk, the clear science and the urgency of the task, this implies taking all measures that are *not impossible* or disproportionately economically burdensome with the objective of reducing global GHG emissions to net zero and below by 2050. The Committee on Economic, Social, and Cultural Rights even observed in this context that this implies the use of “*maximum available resources.*” To this end, Parties have a very narrow margin of appreciation, if any. Given the potential costs of unabated climate change and the very small window of opportunity, there is no discretion anymore as to the level of ambition. Discretion only applies to the choice of measures applied to reach this goal (the “how”) – but no longer to the “what and why”.

The duty of care or “positive obligation” therefore is clear: in order to secure the rights under, e.g. arts. 2 and 8 ECHR, each Party must have a *long-term plan* in place as well as *corresponding measures* reflecting its “highest possible ambition” at the level of its maximum available resources for how it contributes to reaching *global net zero emissions around 2050* (“carbon neutrality”). This implies that states with greater capacity and responsibility will have to reduce their emissions to zero and below faster and deeper, even *before* that time, in order to give states that might need longer the possibility to get there, too. States also need to ensure that public and private investments (and actions) are consistent with a pathway towards low carbon emissions and climate resilient development (Art. 2.1(c) Paris Agreement. And, in their measures, they need to ensure that their own “carbon neutrality” measures do not lead to rising emissions in other parts of the world, due to “exported” or “imported” emissions. This occurs where the production processes of goods that are consumed “here” are outsourced to other states and lead to increasing emissions “there”. This also means taking into account the emissions caused by exported products, for example oil and natural gas, when these products get processed somewhere else. Moreover, this does not mean that states can delay ambitious actions. Rapid and deep emission reductions have to happen *now*. The IPCC warns that “every year’s delay before initiating emission reductions decreases by approximately two years the remaining time available to reach zero emissions on a pathway consistent with 1.5°C».

In sum, it implies that every state ought to employ its highest possible level of ambition and act according to its best capabilities, or simply “do the best it can”. This level is more rigorous if the risk is higher – such with climate change - and involves the requirement of a state to use all measures that are not disproportionately economically burdensome or even its “*maximum available resources*”, now, to address this risk. Only such measures can be considered reasonable and adequate.
Put simply, complying with human rights obligations requires *dramatically accelerated* climate action. By *NOT* reducing emissions at that level of ambition, states fail to prevent foreseeable human rights harms caused by climate change – and thereby violate their obligations.

4. The wider “normative environment” of this positive obligation

Net zero emissions means that all greenhouse gas emissions that cannot be phased out ("residual emissions") will have to be offset. This can happen by carbon dioxide removal, through reforestation, land restoration, soil carbon sequestration, bioenergy with carbon capture and storage, and just carbon capture and storage. Implemented well, some CO$_2$ removal tools could provide co-benefits to biodiversity, improved soil quality and local food security. But done poorly, CO$_2$ removal efforts could displace other land uses, potentially causing adverse effects on food security, biodiversity and human rights.

The picture is complex and the considerations that need to be taken into account are many, and can be partly conflicting. It might therefore, indeed, be opportune to consider a human right to a clean and healthy environment as an appropriate framework for weighing the various environmental and social implications in a more holistic and comprehensive manner, rather than by looking at them through the very narrow lens of a right to life or private life.

This would also better recognize the planetary emergency of the climate crisis.

The right to a clean and healthy environment is recognized in law by at least 155 states. One way to recognize such right on the regional (EU) level would be to add a new protocol recognizing the right to a healthy environment. A second legal pathway, employed by courts in about twenty States, is to rule that the right to a healthy environment is implicit in the right to life.

**Finally, let me answer the question of whether climate change is a matter for human rights courts:**

Yes, absolutely. When states do not live up to their human rights obligations, this is a *matter of law*, not of politics. This does not mean that the court should be prescriptive in what each and every state has to do or which exact type of measures to adopt. It should not. But it should be possible for the court to ask whether the measures adopted are reasonable and adequate to prevent harm from climate change. And the test question for this is: are the measures aimed at and effective for achieving a rapid deep decarbonization and eventually a global phase out GHG emissions around 2050?

And if they are not, the court might want to tell states to revisit their policies and plans (their regulatory and administrative framework) with the aim of not just doing better - but doing *the best they can* (*their utmost*) - in addressing climate change by significantly raising ambition.