

CLIMATE JUSTICE
*The enforcement of the
right to the environment*

PAOLA APOLLARO

Climate Justice



- “*Climate justice*” acknowledges that climate change can have differing social, economic, public health, and other adverse impacts on underprivileged populations
- Justice begins with recognizing the key groups that are differently affected by climate change
- Climate impacts can exacerbate inequitable social conditions
- It also involves considering relative roles and responsibilities for causing the problem of global warming and for associated action.





Human Rights and Climate Change

- Climate change has profound impacts on a wide variety of human rights, including the rights to life, self-determination, development, food, health, water and sanitation and housing
- Climate justice requires that climate action is consistent with existing human rights agreements, obligations, standards and principles
- Human Rights-based Approach to climate *mitigation* and *adaptation*

Climate Litigations



- Cases against states, companies or other entities on the basis of their failure to take sufficient action to reduce greenhouse gas emissions as mandated by national laws or international agreements
- Climate-related litigation have significant financial implications, not only for the defendant to the litigation, but also for other institutions with financial exposures to the defendant, including financial institutions
- The focus is now shifted towards the victims
- Critical benefit-costs relation

Klimaatzaak

- On June 17, 2021, the Brussels Court of First Instance pronounced its long-awaited judgment in a case that challenged the Belgian state's inaction on climate change
- The plaintiffs were 8,422 Belgian citizens who filed the case jointly with the association *Klimaatzaak*.
- They argued that the current national climate policy was insufficient to adequately protect Belgian citizens from the dangerous effects of climate change, in violation of article 1382 CC (general's duty of care) and Articles 2 and 8 of the ECHR 8 (right to life and the right to private and family life)
- As reparation, they asked for the imposition of GHG emissions reduction targets of 42-48 percent by 2025 compared to 1990 levels, of 55-65 percent by 2030, and carbon neutrality by 2050.
- However, the refusal of the court to fix specific GHG emissions reduction targets based on separation of powers issues, thus providing no reparation, provides a cautionary tale for other climate cases.



Implications



- This focus on specific injuries is critical for building political support; such cases link climate change with the lives of ordinary people
- They strength climate diplomacy helping developing strategies, identifying partners, reaching out to the press, building legitimacy and credibility for the litigation, and developing factual experts that can help in the litigation
- Litigations create numerous links between climate change and other fields of law
- Create opportunities for policy coherence across international governance
- Can Climate litigation lead towards the way of climate tribunals?



Thank you

**ClimLaw: Graz 1st Annual PhD Workshop on Climate
Law and Litigation in cooperation with UNEP, UBA and
ASSELLAU 27 May 2022**

The Legal Assessment of Hydrogen Trade between the EU and Neighbouring Countries

Seher ÇIRAK ATEŞ





Hacettepe University – Private law PhD Program



Outline

- ▶ Basic Information on Hydrogen
- ▶ EU's Hydrogen Developments and Targets
- ▶ Neighbouring Countries & Hydrogen Trade

Types of Hydrogen

Color	GREY HYDROGEN	BLUE HYDROGEN	TURQUOISE HYDROGEN*	GREEN HYDROGEN
Process	SMR or gasification	SMR or gasification with carbon capture (85-95%)	Pyrolysis	Electrolysis
Source	Methane or coal 	Methane or coal 	Methane 	Renewable electricity 



EU Clear Targets

- ▶ EU Green Deal,
- ▶ European Hydrogen Strategy for a Climate-Neutral Europe,
- ▶ Fit for 55 Package,
- ▶ Hydrogen and Gas Market Decarbonisation package.

EU Hydrogen Vision

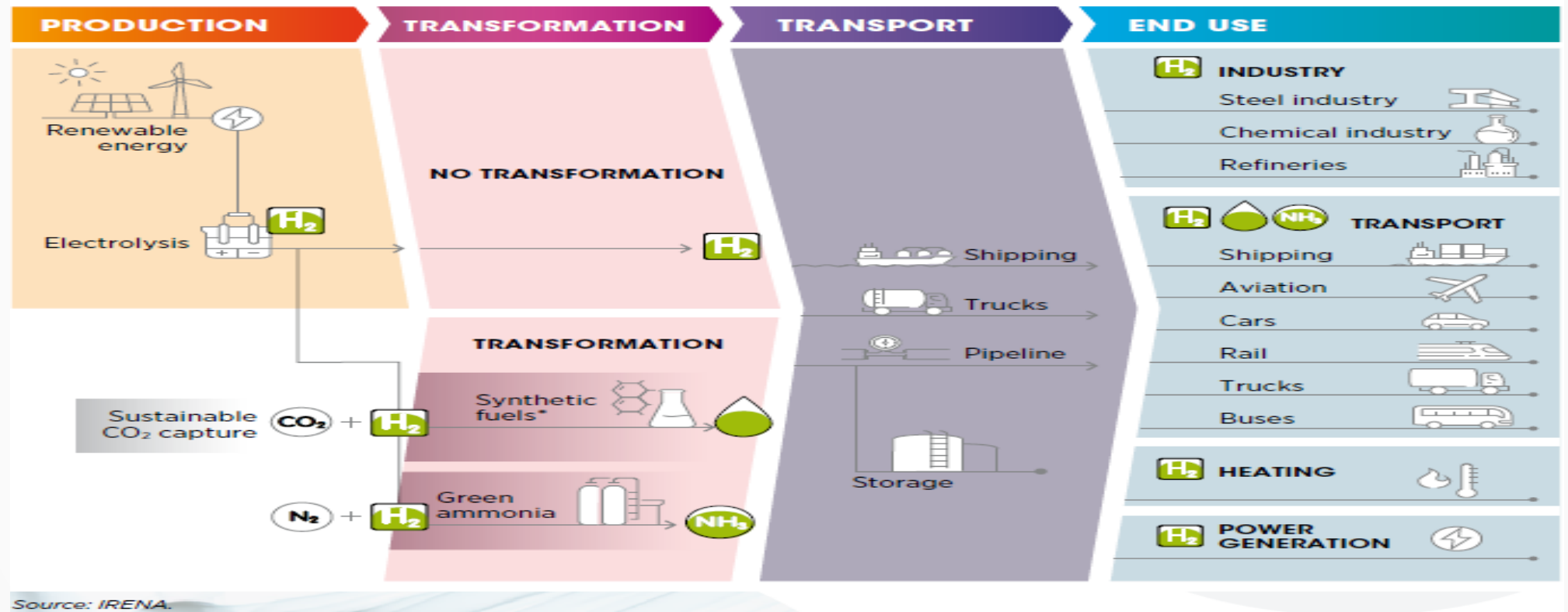
- ▶ The world is facing the major challenge of climate change.
- ▶ There is a consensus that low and zero-carbon hydrogen will play an important role in Europe's energy future.
- ▶ The EU Hydrogen Strategy will give a boost to clean hydrogen production in Europe.
- ▶ In the EU, hydrogen is as an investment priority to boost economic growth and resilience, create local jobs and consolidate the EU's global leadership.
- ▶ EU Member States, individually, are increasingly considering hydrogen deployment as part of their strategy to decarbonise energy supply.



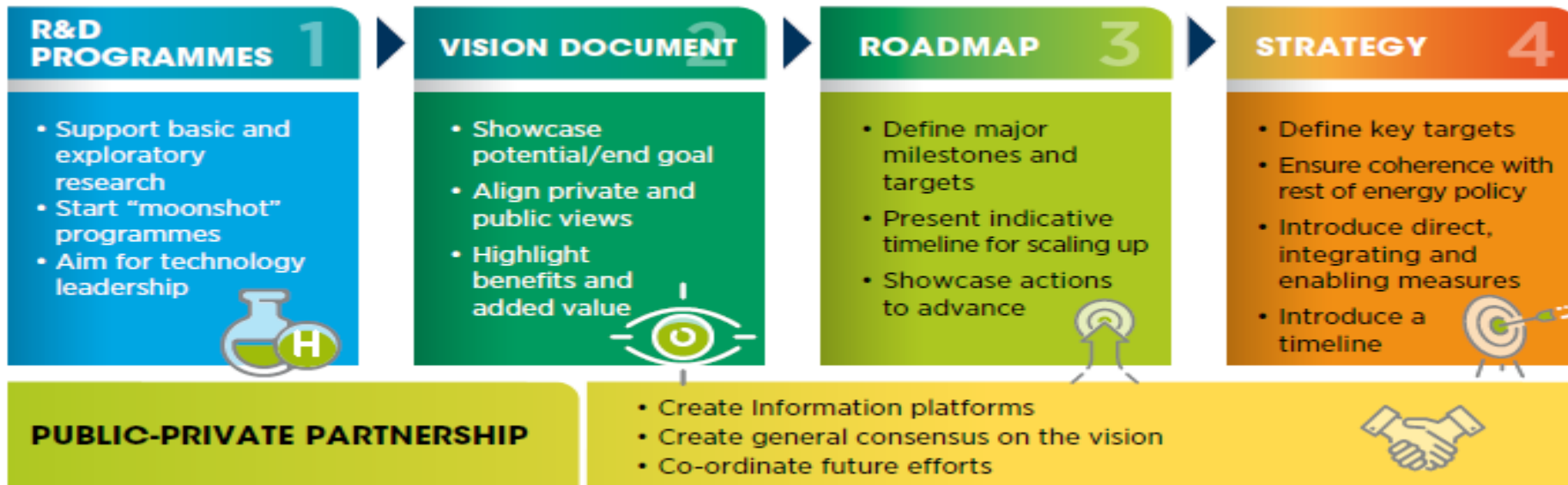
EU Targets

- ▶ To reduce GHG emissions in the EU by at least 40% below 1990 levels by 2030.
- ▶ As the EU aims to achieve climate-neutrality by 2050, and has the intention to raise the GHG emissions reduction target for 2030 to at least 50 to 55% from 1990 levels.
- ▶ Hydrogen is a way of achieving these targets.

Hydrogen as an energy carrier: in many different applications



EU's Target to Implement Hydrogen Strategy in National Level



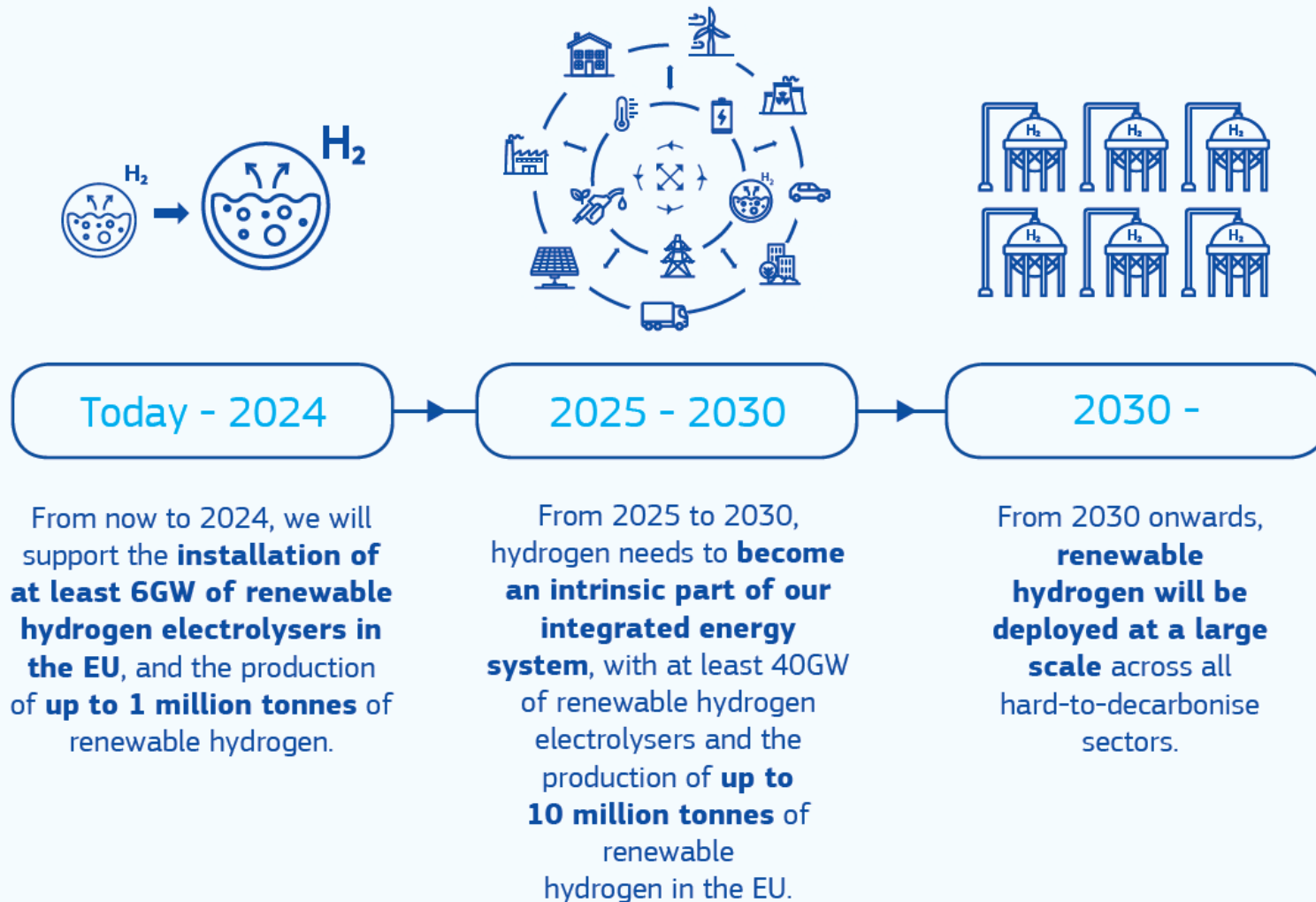


EU Hydrogen Strategy: A Road Map to 2050

- ▶ The EU strategy aims for an integrated view of the hydrogen value chain, and establishes a supporting governance system and policy framework to promote hydrogen deployment.
- ▶ EU Hydrogen strategy document identifies green hydrogen as the only shade of hydrogen compatible with a net-zero emission system.
- ▶ In its European Hydrogen Strategy, the EU targets 80 GW of electrolyser capacity of which 40 GW will be for imports from neighbouring regions, with Ukraine and North Africa being mentioned specifically.

EU HYDROGEN STRATEGY

The path towards a European hydrogen eco-system step by step :





EU Hydrogen Strategy

- ▶ Establishment of **European Clean Hydrogen Alliance**.
- ▶ Build up a clear pipeline of viable investment projects.
- ▶ Brings amendment to EU Emission Trading Systems: Guarantees of Origin (GOs).
- ▶ Direct and transparent, market-based support schemes for renewable hydrogen have been offered.
- ▶ Trans-European Networks for Energy (TEN-E) and the review of the internal gas market legislation for competitive decarbonised gas markets have been revised.
- ▶ Establish the proposed Clean Hydrogen Partnership, focusing on renewable hydrogen production, storage, transport, distribution and key components for priority end-uses of clean hydrogen at a competitive price.



Fit for 55 and Hydrogen

- ▶ The European Commission adopted the **Fit for 55 package** on 14 July 2021. Fit for 55 aims to put the bloc on course to meet its ambitious target of a 55% reduction in greenhouse gas emissions by 2030, relative to 1990 levels, aligning EU policy with the ambitious political mandates of the Green Deal and EU Climate Law. This series of **13 cross-cutting legislative proposals include 8 revisions of existing legislation and 5 brand new proposals.**
- ▶ The **renewable and low carbon hydrogen sector** was well represented across the different initiatives announced under Fit for 55.
- ▶ The **amended RED sets sub-targets for renewable hydrogen** as well as extending the **EU-wide certification for renewable fuels to also include renewable hydrogen.** This is intended to allow renewable hydrogen producers to obtain a premium for their product.



Fit for 55 and Hydrogen – 2

- ▶ The revision of the alternative fuels infrastructure directive (AFID) envisages one hydrogen refuelling station for every 150km of Trans European Network for Transport (TEN-T) core network, as well as refuelling stations in every urban node.
- ▶ The amendment of the regulation setting CO₂ emission standards for cars and vans mentions hydrogen as a decarbonisation option for heavy-duty vehicles in pursuit of emission reductions.
- ▶ The new FuelEU Maritime proposal covers all renewable and low carbon fuels, including decarbonised hydrogen and derived fuels.
- ▶ Under the revised EU Emissions Trading System electrolyzers will now be eligible for free credits and the revised Energy Taxation Directive (ETD) will set preferential tax rates for the use of renewable and low carbon hydrogen.



The European Commission's proposal on 15 December 2021

- ▶ On 15 December 2021, the European Commission adopted a legislative proposal to recast the 2009 EU Gas Directive, as part of the proposed hydrogen and decarbonised gas markets package.
- ▶ The Commission's proposal would refine the principles of the existing Gas Directive and fully extend their scope to cover hydrogen networks.



Demand for H2

- ▶ By 2030, potential demand for H2 could be high enough to initiate some limited international hydrogen trade, most likely between European countries initially, rather than from outside Europe.
- ▶ Low carbon/renewable hydrogen demand will initially come from sectors that are currently utilizing conventional hydrogen for **industrial purposes**, such as **oil refineries**, **ammonia** and **methanol industries**, plus some new industrial demand in the **steel sector**. Additional demand could come from the transportation and heating sectors.



Criteria of feasibility of hydrogen trade

- ▶ extent of decarbonization of domestic energy system;
- ▶ water availability;
- ▶ proximity to H₂ demand centres;
- ▶ state of development of the infrastructure and readiness for H₂ injection;
- ▶ history of bilateral relationships and security of supply.



The Legal Necessity of Hydrogen in EU Neighbouring Countries

- ▶ Key factors in green H₂ production costs are the electricity price, operating hours and capital expenditure for electrolyser equipment. In terms of infrastructure, retrofit or construction of new H₂ pipelines are a promising solution for transporting energy over long distances. H₂ transport by ship and electricity transmission is significantly more expensive. For hydrogen storage, the only viable economical solution would be storage in underground geological formations, such as salt caverns and depleted gas fields.
- ▶ There is hardly any hydrogen legislation in the EU's Neighbouring Countries.
- ▶ A separate “Hydrogen” legislation should be prepared and the primary and the secondary legislation related to hydrogen energy should be clearly established with future foresight in order to achieve a competitive market.

EU Neighbouring Countries



- ▶ Development of technical safety standards compatible with international standards regarding the production, distribution, transmission, storage and end-use processes of Hydrogen in the EU's Neighbouring Countries is of great importance in terms of developing an effective Hydrogen infrastructure.



- ▶ Blending also changes the quality of the gas consumed in Europe and may affect the design of gas infrastructure, end-user applications, and cross-border system interoperability.
- ▶ Blending risks fragmenting the internal market if neighbouring Member States accept different levels of blending and cross-border flows are hindered.
- ▶ Technical feasibility

Incentive Mechanism- Funding

- ▶ National incentive mechanism regulations should also be prepared, since the implementation of the renewable hydrogen strategy is very costly.
- ▶ To support investments in clean hydrogen in the EU Neighbouring countries, both the EU and international financial institutions will mobilise the available financing instruments

For the Development of Hydrogen Technology...

- ▶ Regulatory needs is the foremost one. Chicken&Egg issue.
 - ▶ Hydrogen injection rates vary in European legislation (0.1% UK - 12% Netherlands)
- ▶ Geographic proximity to the markets, low-cost renewable energy production and their supportive government policy.
- ▶ In addition, natural gas export pipelines and interconnectors could potentially transport blended hydrogen initially and 100 per cent hydrogen in the longer term.



EU and Neighbouring Countries Partnership

- ▶ Europe's energy partnerships with both neighbouring countries and regions and its international, regional and bilateral partners, advancing supply diversification and helping design stable and secure supply chains.



What should be done in terms of EU and neighbouring countries trade

- ▶ A separate “Hydrogen” legislation should be prepared and the **primary** and the **secondary legislation** related to hydrogen energy should be clearly established with future foresight in order to achieve a **competitive market**.
- ▶ The development of **technical safety standards** compatible with **international standards regarding the production, distribution, transmission, storage and end-use processes of Hydrogen** is of great importance in terms of **developing an effective Hydrogen infrastructure**.
- ▶ **National incentive mechanism regulations** should also be prepared since the implementation of the renewable hydrogen strategy is very costly.
- ▶ Opportunities for **national** and **international cooperation** in this field should be pursued and evaluated.
- ▶ IGAs, MoUs have great importance in order to develop trade between these countries.

In Brief

- ▶ Hydrogen offers opportunities within the scope of **national and international energy strategy**.
- ▶ Hydrogen promises **environmental sustainability**.
- ▶ **Collaboration is necessary** to overcome technical, financial and regulatory challenges.
- ▶ The **EU has clear target** on Hydrogen Strategy, the neighbouring countries should have a clear target on Hydrogen Strategy legislation.

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Thank you

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The Inclusion of Women through Environmental, Social and Governance Practices and Sustainable Investments as an Effective Climate Response Strategy

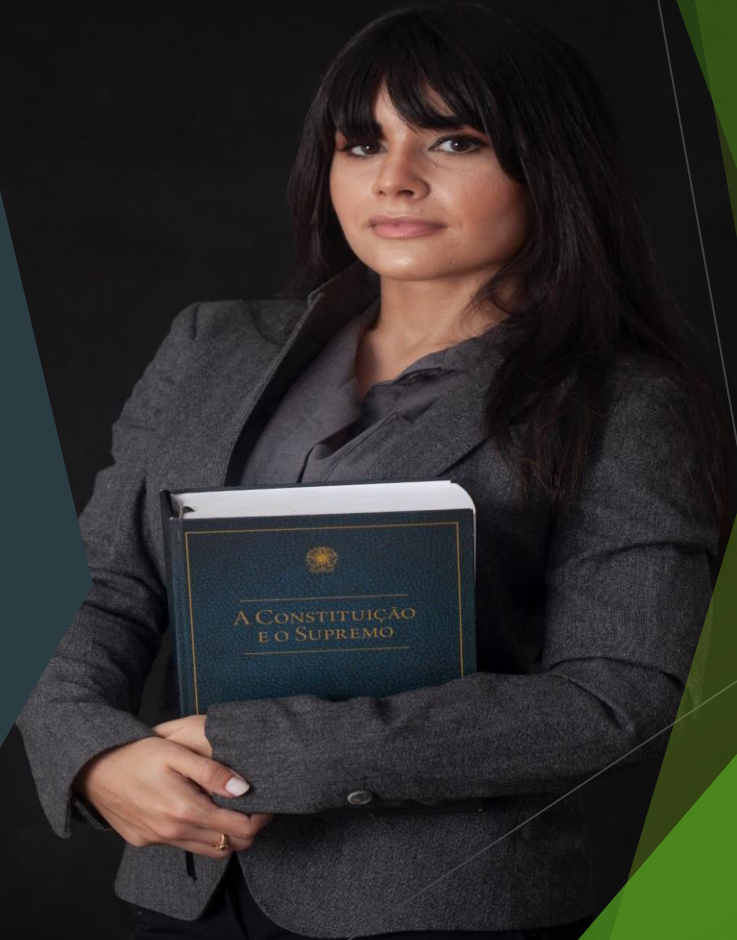
PhD in Environmental Law (UONBI)

Instructor: Professor Collins Odote Olo

Luma Santana de Souza Dórea

ClimLaw: Graz 1st Annual PhD Workshop
on Climate Law and Litigation in
cooperation with UNEP, UBA and
ASSELLAU

June, 2022



SUMMARY

1. Problem Statement

1.1 – What do we already know?

1.2 – What is the problem?

1.3 – Why does the problem matter?

1.4 – How are we going to prove it?

2. Theoretical Framework

2.1 – Identifying Key Concepts

2.2 – Evaluate and Explain Relevant Theories

2.3 – How the Research Fit in



1. PROBLEM STATEMENT

- **Principal Proposition:**

“The genders barriers faced by women in leadership and participation in decision-making on environmental issues limit their capacity to adapt to climate impacts”

- **Interacting Proposition:**

“While women are more vulnerable to the impacts of climate change, men dominate decision-making regarding environmental, social and governance on private and public sectors”.

- **Speculative Proposition:**

“There will not have climate justice until women have an equal say in decision-making - whether in shaping climate policy or taking investment decisions”

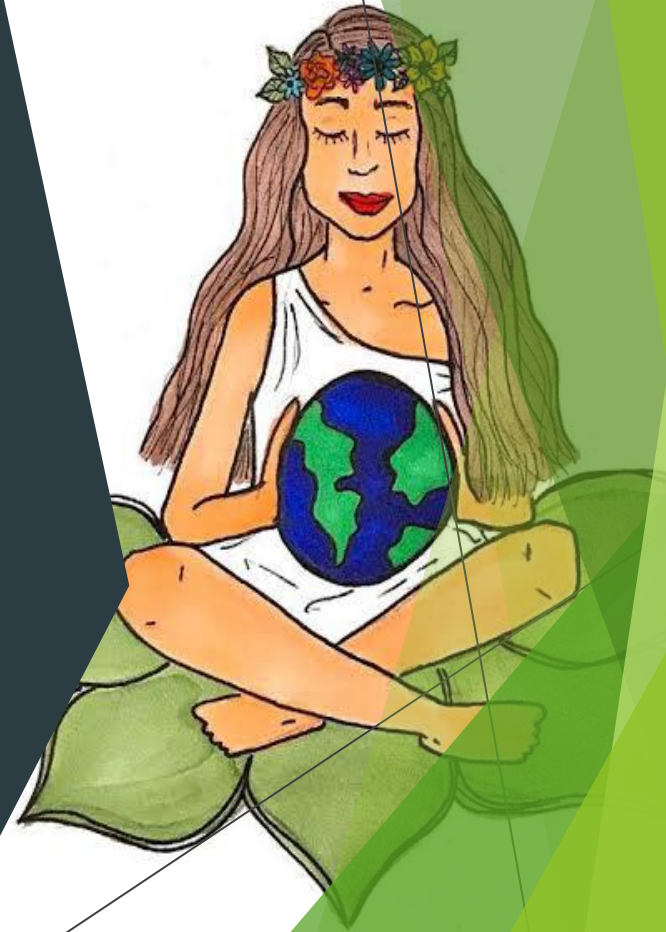
- **Explicative Statement:**

The purpose of the study is to discuss and demonstrate how business will be much more effective in climate change if it address the ingrained biases that hold back female entrepreneurs and climate change solutions with a focus on women



1.1 WHAT WE ALREADY KNOW?

- In the global context, women is most of the burdens caused by climate change. This vulnerability is the result of a series of social, economic, and cultural factors.
- Gender power relations effectively limit women's decision-making power, mobility, and access to resources, including water, which makes them more vulnerable to climate-related risks
- The average representation of women in national and global climate-negotiation bodies is bellow 30 percent.
- Despite these barriers, concrete case studies show that women are effective in devising and implementing solutions to increase sustainable livelihoods while reducing conflicts.
- Studies show that women are more likely than men to use climate smart agriculture techniques to adapt to climate change and that when more women are involved in group decisions about land management, the group conserves more.



1.2 – WHAT IS THE PROBLEM?

- Women do not have adequate access to funds or decision-making that can enable them cover climate losses or take on the opportunities presented by climate change.
- There can be no climate actions without women. They are essential to limiting global warming 1.5°C through their leadership and participation.
- Women and girls in every society need to be part of the solution by effectively responding in times of crisis and actively working towards creating a more just and sustainable world.
- For this to happen, investors and stakeholders need to create opportunities, such as ESG practices with women leadership, and support women entrepreneurs more effectively.
- On the ground private sector need to distribute access to financial and technical support to bring climate innovations to market.



1.2 – WHY DOES THE PROBLEM MATTER?

- Women make up 51 percent of the global population, and still face gender bias that culminates into barriers to access land, financial services, social and capital technology. 80 percent of the people displaced by climate are female.
- These barriers render them vulnerable to food insecurity among other vices. They have also been off the tables on matters of governance and decision making on climate issues.
- Female entrepreneurs when they are effective actors do think differently. They employ six times more women than companies led by men.
- Women are more likely than their male counterparts to innovate to address social needs and score better than men in key skills such as leadership, problem-solving and innovation.
- Women when allowed to work invest 90 percent of their income in their families, compared to just 35 percent of men, and yet still face enormous barriers when it comes to setting up business of their own.



1.4 HOW ARE WE GOING TO PROVE IT?

- In relation to the conceptual and theoretical approach of Ecofeminism, the relationship between gender and environmental justice will be cut, especially in the context of climate change
- Research and concrete data – concrete cases of women in leaderships – will be used to demonstrate that women have a special role in the rural economy and family, over the years, but on the other hand, constitutes a part of greater vulnerability to the devastating effects produced by climate change.
- The study will analyze different movements and fields of study - gender and feminist, environmentalist and animalist – using intersectionality, to address the different "isms" of domination that have behind continuities of business practices that have not yet proposed a mechanism for the inclusion of women in leadership and environmental decision-making.
- Bring ESG practices and their applicability in private and public companies and how investors/shareholders can foster the reduction of gender inequality in environmental issues and promote sustainable development together with higher business returns.



2. THEORETICAL FRAMEWORK

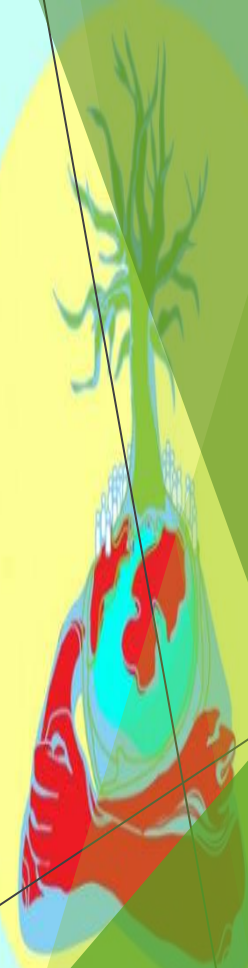
- **Theoretical Framework statement:**

“The theory that I used on this study is that there can be no climate action without female leadership and participation in decision-making on environmental issues.

It was developed by the ecofeminism doctrine, that addresses female participation in environmental questions, especially not that it respects adaptation and climate justice, in addition to studies by international organizations (e.g. IPCC, 2022), and analyzes of specific cases such as Rwanda, Marisol Villalobos, Nidhi Pant and Salima Visram .

This theory indicates that at the base of the problem in the reach of climate change involves the lack of protagonist of women in decision-making of an environmental nature, and that an urgent and attentive look from investors and private companies is necessary for the inclusion of female leadership.

As applied in my study, this theory will support the applicability of ESG practices, with the insertion of women at the level of leadership in private companies - for environmental projects, as a basis for the foundation of a new system of economic development, fairer and sustainable amid climate change.



2.1 IDENTIFYING KEY CONCEPTS:

- **Problem Statement:**

“The genders barriers faced by women in leadership and participation in decision-making on environmental issues limit their capacity to adapt to climate impacts.”

- **Objective:**

“Propose policies and practices for the inclusion of leadership and female participation in environmental decision-making through ESG.”

- **Research Question:**

“How to promote female leadership and participation in environmental decision-making in order to benefit the economy allied to climate change adaptation?”

The concepts of “women in leadership and participation in decision-making on environmental issues ” and “importance of insertion of women on private companies to take action in adaption to climate change" are clearly central to this study. The theoretical framework will define these concepts and discuss theories about the relationship between them.

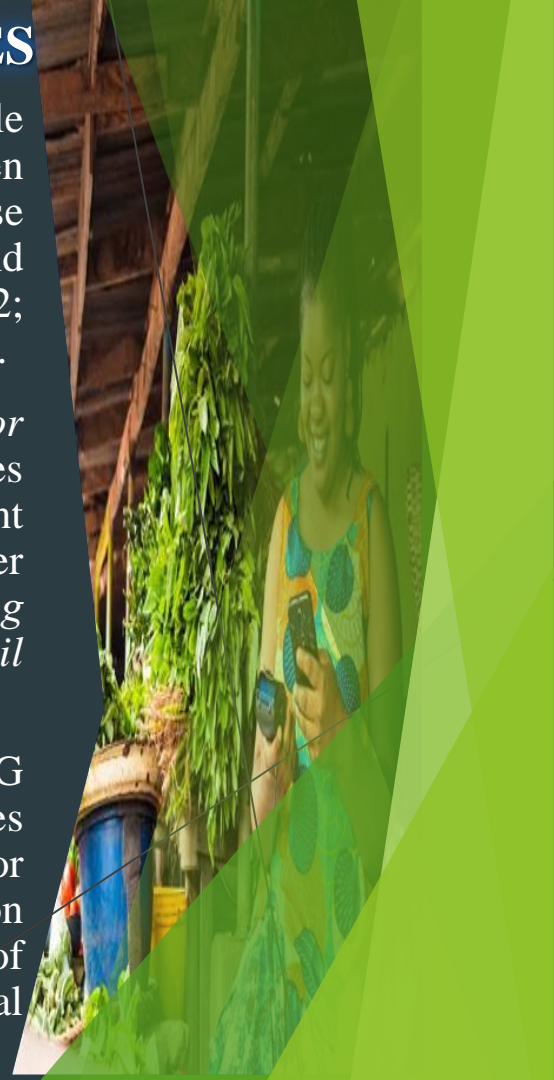


2.2 EVALUATE AND EXPLAIN RELEVANT THEORIES

The ecofeminist line of jurisprudence demonstrates that while women are more vulnerable to the impacts of climate change, men dominate decision-making regarding environmental policies. These inequities perpetuate poverty, risk women's health and wellness, and undermine sustainable resource use (BMZ, & Future-Makers, 2012; Weeratunge, Snyder, & Poh, 2010; The World Bank, FAO, & IFAD, 2009).

In the 2021 report *“Beyond COVID-19: A Feminist Plan for Sustainability and Social Justice”*, for example, UN Women emphasizes that one of the actions needed around the world to address the current interconnected crises of jobs, care and climate that undermines gender equality and threatens the survival of people, and the planet is *“promoting women's leadership in all institutional spaces: from governments to civil society and the private sector, and especially in crisis response”*.

This study will therefore help to understand the dynamics of ESG practice, in the private and public spheres and how these business policies and practices can bring about significant changes in the search for sustainable development, in the context of climate change with a focus on ecofeminist approach and female leadership, together with the reduction of gender inequality both in the labor market and in environmental management.



2.3 HOW THE RESEARCH FIT IN

Approximately 70% of the 1.3 billion people living in poverty in the world are women. They are still heads of household in 40% of the poorest households in urban areas. In rural areas, the world's food production workforce predominates (from 50% to 80%) but owns 10% of the land. In addition, several studies demonstrate a male bias in access to information, employment opportunities, resource availability and decision-making in water-related adaptation measures (Huynh and Resurreccion, 2014; Sinharoy and Caruso, 2019).

This concept – “there can be no climate justice action without women” and “female entrepreneur key to climate solution” is based on several insights that have been carried out by several researchers in the field of ecofeminism and environmental, legal, and social field information, to fill in the little strategic implementation of ESG to achieve sustainability, amid climate change focusing on female leadership.

The research, therefore, will address to the gaps in current public and private business practice, which today adopt policies that are insufficient to guarantee women's participation in environmental decision-making, which affect them so much.



Differentiation in the Regulation of International Aviation Emissions

Zhuoqi Ding

26 May 2022



Research questions

1. Whether differentiation should and can be adopted in the regulation of international aviation emissions?
 - Definition of differentiation
 - Justifications for differentiation (normative and doctrinal)

2. Whether and how climate initiatives covering international aviation sector reflect or adopt differentiation?
 - What are these climate initiatives?
 - How do they reflect differentiation?
 - Development?

Differentiation in climate discourse

Doctrinal basis of differentiation

- Common but differentiated responsibility and respective capabilities (CBDRRC principle)
- Specific needs and special circumstances of developing states
- Sustainable development
- Intragenerational equity

Grounds of differentiation: indicators of ‘fair share’ in NDCs

- Responsibility-based differentiation: GHG emissions from states in past (?), nowadays, or future (?)
- Capacity-based differentiation: population, development needs, financial capacities, and geographical conditions...

Forms of differentiation

- UNFCCC and Kyoto Protocol: **annex-based**
 - central mitigation obligations, implementation, and the financial, technical and capacity-building issues
 - art.2.1 quantified emissions limitation and reduction commitments
- Paris Agreement: **flexible; great nuances in nature and extent**
 - art.4.2 Each Party shall prepare, communicate and maintain successive nationally determined contributions that it intends to achieve. (**self-differentiation**)
 - art.9.1, 9.2 Developed country Parties shall provide financial resources to assist developing country Parties ... **Other Parties** are encouraged to provide or continue to provide such support voluntarily.

Differentiation in climate change litigation

The Urgenda vs. The Netherlands

- Fair share of responsibility

DC: ‘Annex I countries will at most have to be...with due regard to a fair distribution’ (para.4.23).

CA: ‘a distribution in proportion to GDP per capita’ ; ‘has benefited from fossil fuels for a long time’ (paras.60 and 66).

SC: ‘partial fault also justified partial responsibility’ (para. 5.7.6)

- Duty of care:

the onerousness of taking precautionary measures’, ‘the latest scientific knowledge’, ‘the available option to take security measures’, and ‘cost-benefit ratio of the security measures’

The Thomson vs. Minister of Climate Change Issues

- Fair climate target: comparative concepts

Differentiation beyond the UN climate regime

- Proliferation of climate initiatives proposed by non-state actors
 - Various kinds of transnational initiatives: information sharing; financial support; capacity building
- Foundation for adopting differentiation in transnational climate initiatives
 - Normative sense: discrepancies between actors in climate contribution, mitigation capacities
 - Doctrinal sense: application of the CBDRRC principle?
- Empirical evidence of differentiation
 - Global Covenant of Mayors for Climate & Energy: individual climate commitments; financial assistance

To sum up: evolution of differentiation

- ✓ Annexed-based – flexible
- ✓ states – non-state actors

Differentiation in the international aviation sector

International aviation sector and the UN climate regime

- UNFCCC
 - art.4.1 (a) & art.12 a national inventory of anthropogenic emissions (IPCC Guidelines)
- Kyoto Protocol
 - art. 2.2 ‘The Parties included in Annex I shall pursue limitation or reduction of emissions of greenhouse gases ...from aviation ...working through the **International Civil Aviation Organization (ICAO)**...’
- Paris Agreement
- Lack of consensus on distribution of transboundary emissions

Obligations for ICAO to adopt the CBDDRC principle



Non-discrimination vs. differentiation

- ICAO Assembly Resolutions on Climate Issues
 - ‘acknowledging the principles and provisions on common but differentiated responsibilities and respective capabilities under the UNFCCC and the Kyoto Protocol’;
 - Guiding principles of MBMs, including the CBDRRC principle
- Convention on International Civil Aviation (Chicago Convention)
 - preamble: ‘... international air transport services may be established on the basis of **equality of opportunity**...’
 - ...
 - art. 44 (g) ‘**avoid discrimination** between contracting states;’
- Tension between non-discrimination and differentiation: compatible or not?
Fragmentation of international law and principle of harmonization (ILC)

Normative justification for differentiation in international aviation sector:

- Imbalanced development of international air transport around the world:
 - Sharply increasing demands for international air transport in emerging economies and other developing states
 - Large share of global demands taken by developed states
(ITF 2019: EEA states and Turkey 30%; US 11%; China, India, and Brazil 6.5%)
- Discrepancies between states on their contributions to international aviation emissions; accessible mitigation options
- Uneven distribution of consequences of climate change

Climate initiatives targeting international aviation emissions

- International level: standards and recommend practices developed by ICAO
 - Carbon offsetting and reduction scheme for international aviation (**CORSIA**)
 - New areoplane CO2 emissions certification standards
- Regional level: EU Emissions Trading Scheme (EU ETS)
Adjustment in light of the operation of CORSIA

**Welcome your comments
and questions!**

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Displacement in A Changing Climate: Escaping from Marginal Environments to the Margins

ClimLaw: Graz 1st Annual PhD Workshop on Climate Law and Litigation

Organised by

ClimLaw: Graz, Research Center for Climate Law, Faculty of Law (REWI), University of Graz (Austria)
in cooperation with international partners

25 May 2022

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At-A-glance

- Climate change will cause up to **40 million** climate migrations across southern Asia by 2050, (The UN's Intergovernmental Panel on Climate Change's Sixth Assessment Report Working Group, March 2022).
- The World Bank (2021) estimates that in the next thirty years a further **216 million people** will be displaced from their homes and livelihoods, unless urgent action is taken to address the problem.
- By the end of 2021 the number of internally displaced people (IDPs) due to conflict and disasters had risen to nearly **60 million**, almost 5 per cent more than the 48.6 million reported at the end of 2020.
- **23.7 million** internal displacements in 2021 by disasters – weather-related hazards, e.g. storms & floods, accounted for 94% of the total. China, India & the Philippines all recorded their highest figures in 5 years. (The Internal Displacement Monitoring Centre, 21 May 2022).
- During 2020, **40.5 million new displacements were triggered across the world by disasters and violence**, the highest annual figure recorded in a decade (IDMC, 2021).

The impact on Enjoyment of Human Rights by internally displaced persons (IDPs)

- Displaced people are among the most vulnerable populations in greatest need of protection.
- The impacts on the enjoyment of human rights are extensive, starting with the right to freedom of movement and choice of place of residence. When people are displaced, they lose their homes and livelihoods and might be deprived of their rights to housing, food, water and sanitation, health care, education and property.
- Women, children, older people, people with disabilities and indigenous peoples are disproportionately affected.
- The impacts of climate change may exacerbate conflict dynamics and other drivers of conflict and fragility.
- They might have lost their documents during displacement or face difficulties in obtaining or renewing civil documentation, which might create barriers to essential services, social benefits, employment and housing, land and property rights, political participation and access to justice.
- The properties that they left behind might be destroyed, damaged, occupied or stolen.

- ❖ To combat climate- induced displacement, the world must learn from the COVID-19 pandemic and act with urgency, or risk far-reaching and lethal consequences for people who are forced from their homes.
- ❖ The global response to COVID-19 may hold some useful lessons. It shows that if we want to mitigate the impact of a disaster we **need to be prepared to act quickly and in a holistic manner**. If we ignore it, then we will face serious consequences.
- ❖ International organizations to enhance efforts to make programming climate-smart and environmentally sound. This includes **robust analysis of climate and environmental risk and its implications for protection and solutions, and scaling-up concrete actions that protect both people and the environment**.
- ❖ Increase emphasis on prevention and preparedness to anticipate and respond to growing climate shocks as an unavoidable trend and be more predictable in response to climate induced displacement.
- ❖ As climate change displacement continues, the urgency of finding solutions and avoiding marginalization, instability and other problems with protracted displacement become national, and potentially regional and global security imperatives. In the context of internal displacement, three durable solutions are generally recognized: return, local integration or settlement in another part of the country. However, in the context of climate it is complex. Solutions must therefore be flexible and based on free and informed consent.

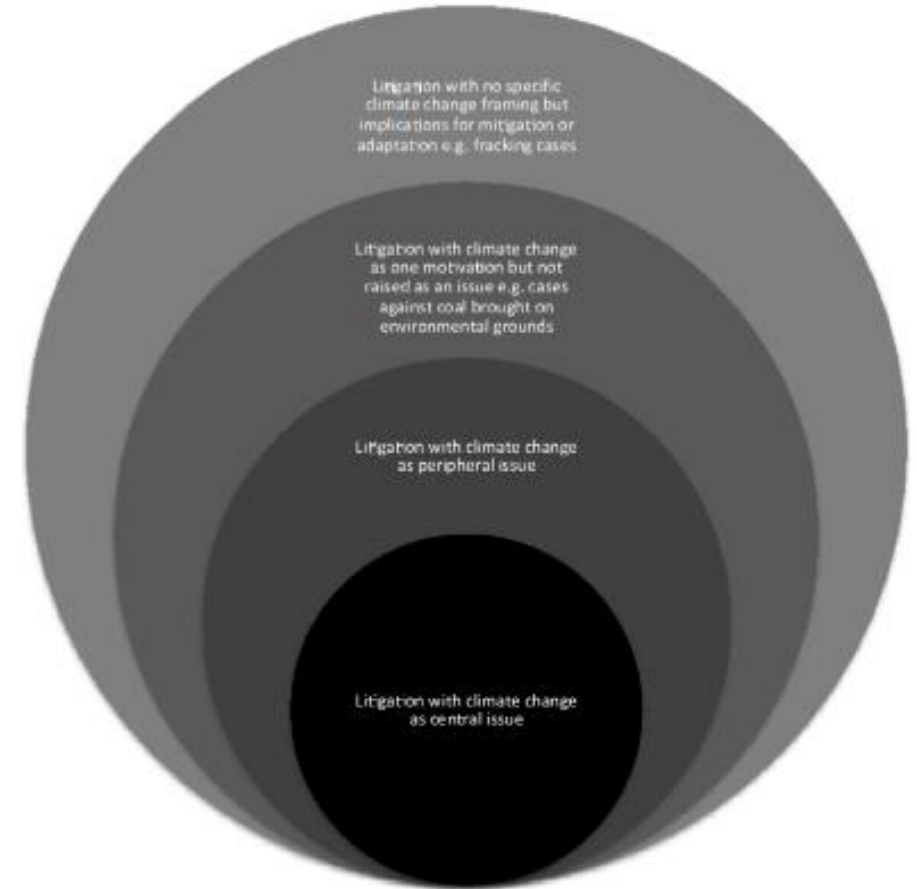
Climate Change Litigation, the (global) carbon budget, and the separation of powers

Outline

- I. Introduction
- II. Challenges of climate change litigation
- III. The IPCC
- IV. The global carbon residual budget
- V. The Role of the Courts – downscaling the budget and the fair national share

Climate Change Litigation

- **No *parvenu*...**
 - Old phenomenon: fossil fuel lawsuits; parens patriae; strategic litigation; human rights approach
 - New phenomenon: Paris Agreement, bottom-up and NDCs; the global carbon residual budget
- **Overarching term...**
 - Climate lawsuits, climate litigation, climate related disputes, climate change litigation...
 - German term „Klima-Klagen“ (climate lawsuits): lost in translation



Challenges of Climate Change Litigation

Justiciability

Capacity, in particular

- Procedural rules
- Provability
- Applicable and manageable standards

Appropriateness, in particular

- International dimension
- Legitimacy
- Separation of powers

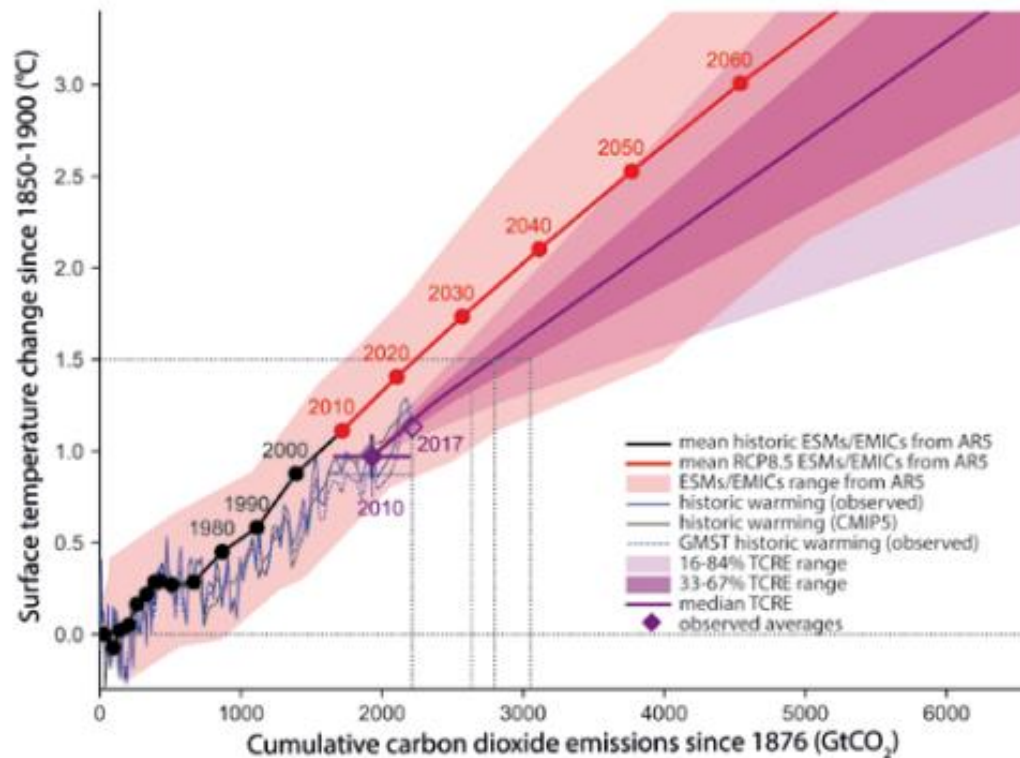
The IPCC

- Authoritative and unanimous voice of science
- Critical double role:
 - scientific input for the adoption of the Paris agreement and the temperature limit + finding a global carbon residual budget to hold the temperature limit
- **Paris Agreement and temperature limit as benchmark in climate change litigation**
 - Non applicable standard „translated“ to a measurable standard in form of the global carbon residual budget
 - The IPCC’s findings and the global carbon budget as „facts“

The global carbon residual budget

Between facts and norm

Global carbon residual budget



Art. 2 para. 1, lit. (a) PA

(a) Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change

- What is the relevant temperature limit?
- What is the pre-industrial level?
- What does holding mean? Is a probability of 66% enough?

The Role of the Courts – downscaling the budget and the fair national share

- Just a piece of the cake...
 - Finding the national fair share
 - Do the courts have the power to come up with a national fair share?
 - Finding the national share and distributing of it (over time) in the national sphere is a balancing decision
- Experts may suggest, courts may control but parliaments make balancing decision

The Role of the Courts – controlling the balancing decision

- Proposal for a mechanism to control the process of the balancing decision (so called „Abwägungsfehlerlehre“)
- First rule:
 - a. When there is a duty to protect, a right to climate protection (healthy environment ect.) there is also a duty to find a plausible and reasonable way to protect the climate in the context of the given international framework
 - b. Trial and error is insufficient, rather there is a need for a reasonable roadmap/budget
 - c. When the state, as it is the case in Germany, did not come up with a plausible roadmap, a national budget or similar the balancing decision is already flawed

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Thank you for
your attention



UNIVERSITY OF NAIROBI

**FACULTY OF LAW
PHD IN ENVIRONMENTAL LAW**

**THE DECARBONIZATION OF KENYA'S SHIPPING
INDUSTRY: TOWARDS SUSTAINABLE OCEAN
GOVERNANCE**

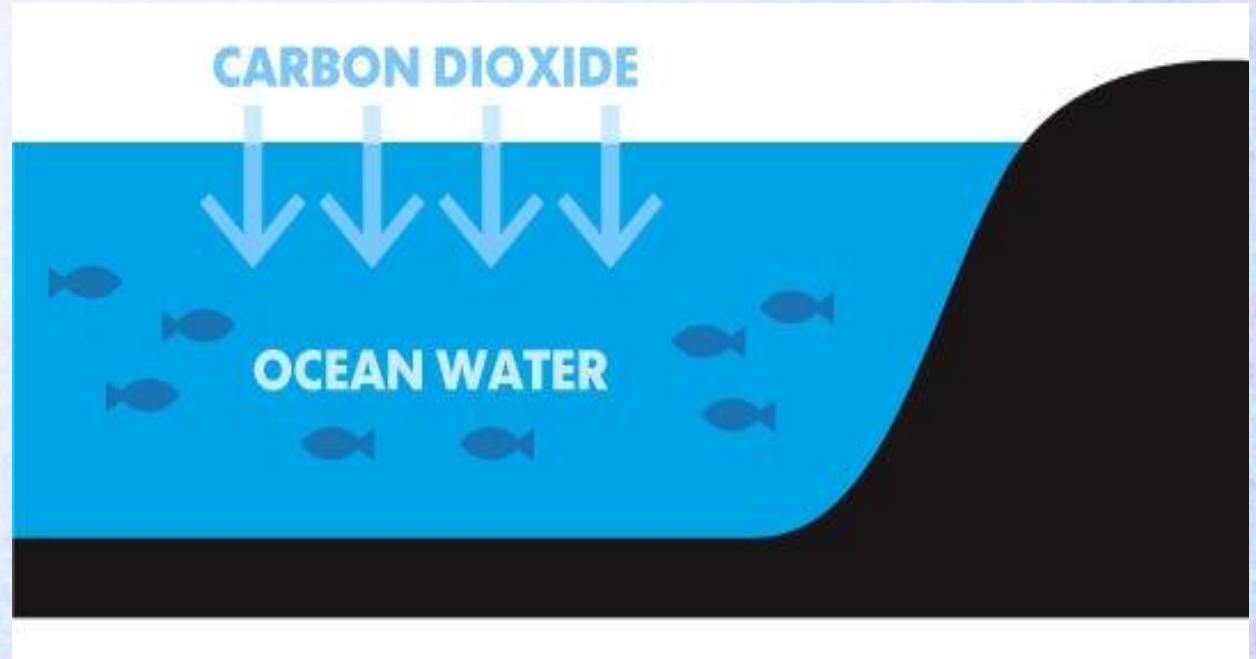
MWATHI KITONGA

Overview

- ❖ Oceans are essential for humankind;
 - ✓ climate regulators
 - ✓ source for nutritious and healthy food
 - ✓ engine for development
- ❖ Organization for Economic Cooperation and Development (OECD) “ocean-based industries contribute €1.3 trillion to global gross value added”
- ❖ Ocean-based industries contribute to hundreds of millions of jobs making it the world’s seventh largest economy



- ❖ Oceans produce half of the oxygen in the earth's atmosphere, absorb 25% of carbon emissions
- ❖ Oceans assist in climate change mitigation absorbing at least 23 percent of human-caused carbon dioxide emissions and more than 90 percent of the excess heat created by human-caused greenhouse gas emissions (GHGs)



- ❖ United Nations Sustainable Development Goals (SDGs)-identified the ocean as a key socio-ecological system
- ❖ Requires transformative change and transition to a more sustainable ocean system;
 - ✓ Global regulatory effort to pursue ocean sustainability
 - ✓ Governance changes across all sectors and scales
 - ✓ Effective participation by multiple actors



Shipping Sector

- ❖ Significant source of greenhouse gas emissions
- ❖ Carries out about 70 percent of all global trade by value and 80 percent by volume contributing to global trade and economic development
- ❖ Accounts for 3 percent of global anthropogenic greenhouse gas emissions annually



Background- Legal and Institutional Framework

- ❖ Stockholm Conference, 1972- issue of climate change raised
- ❖ Environmental perspective to the year 2000 and beyond, 1987-guide to national action and international cooperation, introduced the notion of sustainable development
- ❖ Intergovernmental Panel on Climate Change (IPCC), 1988- established as a forum for the examination of greenhouse warming and global climate change
- ❖ UNEP and WMO, 1989;
 - ✓ Negotiating of a framework convention on climate change
 - ✓ MALE declaration on global warming and sea-level rise, transmitted
 - ✓ Helsinki declaration on the protection of the ozone layer, adopted
 - ✓ Montreal Protocol on Substances that Deplete the Ozone Layer, entered into force
- ❖ Chapter 9, Agenda 21, Rio Declaration, 1992- incorporated provisions on the protection of the atmosphere
- ❖ United Nations Framework Convention on Climate Change (UNFCCC), 1994- aim of stabilizing the concentration of atmospheric GHGs at a level that would prevent anthropogenic interference with the climate system, no specific attention to the marine environment



- ❖ Kyoto Protocol to the UNFCCC, 1997- most influential climate change action, together with the DOHA Amendment, refer to the protection and enhancement of the oceans, contained provisions for the reduction of GHG emissions in the shipping sector
- ❖ United Nations Convention on the Law of the Sea (UNCLOS, 1982), United Nations Conference on Environment and Development (UNCED, 1992)- protection of the marine environment from emerging challenges, no specific reference to climate change
- ❖ Paris Agreement, 2015- conservation and enhancement of sinks and reservoirs of GHGs, noting the importance of ensuring the integrity of all ecosystems including oceans
- ❖ International Conference of Parties to the MARPOL Convention in 1997- adopted the protocol to amend the convention to include the MARPOL Annex VI, also adopted a resolution on carbon emissions from ships
- ❖ The Marine Environment Protection Committee (MEPC) invited to consider feasible strategies for carbon emissions reduction
- ❖ International Maritime Organization (IMO) together with UNFCCC undertook a study of carbon emissions from shipping to establish the amount and relative percentage of emissions from ships
- ❖ IMO assembly adopted a resolution on IMO policies and practices in 2003 in relation to GHG emissions reduction from ships urging the MEPC to identify and develop mechanisms required to limit or reduce emissions from the shipping sector



Brief International Perspective

- ❖ Maritime transport- backbone of the global economy
- ❖ The rise in volume of trade, players across the industry have a responsibility to address the industry's climate impact and enhance ocean sustainability
- ❖ The IMO is responsible for climate change mitigation and air pollution prevention for this sector; addresses the issue of carbon shipping emissions through the MARPOL convention
- ❖ In 2011, IMO adopted its first mandatory measures to improve ships energy efficiency
- ❖ In 2018, the IMO adopted the Initial GHG Strategy setting ambitions to reduce total annual GHG emissions by at least 50 percent by the year 2050, consistent with the Paris Agreement temperature goal
- ❖ Move towards zero carbon emissions by the shipping industry can only be achieved through measures that are adopted by IMO for global application and state adoption
- ❖ The range of potential policy and practice measures include adoption of implementation measures, direct regulatory approaches, information policies, voluntary initiatives, national and regional action



Kenya's shipping industry

- ❖ Western Indian ocean region and the East African sea trade routes- Kenyan coast, plays a pivotal role as home to the port of Mombasa
- ❖ Lamu port, South Sudan, Ethiopia Transport Corridor (LAPSSET) Program- considered Eastern Africa's largest and most ambitious infrastructure project
- ❖ IMO's Initial GHG Strategy, provides specific goals for the reduction of emissions and the phasing out of fossil fuels, demonstrates the challenge faced by international shipping and the need for a shift in the entire sector i.e. implementation of critical measures by member states including Kenya
- ❖ Securing global maritime transport and trade will require member states, especially developing countries, to invest in climate adaptation measures and building resilience
- ❖ New policy measures to be put in place by the IMO will not favour developing countries due to cost implications
- ❖ The shipping sector is expected to change its fuel mix and use new technology and ship designs, alternative fuels and operational adjustments to cut its carbon and environmental footprint



- ❖ The shipping industry, in cooperation with governments, will need to explore alternative fuels, invest in landside infrastructure and replace older vessels with larger and more fuel-efficient ships
- ❖ Structurally weak developing countries like Kenya, will need help to mitigate transition costs and the lower connectivity that could result from decarbonizing maritime transport
- ❖ Developing countries will also need to gain a better understanding of how new regulations will affect the maritime transport services
 - ✓ Kenya as a party to the IMO and as a member of the IMO Council holds special interests in maritime transport and navigation, port and flag state
 - ✓ Kenya has so far ratified 27 IMO Conventions and maintained a strong association with the organization as a participant in its meetings
 - ✓ Kenya has maintained the willingness and resolve to tackle both global and regional challenges in relation to shipping
 - ✓ Kenya's position in the IMO council, is still considered low profile with the country rarely making submissions to meetings of the MEPC



- ✓ Kenya's shipping sector emissions are mainly caused by international shipping, and international maritime emissions are governed under the MEPC of the IMO
 - ✓ The transport sector, has undertaken to reduce GHG emissions to achieve certain targets by 2030
 - ✓ The activities that encompass mitigation actions are listed in the National Climate Change Action Plan (NCCAP,2018-2022) and additional activities are included in the Mitigation Technical Analysis Report (NCCAP, MTAR)
 - ✓ Kenya has ratified the MARPOL Annex VI and domestication is ongoing
- ✓ Other supporting policy measures include the Merchant Shipping Act, 2009 and the Kenya Maritime Authority Act, 2006
- ✓ There is no framework for sectoral adaption planning to climate change impacts in the transport sector in Kenya
 - ✓ Kenya's shipping industry is advanced and growing progressively hence the need to re-evaluate the current practice and policy measures, to minimize the impact of carbon emissions so as to meet national, regional and international requirements
- ✓ Kenya needs to move towards achieving sustainable ocean governance through implementing effective climate-related policy measures in the shipping sector



thank
you



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ASSESSING THE EFFICACY OF CLIMATE CHANGE ADAPTATION STRATEGIES FOR ENHANCING ACCESS TO FRESHWATER IN KANO PLAINS OF THE LAKE VICTORIA BASIN

ClimLaw: Graz 1st Annual PhD Workshop on Climate Law and Litigation

Aloyce Peter Ndege

Centre for Advanced Studies in Environmental Law and Policy



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Outline



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- ◆ Background
- ◆ Statement of the Problem
- ◆ Objectives
- ◆ Research Questions

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Background to the Problem



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- ◆ Freshwater, the most fundamental natural resource, drinking, agriculture, and all forms of socio-economic development.
- ◆ Its stored potential (surface, groundwater, soil moisture, ice, etc.) is increasingly facing challenges from climate change.
 - ◆ **(Palmer, *et al* (2008), Climate change and the world's river basins: Anticipating management options, *Frontiers Ecol. Environ.*, 6, 8189.)**
- ◆ Changes in the freshwater system, both in terms of quality and quantity, resulting from both natural climate variability, will have significant consequences on the ecosystem and the people depending on them.

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Background....



- ◆ Climate change has been evident in the Lake Victoria Basin for a long time. (*Nicholson, S. E. (1996). A review of climate dynamics and climate variability in Eastern Africa. In: The Limnology, Climatology and Paleoclimatology of East African Lakes. Gordon and Breach publishers. Amsterdam.p. 25-56.*)
 - ◆ 1961 floods.
 - ◆ 1998 El Nino floods.
 - ◆ The extremely dry years of 1984, 2001 and 2002 related to La Niña.
- ◆ The changing climate affects the access to quality water which contributes to diarrhea and infant mortality.

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Background..



- ◆ Drought and flooding have greatly affected water access to the inhabitants of Kano plains.
- ◆ Government and organizations working in Kisumu County and other institutions have not been able to successfully implement new and appropriate adaptation measures to stop the vulnerability of the inhabitants of Kano plains to climate change and its impacts.
- ◆ The need to build resilience and adaptive capacity to climate change is rapidly becoming a core concern facing most communities in Kenya and elsewhere.

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Background...



- ◆ Water is by its nature a local resource.
 - ◆ This presents a challenge because solutions to water issues must be tailored by location – there is no one-size-fits-all answer.
 - ◆ The benefit of saving, treating, or reusing a unit of water varies greatly depending on the conditions of the system from which that water comes.
- ◆ This unique attribute of water means effective progress on all the issues discussed above will require collective action among water users in a region with localized solutions.

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Statement of the Problem



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- ◆ Provision of, and access to safe water to the poor is a priority internationally.
 - ◆ Kano plains residents are mostly, low income earners, with the bulk of them generating income from small scale farming, livestock keeping, fishery and business.
- ◆ Climate change has been evident in the Kano plains through intensified floods, prolonging droughts, and storms.
- ◆ This has had a tremendous effect on water access and quality. There is an elevated risk of water contamination from poorly sited pit latrines, and it is worsened by frequent flooding;

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Problem...



- ◆ This is why Kano plains inhabitants experience high occurrence of waterborne diseases such as typhoid and dysentery.
- ◆ The inhabitants often face difficulties with the quality and quantity of the water in the accessible water points.
- ◆ Major rivers, streams and ponds dry during the dry seasons creating a real situation of lack of water.
- ◆ Kenya is a signatory to the UNFCCC and has adopted several laws, regulations and policies on climate change adaptation and sustainable water use.

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Problem...



- ◆ This study therefore seeks to find out the efficacy of these regulatory frameworks, with a view to promoting freshwater access in the plains.
- ◆ Impacts of climate change are experienced locally, it is believed that adaptation responses need to be locally appropriate and designed, led and implemented by local leaders and their communities.
- ◆ Impacts on water access are also experienced – and responded to – differently by various groups within local communities, for example, farmers, fishermen, livestock keepers, men, women, children, people with disabilities and minority and marginalized groups.

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Objectives



- ◆ To critically examine the current climate change adaptation strategies relevant to the promotion of water access in Kano Plains with regards to the following specific objectives:
 - ◆ To critically assess the extent of community awareness and knowledge of concept of, sources and challenges associated with, climate change; and its impact on access to freshwater in Kano plains.
 - ◆ To identify and review the policies, legal and institutional frameworks in place on climate change adaptation that promotes access to, sustainable access use and management of, the freshwaters in Kano Plains.
 - ◆ To identify and review the local strategies employed by the local community in climate change adaptation for the promotion of sustainable freshwater access and use.

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Objectives...



- ◆ To critically assess the efficacy of the policies, legal, institutional framework and the local strategies that promotes sustainable use and management of freshwaters in Kano Plains.

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Research Questions...



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- ◆ What is the extent of knowledge and awareness of the concept of, sources and challenges associated with climate change, and its impact on access to freshwater in Kano Plains?
- ◆ What are the policies, legal and institutional frameworks in place on climate change adaptation that promotes access to, sustainable access use and management of, the freshwaters in Kano Plains?
- ◆ What are the local strategies employed by the local community in climate change adaptation for the promotion of sustainable freshwater access and use in Kano plains?

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...Questions..



- ◆ How can the efficacy of the regulations, institutional frameworks and the local strategies be improved so as to enhance freshwater access in Kano Plains?

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