

2050 – Challenges for Environmental Law

CLIMATE CHANGE

Prof. Charles-Hubert Born (UCLouvain)
Symposium UGent – 5 February 2019



Overview

Introduction

- I. Climate change – perspectives
- II. Policy responses
- III. Law and climate change: the ultimate challenge
- IV. Law and its limits
- V. Role of law

Conclusions

Introduction

Introduction

Horizon 2050 – 30 years from now

Is law capable of prospective ?

« Legal futurology » (HiiL, 2012; Ruhl, 2018)

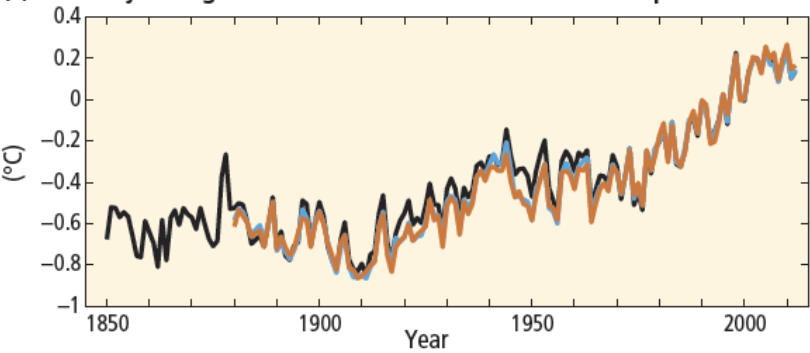
Prospective thinking based on future social, environmental and economical scenarios

Very uncomfortable for a lawyer

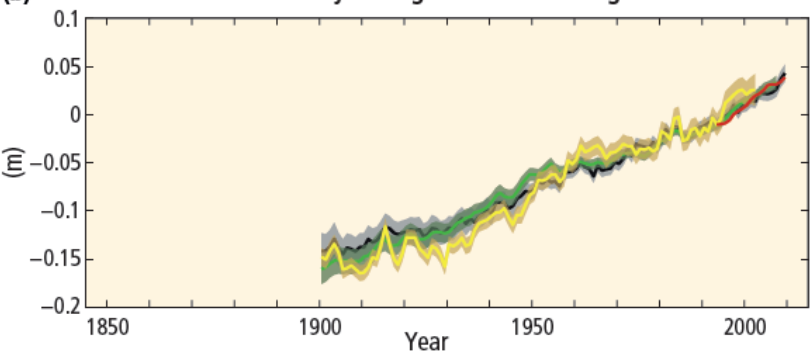
I. Climate change - perspectives

- Future emissions scenarios
- Any fossil fuels production peak ahead ?
- Possible consequences for temperature and sea level rise

(a) Globally averaged combined land and ocean surface temperature anomaly



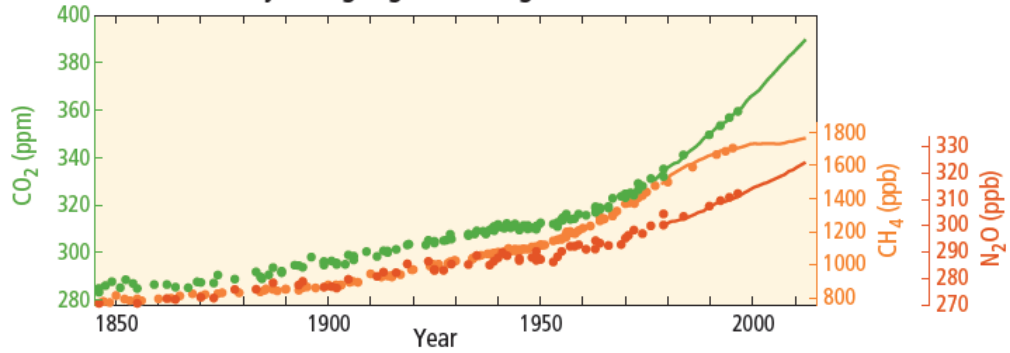
(b) Globally averaged sea level change



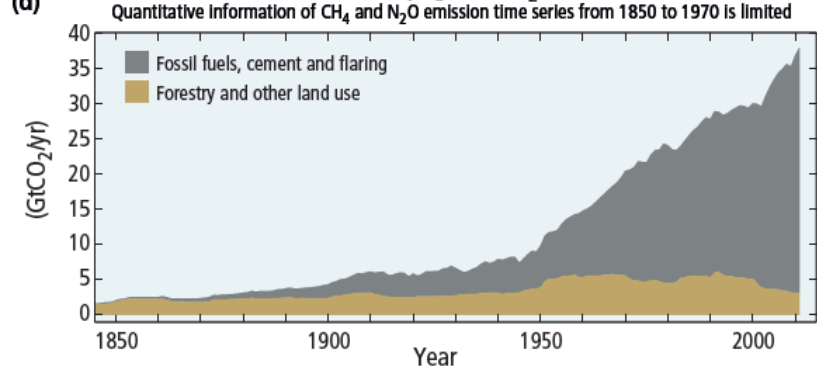
(c) Globally averaged greenhouse gas concentrations

400

(c) Globally averaged greenhouse gas concentrations



(d) Global anthropogenic CO₂ emissions



Cumulative emission

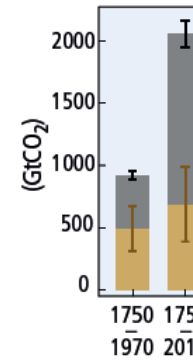
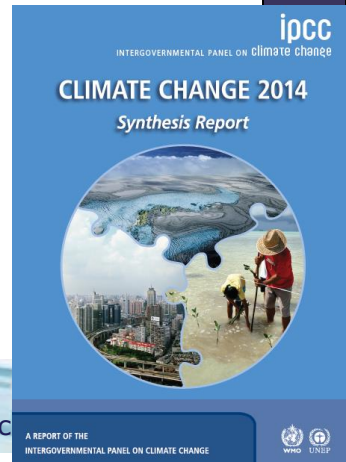
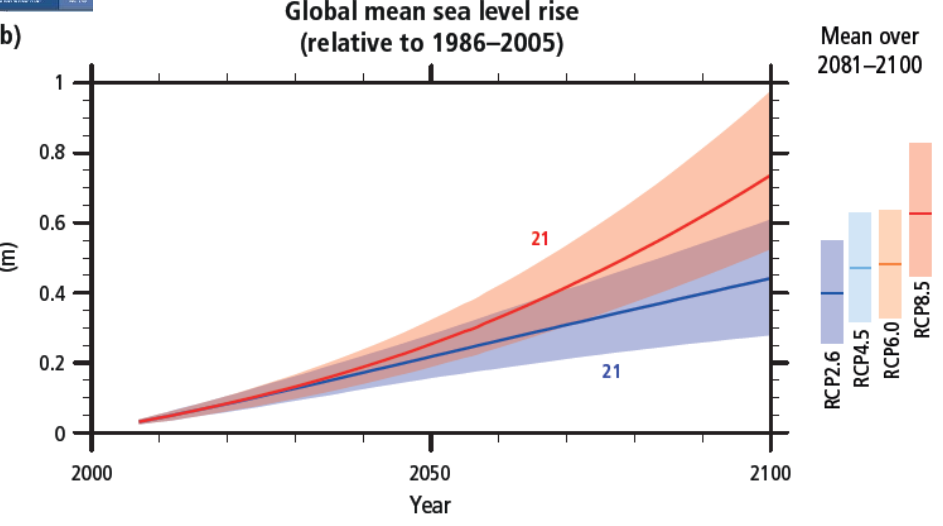
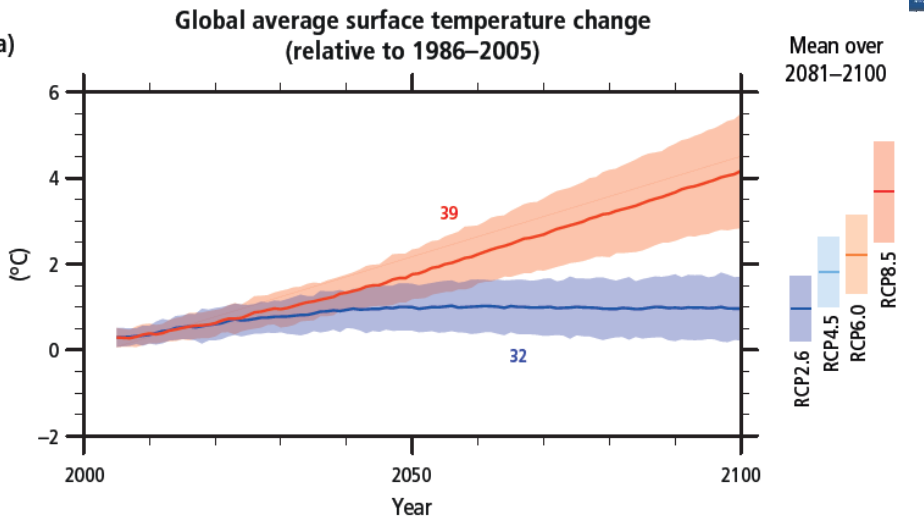
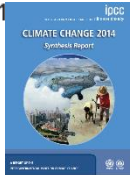
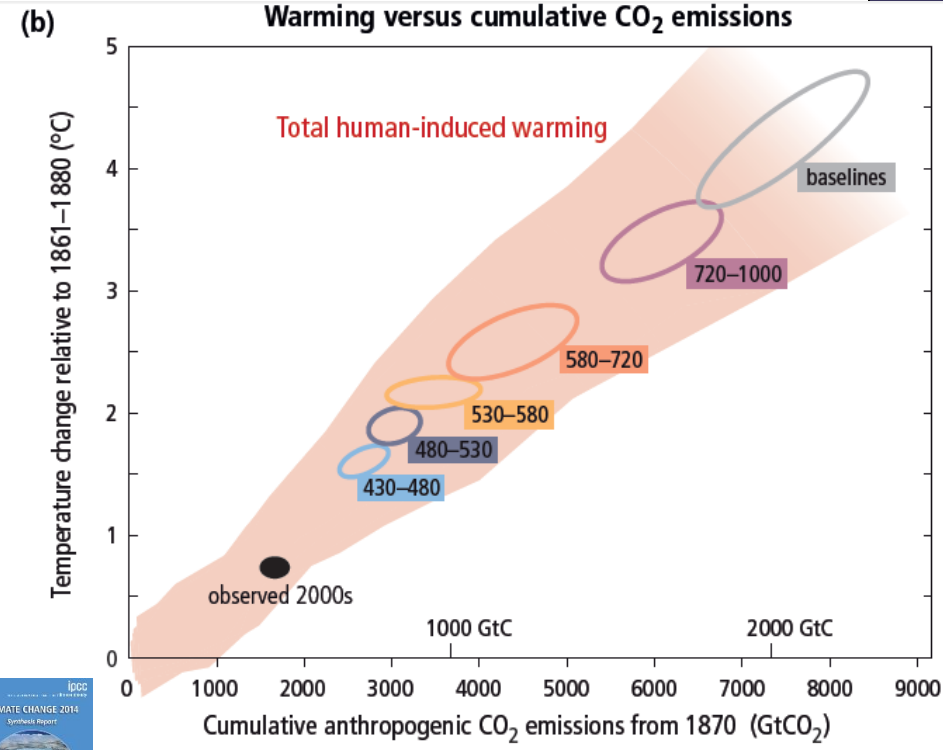
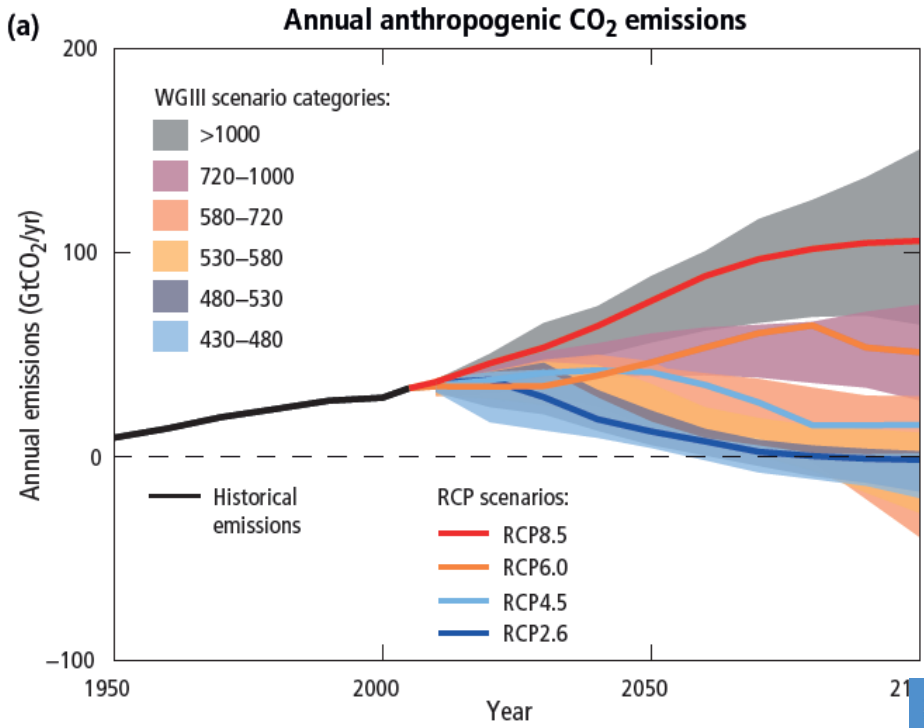


Figure SPM.1 | The complex relationship between the observations (panels a, b, c, yellow background) and the emissions (panels d, e, blue background)

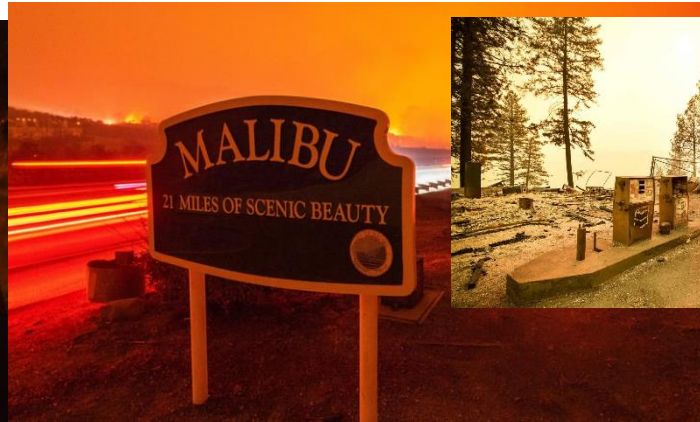




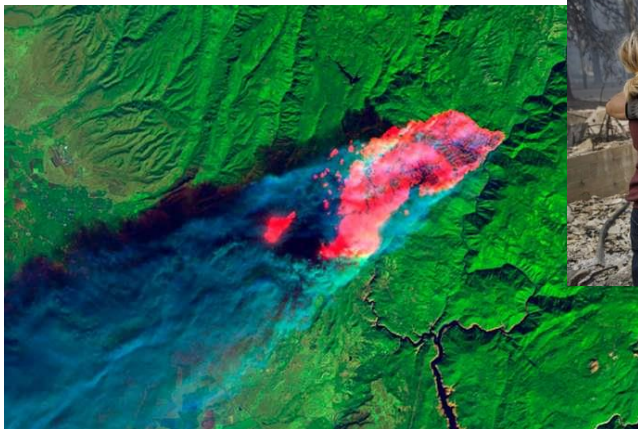
I. Climate change - perspectives

- Consequences for human and non-human life on earth
- The worst case scenario – a climate upset, towards a ‘hothouse Earth’ ? Will the Earth still be ... inhabitable by 2100 ?
- What impact on global and regional security ?
- On democracy itself ? Is democracy global warming-proof ? Let’s keep faith – as history shows (WWII)

Wildfires, Malibu & Camp Fires, USA, Nov. 2018



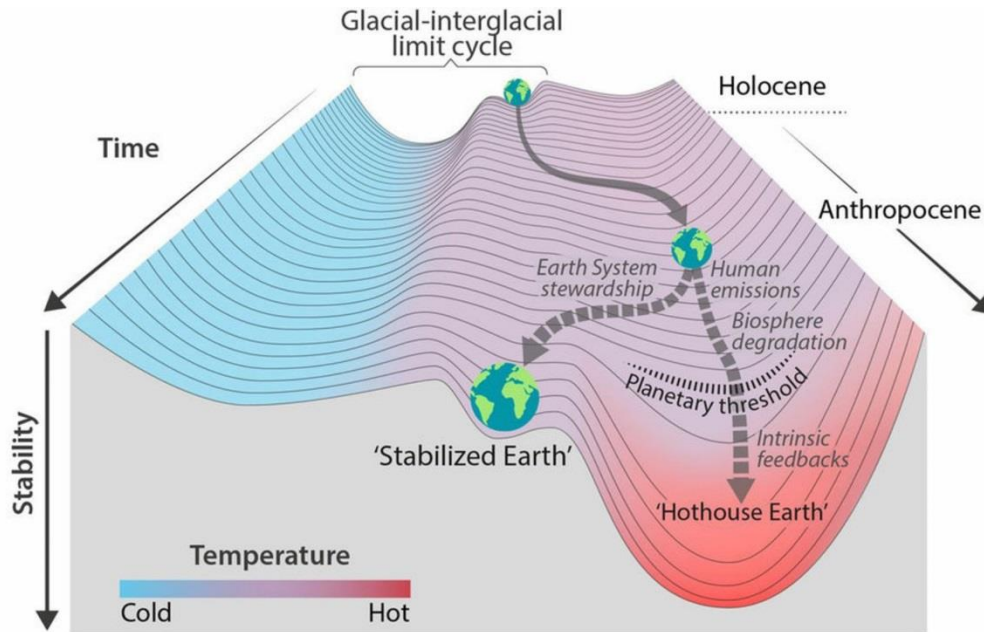
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Landsat 8 © Jeff Chambers / AP



What will be the climate in 2050 ? In 2100 ?



The Uninhabitable Earth

Famine, economic collapse, a sun that cooks us: What climate change could wreak — sooner than you think.

By David Wallace-Wells

July 6, 2017 9:00 pm Peer

COMMENT TOUT PEUT S'EFFONDRE

Pablo Servigne
Raphaël Stevens

Petit manuel de collaboration à l'usage des générations présentes

ANTHROPOCÈNE SEUIL

Fossils by Heartless Machine
In the jungles of Costa Rica, where humidity routinely tops 90 percent, simply moving around outside when it's over 105 degrees Fahrenheit would be lethal. And the effect would be fast: Within a few hours, a human body

PERSPECTIVE

Trajectories of the Earth System in the Anthropocene

Will Steffen^{1,2}, Johan Rockström³, Katherine Richardson⁴, Timothy M. Lenton⁵, Carl Folke^{6,7}, Diana Liverman⁸, Colin P. Summerhayes⁹, Anthony D. Barnosky¹⁰, Sarah E. Coomes¹¹, Michel Crucifix¹², Jonathan F. Donges¹³, Ingo Fetzer¹⁴, Steven J. Lade¹⁵, Marten Scheffer¹⁶, Ricarda Winkelmann¹⁷, and Hans Joachim Schellnhuber^{18,19}

Edited by William C. Clark, Harvard University, Cambridge, MA, and approved July 6, 2018 (received for review June 19, 2018)

We explore the risk that self-reinforcing feedbacks could push the Earth System toward a planetary threshold that, if crossed, could prevent stabilization of the climate at intermediate temperature rises and cause continued warming on a “Hothouse Earth” pathway even as human emissions are reduced. Crossing the threshold would lead to a much higher global average temperature than any interglacial in the past 1.2 million years and to sea levels significantly higher than at any time in the Holocene. We examine the evidence that such a threshold might exist and where it might be. If the threshold is crossed, the resulting trajectory would likely cause serious disruptions to ecosystems, society, and economies. Collective human action is required to steer the Earth System away from a potential threshold and stabilize it in a habitable interglacial-like state. Such action entails stewardship of the entire Earth System—biosphere, climate, and societies—and could include decarbonization of the global economy, enhancement of biosphere carbon sinks, behavioral changes, technological innovations, new governance arrangements, and transformed social values.

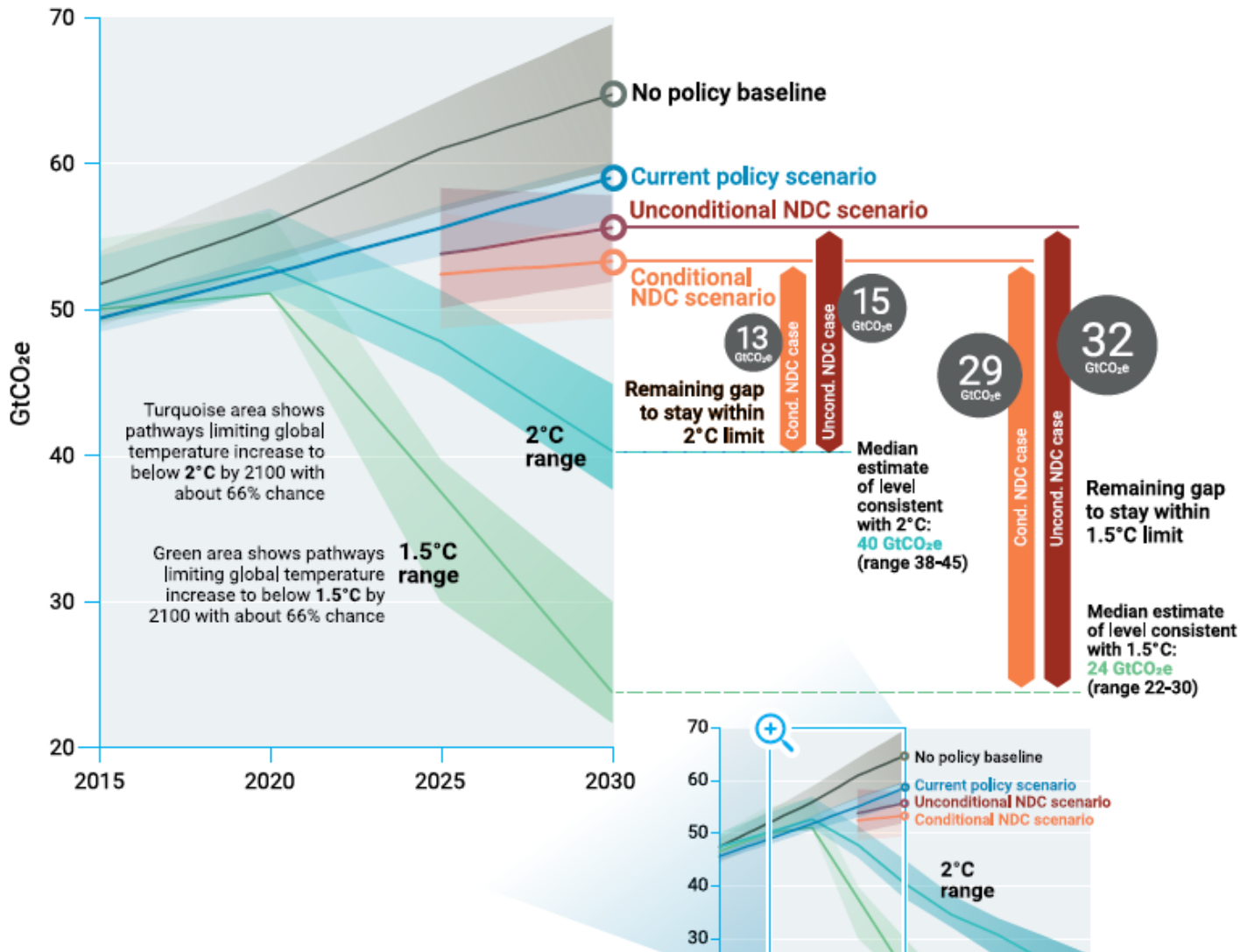




II. Policy responses

- Mitigation: up to now : completely insufficient (UNEP 2018)
- Need for new rhythm and scale: everywhere, at all levels, now and with a steep decrease in GES emissions
- Adaptation is also insufficient; mainly spontaneous (unplanned)
- If no radical measures... there will be ((much) more) suffering

Figure ES.3: Global greenhouse gas emissions under different scenarios and the emissions gap in 2030 (median estimate and tenth to ninetieth percentile range)



III. Law and climate change: the ultimate challenge

- Mitigation policy point of view: climate change is very complex to tackle as it is:
 - global,
 - multiscale (global, regional and local),
 - Incremental (thus less perceptible than oilspill disaster),
 - Irreversible (unless massive negative emissions)
 - multisources (caused by billions of individual and diffuse human-induced emissions),
 - context-dependant (embedded in very different political, economical, ecological and socio-cultural contexts - eg situation in China is totally different from western European countries)
- Need for global, regional, national and local/individual (behavioural) approaches

III. Law and climate change: the ultimate challenge

- Adaptation policy point of view: impacts for humans and ecosystems are:
 - global (temperature- and sea level rise),
 - regional (droughts and desertification, species populations extinction,...) and
 - local (fire, floods, urban heat etc),
 - synergic,
 - multidimensional (environmental, economical, social, psychological, geostrategic, etc.) and
 - context-dependant

- source of social injustice and ecological disasters
- Need for local, context-specific approaches

III. Law and climate change: the ultimate challenge

- Damage and losses remediation point of view :
 - Damage is mainly future and in some way uncertain at the local level (see climate risk assessments)
 - causality is specific: any emission contribute to CC, but no emission can be singled out as a cause for a specific climate change impact –
 - Multiple actors including beyond State's jurisdiction

IV. Law and its limits

- Law is often reactive rather than pro-active – need to think ahead
- Legal certainty vs uncertainty → need for evolutive and adaptive approaches, but in a foreseeable legal framework
- Multiple level legal orders involved – international, regional, national, sub-regional, local, individual citizen and businesses → need for integrated policy making and enforcement at all levels
- Many legal disciplines involved – far beyond environmental law : energy, economy, transport, agriculture, land use planning, ... → need for integrated and interdisciplinary legal frameworks and institutions
- Role of law depend on State political and legal contexts - Difference btw State with or without rule of law and robust institutions → need for different approaches according to context

IV. Law and its limits

- Limits of international order and sovereignty principle – cooperation is the only way out
- Limits of democracy to act swiftly and massively and risk for the rule of law in a highly unsecure context
- Legal certainty and private property rights as obstacles to strong, evolutive and adaptive policies ?
- Scientific uncertainty is the rule when considering 2050 horizon
- Legal blind spots: some key actors are both powerful and elusive from a legal point of view – multinational companies and tax havens

V. The role of law

Role of Law: setting:

- landmarks (objectives, principles and fundamental rights)
- institutions and procedures (governance and cooperation)
- toolbox of legal instruments (public and private policies)
- Responsabilizing actors (through legal and social sanctions and climate litigation)

V. The role of law

Objectives

- Objectives: global objectives are set in international climate law - keeping global warming well below 2°C above pre-industrial levels and reinforcing adaptation capacities to CC (Paris Agr. (art. 2.1))
- Need for more precision → role of NDCs and adaptation planning
- No substantive standard, only voluntary and incremental approach – what will be the rhythm of progression in regard to the needs ?
- Only a few organizations – countries have set ambitious objectives by 2050 (NL, D, FR,...)
- Role of scientists and civil society to increase the level of state engagement (eg pupils and students strikes in Belgium !)

V. The role of law

Principles

- Principles are necessary to guide lawmakers, governments and judges; they are not absolute but flexible and very general standards
- ‘Old’ principles (integration, precaution,...) are still actual !
- New principles are emerging in climate law
 - Principle of “equity and common but differentiated responsibilities and respective capabilities, in the light of different national circumstances » (art. 2.2 Paris Agr.)
 - Progression principle
 - Environmental integrity principle
 - Transparency principle
- Should we adopt new principles ?
 - ecological solidarity ? Towards non-human life beings
 - eco-proportionality (necessity/substitution) principle ?

V. The role of law

Governance - international

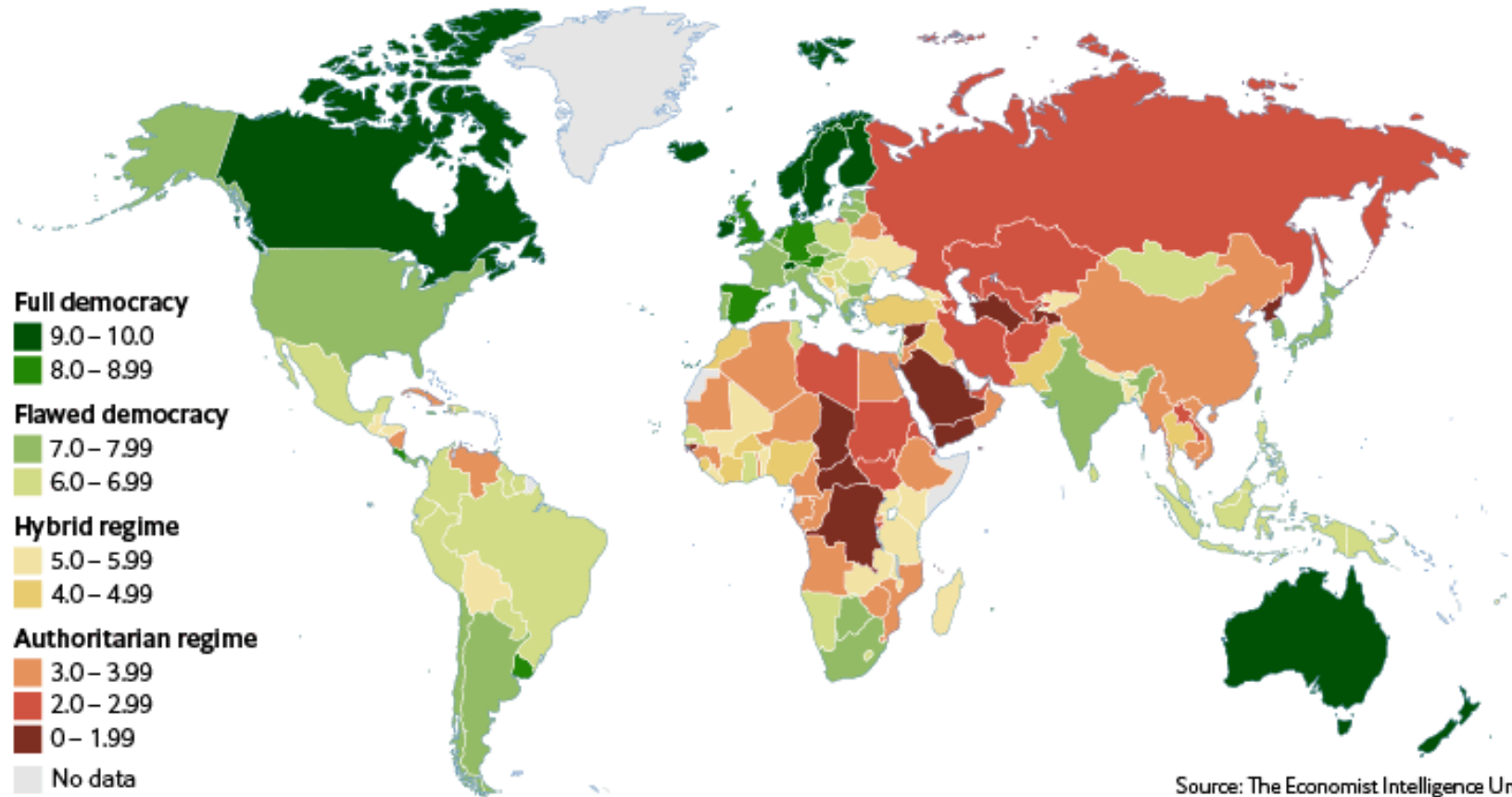
- International cooperation in a fragmented world is more and more difficult
- Unilateralism vs multilateralism
- “Nation first” ?
- Need for stronger international institutions ? What role for Security Council ?
- The role of regional organisations – the example of EU – and its fragility in a crisis context (Brexit,...)

V. The role of law

Governance – intra-state level

- The risks for democracy in a volatile crisis context
- Representative democracy vs deliberative / participative democracy
- The role of regional and local communities
- The case of federal states
- The case of non-democratic countries

Democracy Index 2018



V. The role of law

Instruments (mitigation)

- Limits of current approaches – emissions trade scheme is a failure
- The need for stronger approaches ?
 - A global carbon tax ? regional interconnected emissions trading schemes ?
 - Climate test ?
 - High-carbon productions prohibitions or regulation ?
 - Scheduled obsolescence interdiction ?
- What place for flexibility ? eg SDM in Paris Agreements
- The need to explore private law and soft law resources in States where the rule of law is weak
- The need for a behavioural approach of climate mitigation policies in order to mobilize a larger public – education, professional training, sensibilization, advertising control

V. The role of law

Responsabilization

- Climate litigation is rising – with what results ?
- Is 'classical' tort law suitable for climate litigation ?
 - Legal obstacles: from causality to separation of powers
 - The need to re-examine tort law under a new light
- Need for reactualizing existing legal concepts ? eg Public trust doctrine – commons in civil law (art. 714 Cciv)
- Need to open the access to international, EU and national justice

Conclusion

- We are at a crossroads in human history
- Our survival as an advanced civilization is at stake
- Democracy is under pressure
- All legal disciplines are involved, far beyond environmental law – esp. energy, land use, agriculture, forest, transport and food law
- Law needs to innovate and to set new paradigms to keep humanity in safe planetary limits
- Only the people will get mitigation and adaptation issues at the top of political agenda
- Media and social networks, together with education and sensibilization are playing a central role

Thank you for your attention

