



2021/22  
Investment  
**LAW** & Investor-State  
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TRAINING

# Climate Change, the Net Zero Energy Transition, and International Investment Law

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# **Science-Policy-Law-Markets-Technology**

**I. Climate Change & The Energy Transition**

**II. International Investment Law and ISDS**

**III. Alignment of IIL and Climate Policy/Obligations**

# I. Climate Change & The Energy Transition

# Climate Science

## Every tonne of CO<sub>2</sub> emissions adds to global warming

Global surface temperature increase since 1850–1900 (°C) as a function of cumulative CO<sub>2</sub> emissions (GtCO<sub>2</sub>)

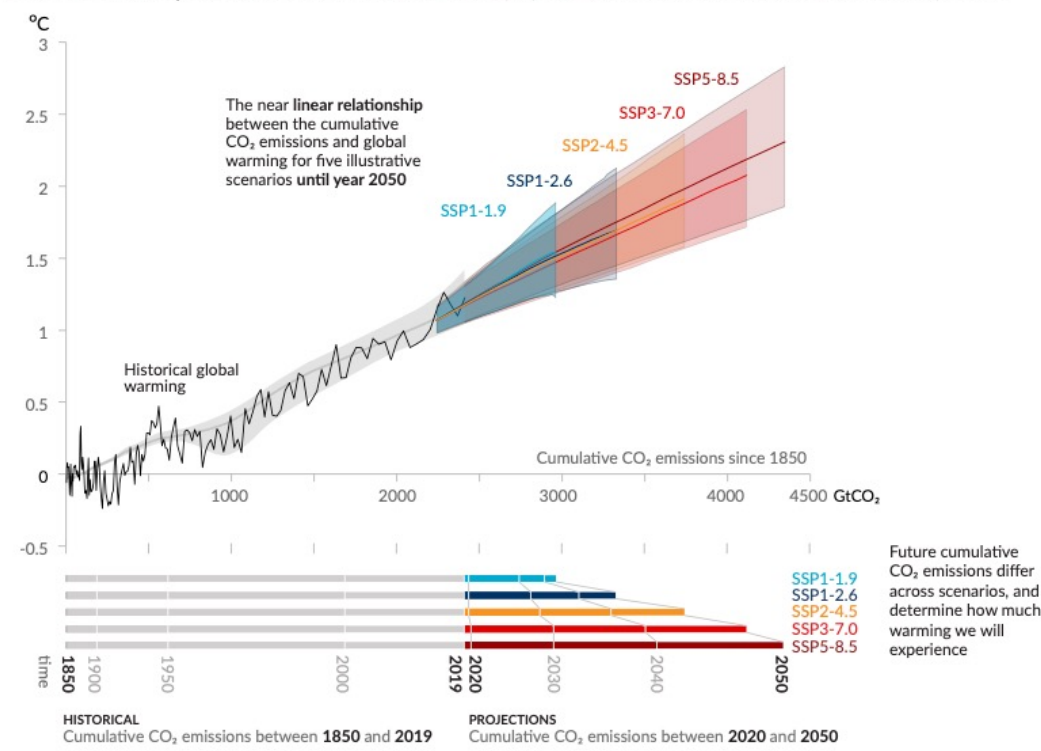


Figure SPM.10: Near-linear relationship between cumulative CO<sub>2</sub> emissions and the increase in global surface temperature.

Source: Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2021: The Physical Science Basis, Summary for Policymakers* (7 August 2021); see also: IPCC, *Special Report: Global Warming of 1.5°C, Summary for Policymakers* (6 October 2018) (“Pathways limiting global warming to 1.5°C with no or limited overshoot would require rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems”).

Table SPM.2: Estimates of historical CO<sub>2</sub> emissions and remaining carbon budgets. Estimated remaining carbon budgets are calculated from the beginning of 2020 and extend until global net zero CO<sub>2</sub> emissions are reached. They refer to CO<sub>2</sub> emissions, while accounting for the global warming effect of non-CO<sub>2</sub> emissions. Global warming in this table refers to human-induced global surface temperature increase, which excludes the impact of natural variability on global temperatures in individual years. {Table TS.3, Table 3.1, Table 5.1, Table 5.7, Table 5.8, 5.5.1, 5.5.2, Box 5.2}

Global warming between 1850–1900 and 2010–2019 (°C)		Historical cumulative CO <sub>2</sub> emissions from 1850 to 2019 (GtCO <sub>2</sub> )					
1.07 (0.8–1.3; <i>likely</i> range)		2390 (± 240; <i>likely</i> range)					
Approximate global warming relative to 1850–1900 until temperature limit (°C)*(1)	Additional global warming relative to 2010–2019 until temperature limit (°C)	Estimated remaining carbon budgets from the beginning of 2020 (GtCO <sub>2</sub> )					Variations in reductions in non-CO <sub>2</sub> emissions*(3)
		<i>Likelihood of limiting global warming to temperature limit*(2)</i>					
		17%	33%	50%	67%	83%	
1.5	0.43	900	650	500	400	300	Higher or lower reductions in accompanying non-CO <sub>2</sub> emissions can increase or decrease the values on the left by 220 GtCO <sub>2</sub> or more
1.7	0.63	1450	1050	850	700	550	
2.0	0.93	2300	1700	1350	1150	900	

# International Framework

- **United Nations Framework Convention for Climate Change (UNFCCC) 1992**
- **Paris Agreement 2015** – global peaking of GHG emissions ASAP; limit warming to 1.5/2°C; nationally determined contributions (NDCs)
- **COP 26 UN Climate Change Conference – Glasgow 2021**
- Race to Net Zero

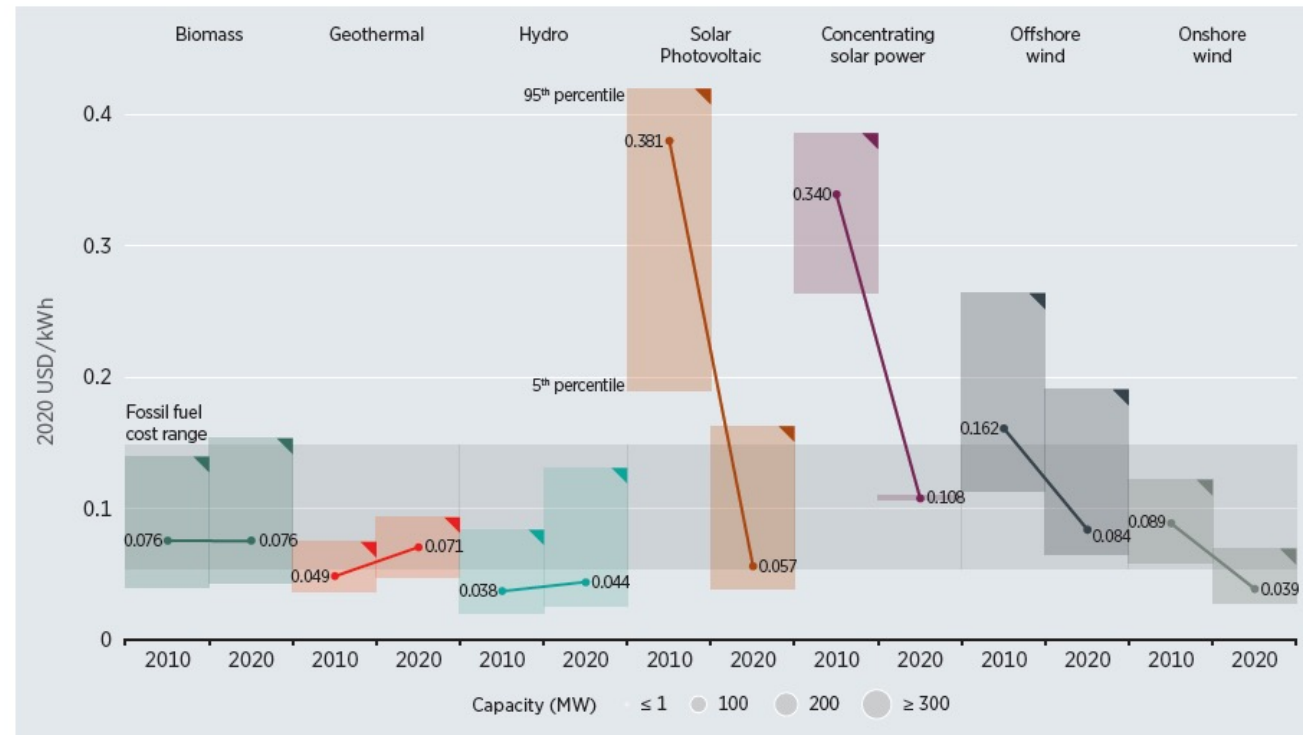
# Energy Transition

- Energy =  $\frac{2}{3}$  of total GHG emissions
- Transformative, systems change (*see IEA's "Net Zero by 2050" report (2021)*)
- Investment gap; >US\$4 trillion annual private investment needed (*IRENA, 2021*)
- High upfront capex
- De-risking investment and reducing cost of capital: Policy support, blended finance, investment protection
- Renewable energy cost / scale revolution
- Fossil fuel phase-outs, stranded assets
- Climate tech
- Carbon pricing



# Renewables Revolution

**Figure ES.2** Global LCOEs from newly commissioned, utility-scale renewable power generation technologies, 2010-2020



Source: IRENA Renewable Cost Database

Note: This data is for the year of commissioning. The thick lines are the global weighted-average LCOE value derived from the individual plants commissioned in each year. The project-level LCOE is calculated with a real weighted average cost of capital (WACC) of 7.5% for OECD countries and China in 2010, declining to 5% in 2020; and 10% in 2010 for the rest of the world, declining to 7.5% in 2020. The single band represents the fossil fuel-fired power generation cost range, while the bands for each technology and year represent the 5th and 95th percentile bands for renewable projects.

Source: International Renewable Energy Agency (IRENA), Renewable Power Generation: Costs in 2020 (2021)

# Role of Policy Support

## (2) Path dependence

Policy action in certain domains almost always has the outcome of changing to some degree the problem at hand, creating the need for further analysis and further policy action (Rittel and Webber, 1973). Playing the game changes the game. For example, research suggests that it was the German introduction of feed-in tariffs that created a market for solar photovoltaics, which allowed Chinese manufacturers to justify expanding production at a large scale, which subsequently resulted in substantial cost reductions and the availability of low-cost solar energy to the rest of the world (Yu, Popiolek and Geoffron, 2016). A relatively benign climate policy decision transformed the whole low-carbon industry and climate change problem, affecting the policy strategy of all nations, by opening new opportunities and closing older ones.

*Source: Jean-Francois Mercure et al., Risk-opportunity analysis for transformative policy design and appraisal, C-EENRG Working Papers, University of Cambridge 9 (2020)*



# Role of Policy Support

- ‘Government interventions will be critical in coming years both to react to the disruption caused by the pandemic and to set the energy transition on track to achieve internationally agreed goals. [...] Importantly, interventions must be persuasive enough to raise investor confidence to the levels needed to mobilise the massive amounts of private sector funding required to achieve the 2030 targets of the Paris Agreement [...].’

*Source: International Renewable Energy Agency (IRENA), The post-COVID recovery: An agenda for resilience, development and equality (2020)*

# ESG Investing/Regulation

- Market valueu should reflect society's valuesu (Mark Carney)
- UN's Principles for Responsible Investment: 3,000 institutional investors and PE firms with US\$103 trillion AUM
- Task Force on Climate-Related Financial Disclosures (TCFD)
- ExxonMobil shareholder vote (May 2021)
- EU Taxonomy Regulation: mobilise capital flows into sustainable investments

# Domestic Climate Litigation

- *Urgenda v. Netherlands*
- *Milieudefensie et al. v. Royal Dutch Shell*

# Just Transition

- Paris Agreement preamble recalls “the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities.”
- Sustainable Development Goals (“SDGs”) 8-10, adopted by all UN member States in 2015, call for “full and productive employment and decent work for all”, “sustainable industrialization”, and “[r]educe[d] income inequality”.

# U.S.-China Joint Statement Addressing the Climate Crisis

U.S. Special Presidential Envoy for Climate John Kerry and China Special Envoy for Climate Change Xie Zhenhua met in Shanghai on April 15 and 16, 2021, to discuss aspects of the climate crisis. At the conclusion of the discussion, the two Special Envoys released the following joint statement.

*Begin text:*

1. The United States and China are committed to cooperating with each other and with other countries to tackle the climate crisis, which must be addressed with the seriousness and urgency that it demands. This includes both enhancing their respective actions and cooperating in multilateral processes, including the United Nations Framework Convention on Climate Change and the Paris Agreement. Both countries recall their historic contribution to the development, adoption, signature, and entry into force of the Paris Agreement through their leadership and collaboration.
2. Moving forward, the United States and China are firmly committed to working together and with other Parties to strengthen implementation of the Paris Agreement. The two sides recall the Agreement's aim in accordance with Article 2 to hold the global average temperature increase to well below 2 degrees C and to pursue efforts to limit it to 1.5 degrees C. In that regard, they are committed to pursuing such efforts, including by taking enhanced climate actions that raise ambition in the 2020s in the context of the Paris Agreement with the aim of keeping the above temperature limit within reach and cooperating to identify and address related challenges and opportunities.
3. Both countries look forward to the US-hosted Leaders Summit on Climate on April 22/23. They share the Summit's goal of raising global climate ambition on mitigation, adaptation, and support on the road to COP 26 in Glasgow.
4. The United States and China will take other actions in the short term to further contribute to addressing the climate crisis:
  - ♦ a. Both countries intend to develop by COP 26 in Glasgow their respective long-term strategies aimed at net zero GHG emissions/carbon neutrality.
  - ♦ b. Both countries intend to take appropriate actions to maximize international investment and finance in support of the transition from carbon-intensive fossil fuel based energy to green, low-carbon and renewable energy in developing countries.
  - ♦ c. They will each implement the phasedown of hydrofluorocarbon production and consumption reflected in the Kigali Amendment to the Montreal Protocol.
5. The United States and China will continue to discuss, both on the road to COP 26 and beyond, concrete actions in the 2020s to reduce emissions aimed at keeping the Paris Agreement-aligned temperature limit within reach, including:
  - ♦ a. Policies, measures, and technologies to decarbonize industry and power, including through circular economy, energy storage and grid reliability, CCUS, and green hydrogen;
  - ♦ b. Increased deployment of renewable energy;
  - ♦ c. Green and climate resilient agriculture;
  - ♦ d. Energy efficient buildings;
  - ♦ e. Green, low-carbon transportation;
  - ♦ f. Cooperation on addressing emissions of methane and other non-CO2 greenhouse gases;
  - ♦ g. Cooperation on addressing emissions from international civil aviation and maritime activities; and
  - ♦ h. Other near-term policies and measures, including with respect to reducing emissions from coal, oil, and gas
6. The two sides will cooperate to promote a successful COP 26 in Glasgow, aiming to complete the implementation arrangements for the Paris Agreement (e.g., under Article 6 and Article 13) and to significantly advance global climate ambition on mitigation, adaptation, and support. They will further cooperate to promote a successful COP 15 of the Convention on Biological Diversity in Kunming, noting the importance of the post-2020 Global Biodiversity Framework, including its relevance to climate mitigation and adaptation.

**Source: U.S. Department of State, U.S.-China Joint Statement Addressing the Climate Crisis (17 April 2021)**

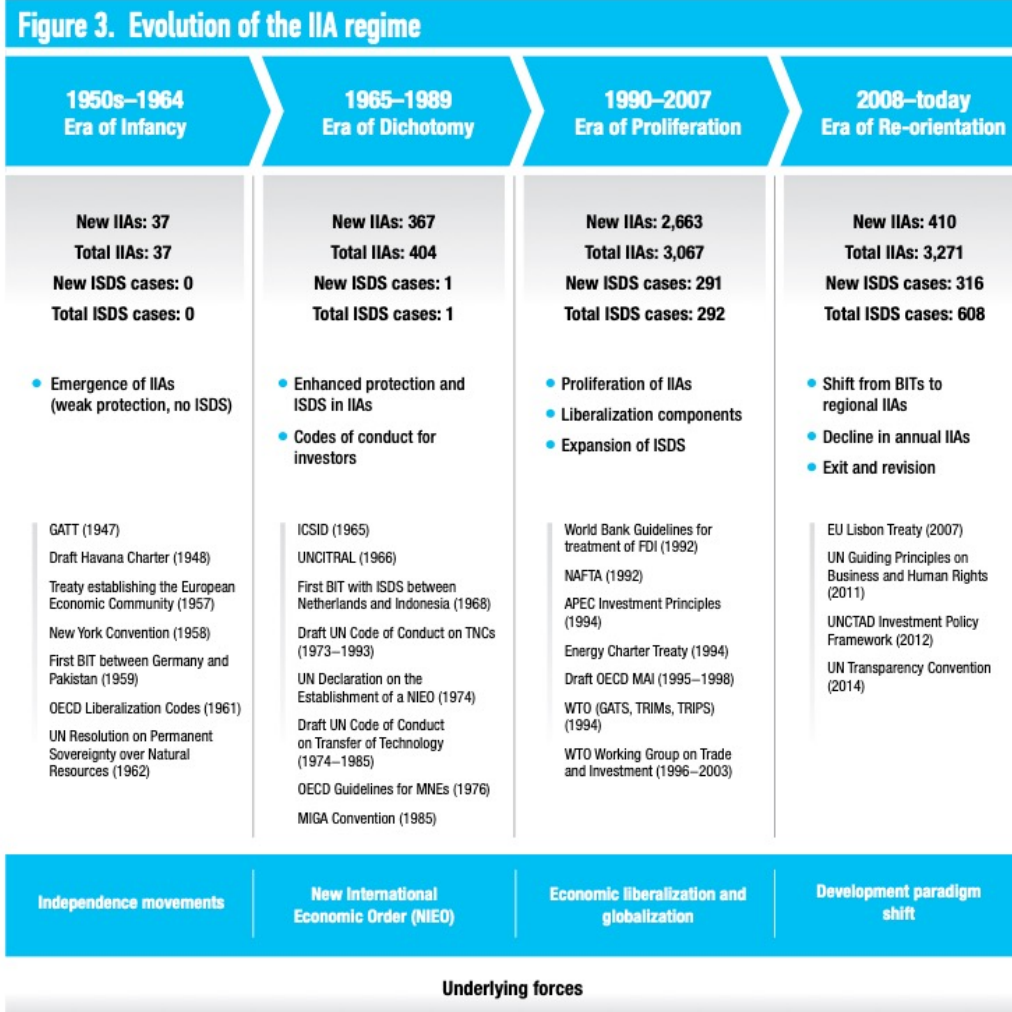


## II. International Investment Law & ISDS

# Investment Treaty System

- Foreign investment protection system: PRI (MIGA), IIAs (ICSID)
- Political and regulatory risk
- Predictable/stable legal and regulatory framework in Host State
- Criticism and reform: *quality* of investment, right to regulate, ISDS

# Evolution of IIAs & Jurisprudence



Source: UNCTAD, WIR15.

Note: Years in parentheses relate to the adoption and/or signature of the instrument in question.

Source: Source: UNCTAD, Reform Package for the International Investment Regime (2018)

# Reform

“The conservation of natural resources, environmental protection and social well-being did not feature prominently on the international policy agenda some 50 years ago...As the global community’s views on development have evolved, societies’ expectations about the role of foreign investment have become more demanding. Today, it is no longer enough that investment creates jobs, contributes to economic growth or generates foreign exchange. Countries increasingly look for investment that is not harmful for the environment, which brings social benefits, promotes gender equality, and which helps them to move up the global value chain.”

*Source: UNCTAD, Reform Package for the International Investment Regime (2018)*

# Right to Regulate

- Policy space
- Climate policy



# Climate Provisions in IIAs?

- No distinction between high and low carbon activities
- Paris Agreement and climate obligations?

# Fair & Equitable Treatment

“Each Contracting Party shall, in accordance with the provisions of this Treaty, encourage and create stable, equitable, favourable and transparent conditions for Investors of other Contracting Parties to make Investments in its Area. **Such conditions shall include a commitment to accord at all times to Investments of Investors of other Contracting Parties fair and equitable treatment.**”

*Source: Energy Charter Treaty, Article 10(1) [emphasis added]*

# Fair & Equitable Treatment

- IIA-specific and fact-specific
- Legitimate expectations of regulatory stability
- Specific commitments and stabilization clauses
- Investor due diligence and reliance
- Reasonableness of Host State's measures

# ISDS Claims Concerning The Energy Transition

- Changes to Renewable Energy Policy Support
- Coal Plant Phase-Outs

# Renewable Energy Claims

- 70+ claims, predominantly Energy Charter Treaty
- Including: Albania, Bulgaria, Canada, Czech Republic, Germany, Italy, Japan, Kenya, Romania, Spain, Tanzania
- Changes to RE policy support, e.g. feed-in-tariffs
- Compensation for reduced income streams
- Investors' legitimate expectations: tariff stability; a “reasonable return”; no radical change to the regulatory regime?
- Paris Agreement and climate obligations?



# Coal Plant Phase-Out Claims

- Two US\$1 billion claims against Netherlands in 2021
- Compensation for phase-out
- Legitimate expectations
- Valuation

# III. Alignment of IIL and Climate Policy/Obligations

# ICC Task Force on the Arbitration of Climate Change Related Disputes

**5.63** In the international investment treaty context, the **Paris Agreement** is now expressly referenced in some bilateral investment treaties, including the *2018 Netherlands Model Bilateral Investment Treaty*.<sup>107</sup> As a result, arbitral tribunals determining claims made by a private sector investor against a host state under such treaties are obliged to give greater consideration to international climate change obligations bearing on states, and specifically the Paris Agreement. Even where there is no reference to the Paris Agreement in the applicable bilateral investment treaty, international obligations are usually interpreted on a progressive basis and it is likely that the Paris Agreement, and **NDCs**, will inform the investing party's legitimate expectations in determining, for example, a fair and equitable treatment claim.

*Source: International Chamber of Commerce (ICC), Resolving Climate Change Related Disputes Through Arbitration And ADR (2019)*

# Tribunals: Treaty Interpretation

- Article 31(3)(c) VCLT: “any relevant rules of international law applicable in the relations between the parties...”
- *Philip Morris v. Uruguay* (2016): international public policy

# State Practice : Treaty (Re)negotiation

- Stockholm Treaty Lab
- Energy Charter Treaty (ECT)



# ECT Modification

- EU's position is that “[t]he Modernised ECT should reflect climate change and clean energy transition goals, and contribute to the achievement of Paris Agreement objectives.”
- EU proposals include: graduated phase-out of investment protection for fossil fuels; coverage of new low carbon investments; right to regulate; regulatory stability and subsidies; indirect expropriation carve-out for non-discriminatory climate change measures; non-regression clause; commitment to clean energy transition.

*Source: Energy Charter Secretariat, Discussion of the Energy Charter Conference (6 Oct. 2019); European Commission, European Union text proposal for the modernisation of the Energy Charter Treaty: additional submission (March 2021)*

# Compensation

- Climate change > financial and scientific complexity
- Impact on valuation of physical and transition risks
- New potential factors, e.g. social cost of carbon, carbon border adjustment mechanism
- International standard of compensation for fossil fuel phase-outs?

# Conclusion

- Transformative, systems change
- IIL's relevance and legitimacy in Net Zero era
- Radical collaboration among policymakers and stakeholders
- Break down professional silos