

In Pursuit of a Just Energy Transition Through International Unification of Laws on Public-Private Partnership: A Case Study of Central Asia

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My main arguments

- Paradoxically, many renewable energy projects that are currently implemented, in fact, promote “unjust” energy transition, because wrong legal instruments are used.
- Public-private partnership (PPP) is the most appropriate legal instrument for enabling a “just” energy transition worldwide.
- Success of the just energy transition depends on the international harmonisation of laws on PPP.

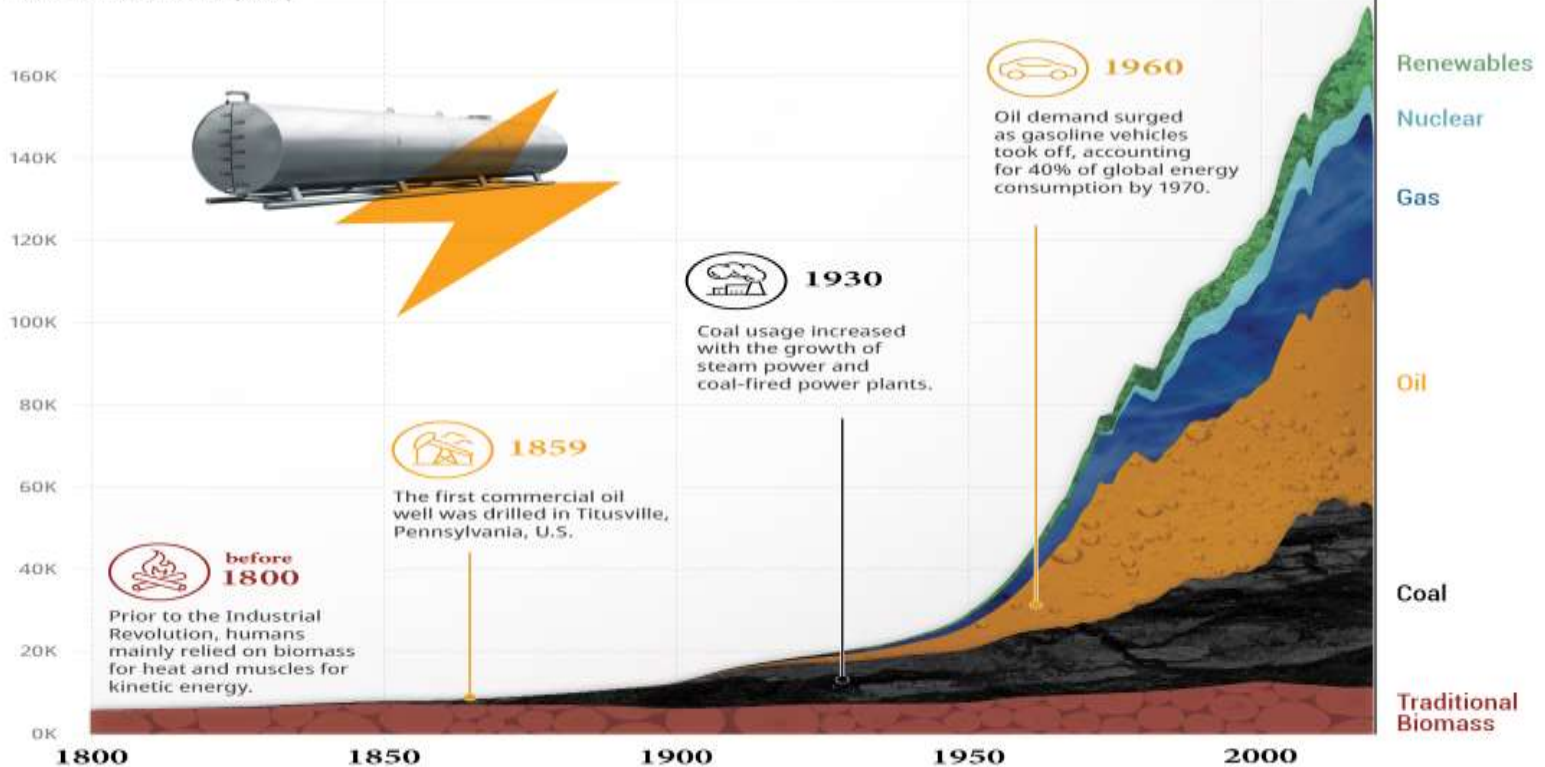
THE HISTORY OF Energy Transitions

The economic and technological advances over the last 200 years have transformed how we produce and consume energy.

Here's how the global energy mix has evolved since 1800.

Global Primary Energy Consumption by Source 1800-2020

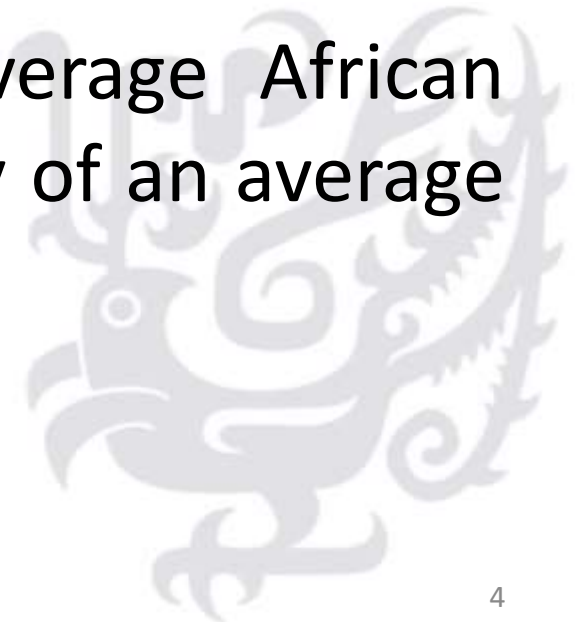
180K Terrawatt-hours (TWh)



Source: Vaclav Smil (2017), BP Statistical Review of World Energy via Our World in Data

What is “just” energy transition?

- No universally accepted legal definition.
- It is generally understood as a fair distribution of burdens and benefits of the transition to a low-carbon economy.
- “Climate Colonialism” - an average African consumes a tenth of the energy of an average European.



International harmonisation of the laws on PPP

- No universally accepted legal definition of PPP.
- UNCITRAL Model Legislative Provisions on Public-Private Partnerships adopted in 2020.
- UNECE/EBRD Model Law for Public-Private Partnerships/Concessions adopted in 2022.
- PPP is no longer merely a generic term, but a *sui generis* legal concept of international (transnational) commercial law.

UNCITRAL

legal principles of PPP

- 1) Transparency
- 2) Fairness
- 3) Stability
- 4) Proper management
- 5) Integrity
- 6) Competition
- 7) Economy
- 8) Long-term sustainability



What are the Sustainable Development Goals?

- The SDGs of the 2030 Agenda are a set of 17 goals adopted in September 2015 at a historic United Nations Summit that aim to end poverty, protect the planet and ensure prosperity for all by 2030.
- SDG 7 - ensure access to affordable, reliable, sustainable and modern energy for all.
- The SDGs call for the different type of PPP.

What is the PPP for SDGs?

- PPP for SDGs is a new type of PPP designed to implement the SDGs.
- Traditional PPP model - “value for money”.
- New “PPPs for SDGs” model - “value for people and the planet” as well as “value for money”.
- PPP for SDGs projects shall comply with 10 UNECE Guiding Principles on PPPs in support of the SDGs.

UNECE

legal principles of PPPs for SGDs

- Principle 5: Disclose more information about projects to society especially on the commitments made to various partners in the project.
- Principle 7: Set out clearly the projects' selection criteria to promote “Value for People” so that the best projects aligned with the SDGs can be selected.

UNECE tools and standards

- **People-first Infrastructure Evaluation and Rating System (PIERS)** – platform for scoring projects against the PPP for the SDGs criteria.
- **Standard on Public-Private Partnerships in Renewable Energy** issued in 2019 - provides policymakers with guidance and tools for the design and implementation of PPPs for the SDGs in the renewable energy (RE) sector.

What is PPP as a legal concept?

- This is a universal legal definition of PPP from UNCITRAL, isn't it?
- Is there a real difference between “PPP” and “PPP for SDGs” as legal concepts?
- Does the “PPP for SDGs” as a legal concept add any value?
- An energy PPP project is the so-called “independent power producer” (IPP) project.

The role of law in enabling a just transition

- Securing adequate investments in renewable energy source (RES) projects is a central part of the just energy transition.
- Paradoxically, if a wrong legal instrument is used, renewable energy investments can lead to an “unjust” energy transition.



PPP for just energy transition

- PPP if properly structured as a legal instrument for the implementation of renewable energy projects can help to achieve the energy trilemma of equity, security, and sustainability.
- PPP is, therefore, the most appropriate legal instrument for providing social and economic infrastructure, including renewable energy facilities.

Why Central Asia as a case study?



Common problems in Central Asia

- Common climate change challenges.
- Energy deficit.
- Cross-subsidisation of electricity tariffs.
- Crumbling energy infrastructure struggles to support the intermittent renewable energy sources in the electricity mix.
- Lack of flexible capacity (mainly Kazakhstan's problem).

Water-energy nexus



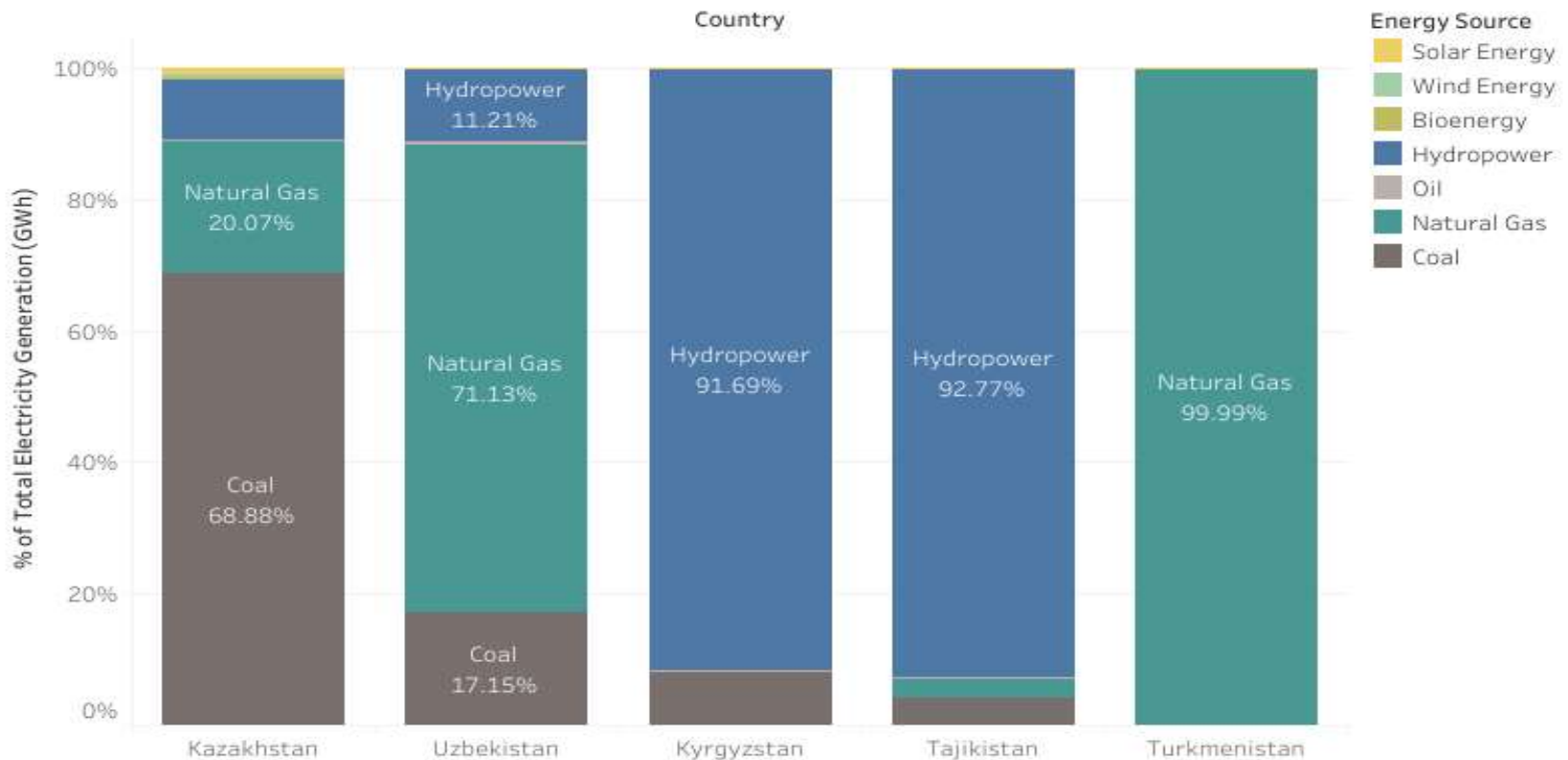
Central Asia's

“just” energy transition context

- Tajikistan and Kyrgyzstan mostly rely on hydropower, Uzbekistan and Turkmenistan on natural gas, whereas Kazakhstan on coal, for electricity.
- All 5 countries ratified the Paris Agreement.
- National net zero economy targets – 2050 (Kyrgyzstan) and 2060 (Kazakhstan). No set targets - Tajikistan, Turkmenistan and Uzbekistan.

Energy mix in Central Asia

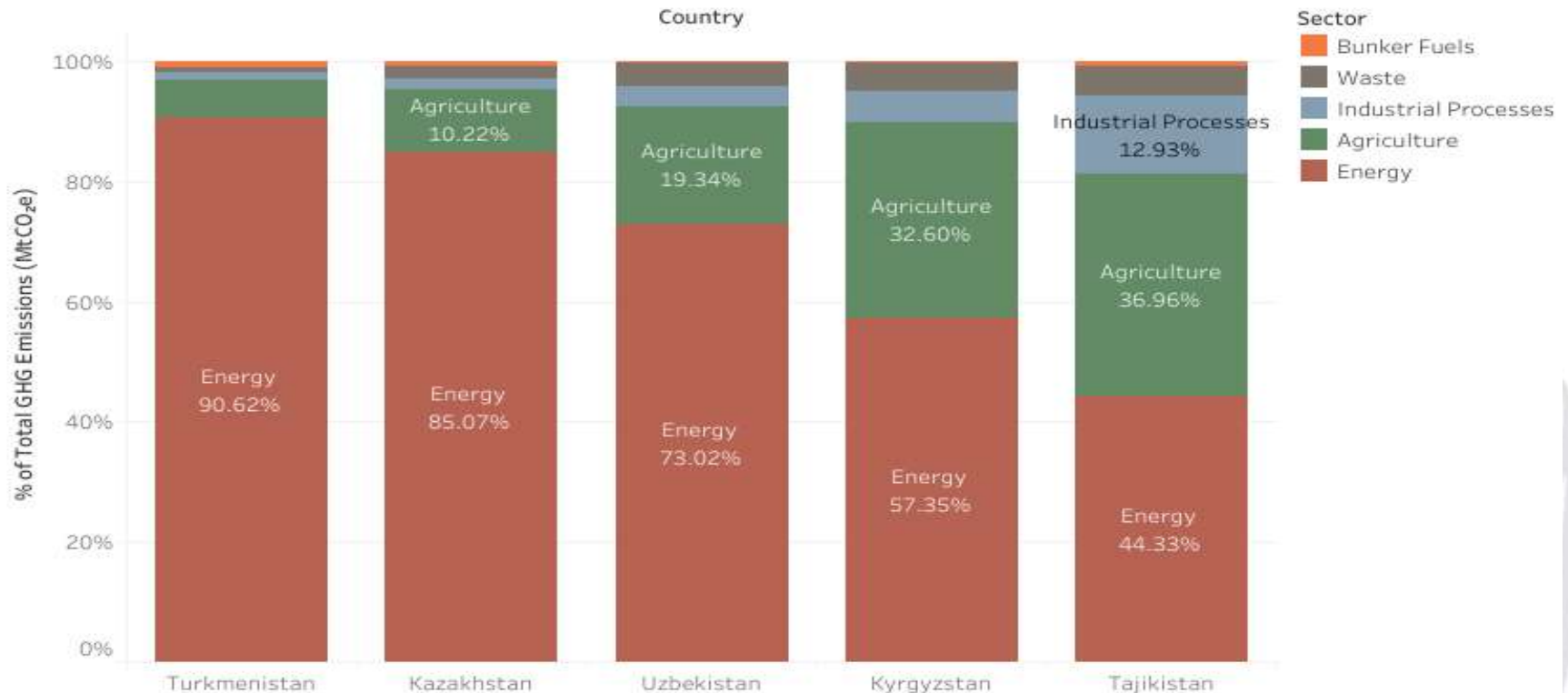
Electricity Generation by Energy Source in Central Asia , 2019



Data Source: International Renewable Energy Agency (IRENA)

Energy sector is the biggest polluter

GHG Emissions by Sector in Central Asia, 2019



Data Source: CAIT (Note: The "energy" sector in the CAIT dataset includes 6 subsectors: building, electricity/heat, fugitive emissions, manufacturing/construction, transportation, and other fuel combustion. For the specific purpose of this visualization, we have excluded the "Land-Use Change and Forestry" sector in the original dataset.)

Renewable energy investments in Central Asia

- The region has seen an unprecedented growth in renewable electricity since 2018 driven mainly by solar and wind power additions.
- Nevertheless, wind and solar comprise only about 6% of installed capacity in the region.
- The region would need to invest some \$1.407 trillion in renewable energy between 2020 and 2050.

Diverging paths

- All 5 countries of Central Asia have adopted renewable energy strategies and established corresponding legislative and regulatory frameworks for its development.
- Different legal instruments, however, are used to attract international investments in renewable energy projects.
- Uzbekistan and Kyrgyzstan rely on PPP.

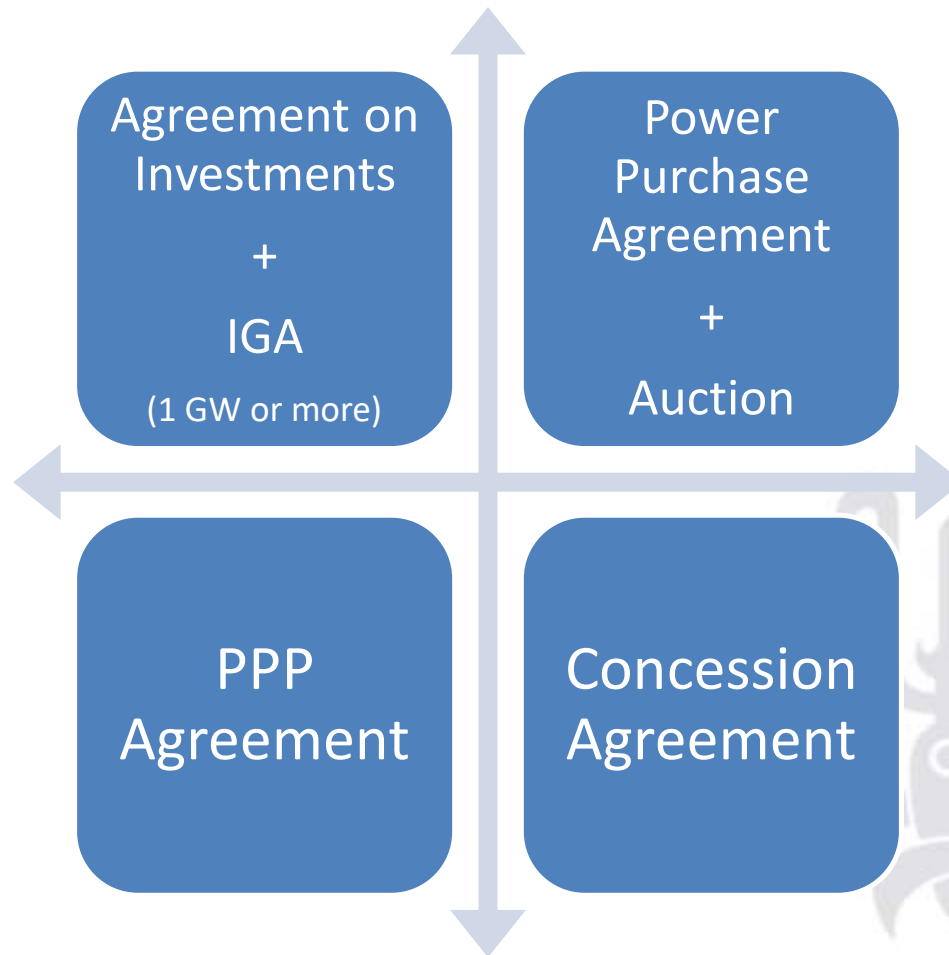
Kazakhstan

- Kazakhstan was among the top five developing economies by international investment in renewable energy in 2015 – 2022.
- As of today, there are 146 RES facilities with a total capacity of 2.9 GW, which is about 4.53% of the energy mix.
- The target is to reach 15% of electricity production from renewables by 2030

Expected energy mix by 2035

Renewable energy	24.4%
Hydropower	10.8%
Natural gas	25.8%
Coal	34.3%
Nuclear power	4.7%

Legal instruments in Kazakhstan



Action plan until 2035

	Name of the large-scale RES project	Capacity	Commissioning year	Method
1	Construction of a wind power plant with energy storage systems by Masdar (United Arab Emirates)	1 GW	2028	Agreement on investments + IGA
2	Construction of a wind power plant with energy storage systems by Total Energies (France)	1 GW	2028	Agreement on investments + IGA
3	Construction of a wind power plant with energy storage systems by ACWA Power Company (Saudi Arabia)	1 GW	2028	Agreement on investments + IGA
4	Construction of wind and solar power plants with energy storage systems by HEVEL (Russia)	1GW	2028	Agreement on investments +?
5	Construction of a wind power plant with energy storage systems by China Power International Holding (China)	1 GW	2028	Agreement on investments +?

Unique legal framework for large-scale RES projects

International treaty

Agreement on
investments

PPA



Renewable energy in Kazakhstan: an unjust transition?

- Ad hoc International treaties that provide for significant preferences and exemptions from the Kazakhstani laws for certain projects.
- No open tender.
- Opacity in contract provisions.
- “Agreement on investments” is not an appropriate legal instrument for these purposes?

Neocolonialism?

- Why do certain investors from certain countries have preferential treatment?
- Who will benefit and who will lose from such type of projects energy transition?
- Who and on what legal basis agreed on the terms (i.e., including tariffs) of all agreements on behalf of Kazakhstan?
- The motivations are political rather than based on “real needs”?

Rhetoric questions

- Would several small RES projects implemented through auctions likely be a more cost-effective, environmentally preferable, and socially beneficial alternative to building one large RES power plant by an investor, appointed by the host government?
- Is the “just” energy transition not only about the source of energy but about enabling all the SDGs?

Renewable energy project is not an end in itself!



Uzbekistan

- Goal of mobilizing \$30 billion from the private sector by 2030.
- Target to reach 40% of electricity production from renewables by 2030.
- Competitive bidding process.
- PPP as a preferred legal instrument.



Kyrgyzstan

- More than 90% of its electricity is generated from hydropower, so the target for the RES is to reach 10% by 2040.
- Competitive bidding process.
- PPP as a preferred legal instrument.



Why international harmonisation of laws on PPP is needed?

- Helps to address the problem of “fake” PPPs.
- Helps to enable so-called “cross-border PPPs”.
- Helps to revive China’s “Belt and Road Initiative” (BRI).
- Helps to achieve Agenda 2030 and the Sustainable Development Goals (SDGs).
- Helps to enable “just” energy transition.