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Energy as a geopolitical battleground in Sri Lanka

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ABSTRACT

Sri Lanka has committed to achieving carbon neutrality status by 2050, but it is foreseeing more coal power plants, which has created spaces of contention locally and geopolitically. What is the role of geopolitics and local politics in shaping Sri Lanka's decision to embark on coal at the very point in time when it has pledged a commitment to renewables? This paper explores this puzzle with particular attention to the encounters between global and local actors and the role of the state in the socio-political construction of the geopolitical battleground of energy. It traces the role and influence of international actors and agendas on domestic actors and dynamics within the state and society, and the opportunities or obstacles for geopolitical actors exerting extensive influence. The paper offers fresh insights into understanding the geopolitics of energy transition in a developing country context.

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Introduction

International climate commitments and local political realities have made energy transitions a contentious issue. In Sri Lanka, energy has become a battleground for geopolitical control through development aid, loans, and other bilateral and multilateral assistance. Despite having a high potential for solar and wind energy and an ambitious carbon neutral commitment, the energy transition policy in Sri Lanka still encompasses coal as a critical component. The puzzle this paper addresses is why Sri Lanka is going along with coal, knowing well that it will reverse its climate commitments, create environmental degradation and increase electricity prices. What is the role of geopolitics and local politics in Sri Lanka's coal pathways as part of the energy transition?

Energy transitions depend heavily on technology transfer, innovation, and local and foreign private investments (Hafner and Tagliapietra 2020; Goldthau, Eicke, and Weko 2020; International Renewable Energy Agency (IRENA) 2019; Murphy and Smith 2013; Potocnik 2007). The inability of developing countries to make the shift towards renewables without external support allows extraneous actors to play a role in their energy transitions (Hafner and Wochner 2020; Yermakov 2021; Ansari and Holz

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2020). These external actors – mainly states – embrace the opportunity to increase their influence through supporting energy transitions. This calls for critical scholarly attention to the new geopolitics of energy transitions.

Energy is a key challenge faced by developing countries, and many emphasize the uptake of renewable energy to achieve their climate commitments. At the same time, energy security and affordability are often the overriding priorities, taking precedence over trying to fulfill their international climate commitments (Sovacool 2014, 2017; Healy and Barry 2017). This conundrum makes energy transition a challenging task for policymakers (Munro 2019; Bridge and Gailing 2020; Golubchikov and O’Sullivan 2020). Given this backdrop, energy has become a critical geopolitical arena for contestation. Energy has also become a geostrategic tool, where external actors who provide and control energy directly or indirectly have influence and advantage.

The transition to a global energy system dominated by renewable energy will create geopolitical winners and losers, and as Paltsev (2016) argues, the future geopolitics of renewable energy could resemble the post-Cold War situation, where uncertainty prevails as to widely different possible outcomes. Transitioning to renewables could take multiple pathways and trajectories, any of which would also need to consider energy security, sustainability, and financial possibilities, especially in the global South.

Peters (2003) was among the first scholars to argue that the development of renewable energy would lead to more equitable energy distribution and lower geopolitical tensions. Vakulchuk, Overland, and Scholten (2020) likewise argue that renewable energy expansion would lessen the role of geopolitics in international relations since renewable energy will increase the local availability of energy and thereby make energy less prone to political tensions. Hoggert (2014) similarly notes that small-scale photovoltaics technologies are likely to promote a secure low carbon transition with reduced geopolitical risks. However, renewable energy, while strengthening energy security, could simultaneously lead to the emergence of new interdependencies between countries.

Several scholars argue that the transition to a predominantly renewable energy system poses numerous new geopolitical risks (Westphal 2011; Scholten and Bosman 2016; Overland 2019; Vakulchuk, Overland, and Scholten 2020). Westphal and Droege (2015) point out that metamorphosing the global energy mix will introduce greater diversity but at the risk of less security. Paltsev (2016) argues that supply and demand for energy will remain decisive factors in the future global balance of power. These diverse positions on the effects of geopolitics and energy transitions call for new contextual knowledge of key cases.

This paper responds to this by exploring the dynamics and politics of energy transitions in a changing geopolitical order. The paper presents a theory-informed single case study of Sri Lanka, focusing on how energy has become a geopolitical battleground and how encounters among external and internal actors heavily influence a country’s energy future and energy transition. Sri Lanka has committed to achieving carbon neutrality by 2050, but it is at the same time commissioning more coal power plants, causing contention both locally and geopolitically. The paper examines this puzzle with particular attention to the encounters between global and local actors and the role of the state in the socio-political construction of the geopolitical battleground of energy.

Understanding the geopolitics of energy transitions

The contemporary world order is in transition as the centrality of global institutions is weakened, nation-states reassert their powers, and new actors lead the way with new global and regional initiatives and coalitions (Dian and Menegazzi 2018; Weiss and Wilkinson 2018).

Energy transitions offer one of the best available opportunities to study the new modes of geopolitical power play that have arisen in this changing international context. This results not only from the continued centrality of energy but also the extensive and innovative experiments and transformations seen in the energy sector, with the emergence of renewables as clear viable alternatives for oil, coal and natural gas. Energy transitions consequently serve as a useful lens to scrutinize the increasing tendency for collaboration in the many sectors that also permit political and economic trade-offs. Geopolitics is now increasingly understood in terms of its expression not only on the national and international levels but at all spatial scales (Blondeel et al. 2021; Bridge and Gailing 2020). Contemporary environmental politics articulate this trend particularly powerfully, as exemplified by the complex interactions that take place between decentralized networks made up of multiple actors across all scales.

The global challenges encountered will condition the future of geopolitical actions. Energy transitions form a global challenge that influences the modality of the emerging world order and leads to alternative conceptualisations of geopolitical actions (Acharya 2014; Barnett and Duvall 2010). In the light of these global challenges, there is a need for a new understanding of the emerging political communities which will be composed of new actors, agents, and dynamics. Novel challenges also generate new hegemons and counter-hegemons, and the interplay between them paves the way for a fresh understanding of the new geopolitics in the light of global challenges, specifically from a regionalized world perspective. The question is how the actors, agents and dynamics in developing countries would secure and maintain the important mainstays of democratic politics, such as legitimacy, inclusivity, accountability, and equity, with new global challenges, such as energy transitions (Van der Merwe and Dodd 2019; Fischer and Newig 2016).

Geopolitics of energy transitions is an emerging research field. Most of the research relating to the geopolitics of energy is either about the geopolitics of oil and gas (Akiner 2004; Amineh 2007; Umbach 2010) or the geopolitics of renewable energy (Scholten and Bosman 2016; Overland 2019). Energy transitions have been addressed in studies on economic aspects of energy diffusion (Meade and Islam 2015; Duan, Zhu, and Fan 2014), energy technologies (International Energy Agency (IEA) 2014; Schaeffer et al. 2015; Fortes et al. 2015), and policy implications (Schwanitz et al. 2015).

In recent years, a growing body of literature has emerged on the geopolitics of energy transition. Scholten (2018) discuss the winners and losers in the new global energy situation, the shift in regional and bilateral energy interactions between established and developing countries, governance responses, and infrastructure improvements. According to Goldthau, Keim, and Westphal (2018), the energy revolution ultimately entails a systemic shift; the low-carbon transformation is expected to make the energy system more sustainable and considerably more diverse on a global scale. However, new difficulties created by energy transition strategies could, according to Hache (2018), turn out to

be as complex as today's energy geopolitics. Local and decentralized relationships may add a new geopolitical layer to traditional actors, while technical, economic, sociological, behavioral, geographical, and legal elements may further complicate the evolving conundrum. After analysing the literature on the geopolitics of energy system transformation, Blondeel et al. (2021) conclude that more profound knowledge of the link between politics and energy systems is required to forecast sustainable energy transition paths. This paper addresses this need through new contextual knowledge on the interlinkages between energy transitions and geopolitics from a global South perspective.

Bazilian et al. (2019) outline four scenarios for the energy transition and its impacts on global geopolitics: cooperation and global consensus on climate change that facilitates international policymaking; technological advancement charting a new path to transition; country-first policies that prioritize energy security, known as dirty nationalism; and business as usual where fossil fuels remain dominant. Lombardi and Grünig (2016) look at low-carbon energy security and energy geopolitics, focusing on four themes: challenging the energy security paradigm; climate change and energy security goals; energy security in a geopolitical context; and the impact of large-scale renewable energy projects on energy security and shifting geopolitical alliances. Hafner and Wochner (2020) describe how the global energy transition will unfold among several major global geoeconomic/geopolitical blocks and how it will influence and be influenced by global governance. They identify four factors contributing to the energy transition: global energy demand, top-down climate legislation, bottom-up technology, and energy industry technical innovation. There is thus a growing literature on energy transitions and geopolitics, but it is largely limited to the global North. This paper adds to this literature through a global South perspective and an empirical case study of Sri Lanka.

Geopolitics of energy transition in the global south

The geopolitical and geoeconomic concerns surrounding energy and climate policy are growing more complicated, according to Eyl-Mazzega and Mathieu (2019), resulting in rekindling old energy rivalries and creating new ones. According to Makarov, Chen, and Paltsev (2017), the post-Paris energy environment presents a challenge for industrialized and developing countries in terms of energy transition and climate pledges.

Overland (2019) examines four emerging misunderstandings about renewable energy geopolitics: competition for essential resources; new resource curses; electrical disruption as a geopolitical weapon; and cybersecurity as a geopolitical concern. He argues that higher use of renewable energy would lead to greater decentralization, which may make the system more resilient. International energy competition, he believes, will shift from control of physical resources, their locations, and transportation routes to control of technology and intellectual property rights.

From the global South perspective, theories of International Political Economy (IPE) help understand the energy transitions. Renewable technologies have reached commercial maturity, according to their cost curves. The costs of solar photovoltaic (PV) units have dropped by roughly 90% in the last decade (IRENA 2019), and onshore wind turbine unit costs have followed suit. This is primarily due to scale effects and a worldwide renewable energy capacity investment boom. Low-carbon technologies are now

cost-effective energy sources, and are attracting the highest amount of investment of any energy source in many locations (IEA 2019).

This trend is expected to continue given that the underlying investment decisions reflect government policies that favor renewables and the strong market pull from large economies. There are, however, considerable disparities in global disparities between the allocation and distribution of global capital as developing nations got just 12% of the total investment (Frankfurt School-UNEP Centre/BNEF 2018). This uneven investment pattern in renewables is consistent with overall energy investment. According to the IEA, middle-to-low-income nations contributed 14% of global investment, accounting for 41% of the world's population. In contrast, high-income nations got more than 40% of investment volumes, accounting for less than 15% of the global population (IEA 2019).

In order to ensure sustainable development in low-income nations, adequate investment in low-carbon energy sources is required, putting them on a climate-friendly growth path. In reality, developing countries have the most significant financial demands for mitigating technology (Tempest and Lazarus 2014). Many nations in the global South are grappling with a “technology gap” (Castellacci 2011), which is a source of persistent underdevelopment and poverty (Fofack 2008). As a result, some observers argue that promoting access to low-carbon technology would likely result in a “development dividend” in the least developed countries (Forsyth 2007). Glachant and Dechezleprêtre (2016) found that many developing nations remain cut off from international technology transfers. This is because worldwide private developers consider politically unstable countries too risky for investments, and there is a weak commercial rationale for private enterprise to engage in very impoverished countries or areas (Kirchherr and Urban 2018).

The cost of transitioning away from high-carbon systems and the options for alternatives determine whether countries can avoid infrastructural and technical carbon lock-in (Seto et al. 2016). As a result, existing technologies and infrastructure will resist change in nations that are currently not attractive for cleantech investments and do not engage in low-carbon tech value chains. When private enterprises refuse to invest, international institutions (Ockwell and Byrne 2015; Rimmer 2019) and public-private partnerships can help spread low-carbon technologies (Chon, Roffe, and Abdel-Latif 2018).

External actors, as well as domestic variables, play a role in carbon lock-in. For example, China's overseas investments in fossil fuels are far more than those in renewables (Li, Gallagher, and Mauzerall 2018). So Chinese investments as external actors contribute to carbon lock-in in their investing countries. Li, Gallagher, and Mauzerall (2020) point out that Chinese energy investments focus on developing nations, with the great majority going to coal (24.5 GW), gas (20.5 GW), and hydropower (18.1 GW), while wind (7.2 GW) and solar (3.1 GW) account for a very modest percentage. Investment challenges have undermined Chinese renewable uptake externally as fossil fuels have robust financial backing locally (Larsen and Oehler 2022). External investments help create a domestic environment conducive to carbon lock-in.

Such investments produce path-dependent positive returns in fossil infrastructure, potentially delaying the adoption of low-carbon technology and the deployment of renewables despite their economic viability (Unruh 2000; Unruh and Carrillo-Hermosilla 2006). This might substantially obstruct low-carbon future development pathways

in the countries receiving such investments. It is feasible to break free from such a shackle, but it comes with significant transaction costs because it necessitates modifying long-established infrastructure, norms, and (economic and political) institutions (Seto et al. 2016).

The energy transition will impact regional energy trade and integration. As part of the energy revolution, regional energy commerce is likely to grow as money may be generated from the cross-border balancing of renewables supply changes (Criekemans 2018). As a result, cross-border electrical systems become more integrated. According to observers, this gives a competitive advantage to countries that control and operate regional networks and to the most efficient producers. Controlling regional grid infrastructures, including power lines, storage, and software, will become increasingly important for national security for projecting influence and authority (Criekemans 2018). Regional integration may also occur around power centers in networked grids (Goldthau et al. 2019).

The crucial issue here in the context of the global energy transition and the global South is that technology, commerce, and finance are seen as a means to an end rather than industries in and of themselves. According to the number of patents in the low-carbon technology arena, the OECD countries and China have technological leadership. Because of their reputation as technological laggards, nations in the global South may become politically dependent on the goodwill of prominent green technology patent leaders. Similarly, trading cannot be said to take place on a global scale. In the context of the global energy transition, the concentration of renewable technology patents can be interpreted as a sign of the continued existence of the established OECD dominance in the global economic system, supplemented by the emergence of a small number of new core countries, most notably China. Chinese patents account for one-third of all low-carbon technology patents (IRENA 2019). The transition pathways have been modeled and facilitated to allow externalities rather than internal solutions where local solutions are discouraged. The energy transitions have been designed where the global South are dependent on external assistance rather than exploring internal capabilities and developing local capacity. For example, the global deployment of solar panels does not fundamentally alter the logic of perpetuating dependent relationships; hence, intellectual property rights continue to be necessary to profit from innovation. More to the point, low-carbon solutions cannot be projected to diffuse globally due to free-market forces, sufficient demand pull, and dropping unit costs, according to the IPE perspective. Instead, they may be made available in the strategic interests of both the countries that these innovations originate from and the organized incumbents in the destination countries. The case study will examine this through analytical attention to the interconnected dynamics of involvement, investment and innovation in energy transition, what I will refer to as a “triple I framework”.

The Triple I framework

In the context of developing countries, energy transitions have been primarily framed through the slogan: “affordable energy for all” (United Nations Department of Economic and Social Affairs 2016). These countries depend on external actors for technology, aid, finances and know-how.

Whilst many of these countries have long been dependent on energy from outside, the goal of increasing energy supply for development combined with the climate agenda gives new impetus for external actors to use energy as a geopolitical tool and make energy one of the central themes in the geopolitical arena. Energy has long been used as a tool to gain advantage and to strengthen bilateral and multilateral cooperation. The geopolitical actors use multiple avenues – state-to-state aid, multinationals, international financial institutions, private entities, technical advice, policy assistance – to ensure their dominance. In energy transitions, contestations among the actors occur in three different areas of engagement: Innovation, Investment, and Involvement. These are situated within complex and changing socio-politico-economic contexts (Figure 1). In developing countries, to achieve sustainable energy transition, there should be enabling policies, and the policies should be implemented. Innovative technological solutions could produce cost-effective, sustainable outcomes. These outcomes reduce the financial burden and environmental problems of the developing countries, thereby encouraging transitions toward renewables and research and development must be sufficiently financed. Enabling policy and financing innovation could produce cost-effective, sustainable solutions. The inability of the developing countries to advance energy transitions in the spheres of policy, investments and technology has allowed external actors to use them as tools of engagement.

Different actors involved in the multi-scalar geopolitics of energy transitions use these engagement tools singularly and in combination. Spatially and temporally, each actor will have their own set of limitations and advantages. Some will have more power, influence and control over certain thematic spheres than others and may seek to maximize this while trying to gain influence over other areas. The interplay between the actors and the available tools for engagement will pave the way for the emergence of new coalitions and contestations.

Polymaking and implementation obviously play a central role in making transition practical and possible. Polymaking can be top-down and technocratic or bottom-up

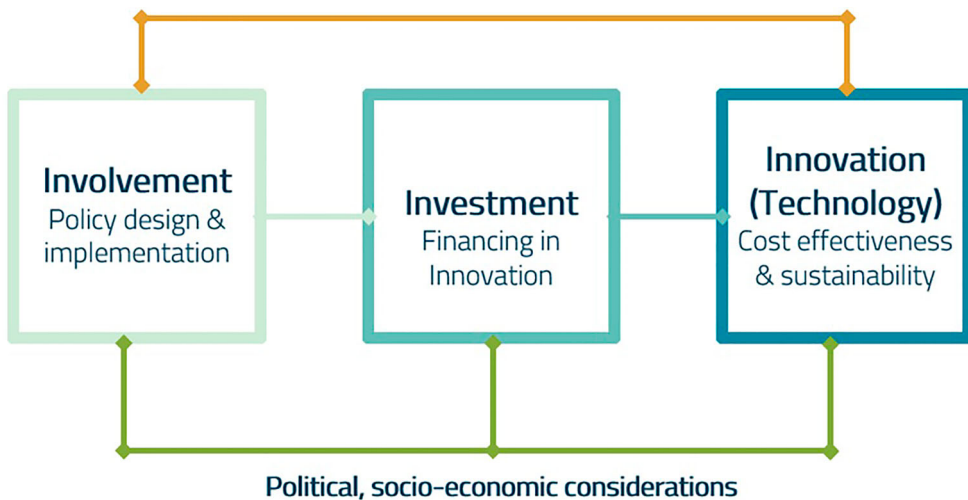


Figure 1. The Triple I framework: Tools of engagement (developed by the author).

and participatory, with important implications for the design, implementation and the role of different domestic and international actors (Stokke and Törnquist 2013; Törnquist, Webster, and Stokke 2012). A critical challenge for energy policymaking in the global South has often been a lack of political will to shift towards renewable energy sources. Enhanced public participation may be crucial for strengthening policymaking for green transitions but may also impede such policymaking if an energy transition is experienced as harmful to the interests of a group. Domestic policymaking on energy transitions, especially in the global South, also provides a space for political, economic and technological involvement by international actors, thus turning policymaking into a domain for complex and potentially contentious interactions between multiple actors.

While policy processes frame energy transitions, innovations and investments are drivers of change and focal points of international involvement. Advances in technology, improved efficiency, and reduced cost have made renewables an increasingly competitive aspect of energy transitions. There is, however, widespread concern that the energy sector has yet to make emerging new technologies accessible to developing countries (IEA 2020). Energy companies continue to market their products to commercial customers financially capable of adopting new technologies for economic gain. Those less well-off await their turn, as they have done for decades (United Nations Conference on Trade and Development 2018). It is also known that these power players export second-rate solutions to weaker countries (Clapp 1998; Cole, Greenwood, and Sanchez 2016). Moreover, innovation is not neutral; it may be directed towards large-scale and “high-tech” solutions or low-technology and locally manufactured ones.

Like innovation, investment is fundamental for developing countries to achieve energy transitions whilst ensuring energy for all. The state’s resources for energy transition will decide its design and direction. Investment has tended to focus on large enterprises rather than small-scale or participatory solutions (Mazzucato and Semieniuk 2018; IRENA 2020). High levels of unmet demand are significant constraints for renewable energy uptake in the global South (Frankfurt School-UNEP Centre/BNEF 2018). Contrary to the liberal economic theory that demand attracts investment, the private sector often does not actively engage since it finds it difficult due to political and economic conditions that are not favorable to renewables (Burke and Stephens 2018). As for external state actors, along with investments, they may also bring political influence (Chen and Li 2021). States already incapacitated by budgetary constraints may welcome these investments from external actors, even though they carry significant political conditionalities.

In recent years, the value chains for energy technologies have globalized. Production is now governed by multiple value chains (Meckling and Hughes 2017), making the emerging technologies available in the global South. In reality, globalizing value chains does not benefit all countries. Many developing countries remain excluded from international technology flows (Glachant and Dechezleprêtre 2016). Political and economic risks make private sector companies, especially energy companies, shy away from engaging in energy-related investments. This is despite efforts by, for example, the World Bank to encourage or leverage increased private sector investment in clean energy for all (Energy Sector Management Assistance Program 2019).

Nevertheless, businesses often do not see any viable market in many countries in the developing world. Profit centric business models apply to emerging clean energy

technologies such as solar and wind. The absence of a profitable renewable energy market makes a clean and green energy transition difficult, with countries struggling to escape carbon lock-in. For societies in transition, innovation and investment are challenging in many ways as they often lack the necessary know-how and financial capital – and policy by itself is to little avail without both innovations and investments. Thus, countries look for viable options for green and clean alternatives while giving in to the conditionalities and interests of local and international players (Bazilian et al. 2019; Vakulchuk, Overland, and Scholten 2020). Economic power, longstanding bilateral relationship, and regional superiority are critical geopolitical conditions that actors may use strategically to gain leverage and pursue their interests in the energy sector in recipient countries.

Research methods

The paper employs a qualitative single case study. The case study approach is used as the research strategy to collect, interpret, and analyse relevant data and report findings. Yin (2009: 14) defines it as “an empirical enquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not evident”. Case study research contributes to understanding interrelationships in real-world situations that are too complex for survey or experimental methods (Yin 2017; Hodkinson and Hodkinson 2001). It can help describe and illustrate specific real-world processes and aid theory development (Hodkinson and Hodkinson 2001). The paper will not make empirical generalizations beyond the case study, but the case study can reveal causal mechanisms that are of analytical relevance beyond the single case study. Therefore, the qualitative single case study approach provides a suitable means of investigating the geopolitics of energy transition in Sri Lanka and identifying mechanisms of broader relevance.

The data collection comprised both primary and secondary data. Primary data was collected through in-depth, semi-structured interviews and secondary data through policy documents, statements, reports, newspapers and website information. The secondary data gave insights into key actors, processes, discourses, and energy transition dynamics in Sri Lanka. This paved the way for fieldwork planning and guided the interviews. The qualitative case study was designed to understand the power game dynamics and how this influences the energy transition in Sri Lanka. As it explores causal mechanisms, qualitative interviews with key informants are well-positioned to shed light on these dynamics. The fieldwork was carried out from November 2019 to January 2020. Interviews typically lasted 45 min or more, depending on each participant’s availability and interest. Interviews were conducted in English, Tamil and Sinhala languages as the author also speak Tamil and Sinhala. Identification of research participants was carried out based on information gathered from secondary documents and the snowball sampling method. The interview guide centered around specific themes derived from the document sources, where in-depth questions were used when the respondent had the ability and expertise to provide more understanding.

During the fieldwork, interviews were conducted in two phases. The first phase of qualitative interviews was done in the capital Colombo, which comprises government officials, energy experts, academics and environmental activists. The second phase of qualitative interviews was done locally in the former war zones, with local government

officials and the public. Altogether interviews were conducted with 45 respondents. After completing the fieldwork, interviews were transcribed, the notes and transcripts were translated to English and coded according to themes, and systematic thematic analysis was conducted. During the analysis, it was found that more information was needed to fully understand the specific nuances and intricacies, and it was decided to conduct further qualitative interviews. Digital interviews were conducted in the middle of the Covid-19 pandemic between June and September 2020, through Zoom and Skype. Out of 32 invitations, only 14 agreed to an interview online. Several persons declined to participate, citing security reasons. These interviews were also transcribed and coded. Both documents and interviews were thematically analysed to identify factual information and reflections from the informants relevant to the research question.

Sri Lanka: contestations for energy dominance

Sri Lanka is a post-war state rebuilding itself after the ending in 2009 of a three-decade-long civil war. It is a tropical country, rich with natural resources and excellent potential to develop renewable energy sources. Sri Lanka aspires to move towards renewable and sustainable energy amid rising energy demand, limited public finance, and destabilization of existing hydropower production as a result of climate change (Limi 2007; Asian Development Bank (ADB) 2017). Meanwhile, Sri Lanka is also on the lookout for cheap energy. The above reasons, along with Sri Lanka's commitment to the Paris climate declaration and its Nationally Determined Contributions add pressure to move towards clean energy alternatives. It has pledged at the 22nd UNFCCC Conference of Parties in Marrakech, Morocco, as part of the Climate Vulnerable Forum, to use only renewable energy resources by 2050 (ADB 2017). However, in reality, Sri Lanka is heavily dependent on fossil fuels, mainly coal. Before independence, Sri Lanka was a hydroelectricity producer but at a very small scale. Over the past two decades, an increase in demand and limits on remaining hydro potential have pushed Sri Lanka to look for energy alternatives.

The aim of the state in providing as much energy as cheaply as possible has consistently overridden the stated goal of renewables and reduced climate emissions. To understand Sri Lanka's opposing trajectories in energy policy and implementation, identifying the key actors in the energy sector will be beneficial. The key actors can be clustered into two categories, internal and external actors.

Domestic actors

The Ceylon Electricity Board (CEB) is a state-owned electricity company which controls all significant functions of electricity generation, transmission, distribution and retailing in Sri Lanka. The CEB plays a crucial role in Sri Lanka's energy transition. The CEB develops a Long-Term Generation Expansion Plan (LTGEP) once every two or three years, outlining the least costly generation options that need to be added to the system annually for the next 20 years to meet the forecasted demand. It includes information on the existing generation system, generation planning methodology, system demand forecast, and investment and implementation plans for the proposed projects. Furthermore, it recommends the adoption of the least cost plant sequence derived for the

base case. CEB also prepares a 25-year comprehensive electricity sector master plan which is updated every ten years: this provides the basis for the LTGEP. Both the master plan and LTGEP are only concerned about the policy perspective prescribed by the ruling government and fail to map out the investment opportunities and innovation possibilities. This has, throughout the years, undermined sustainable energy transitions.

The Public Utilities Commission of Sri Lanka (PUCSL), the national regulator, is another important domestic actor. It is an independent regulatory body that monitors the electricity industry's economic, technical, and safety regulations in Sri Lanka. It is mandated through an Act of Parliament and PUCSL must approve the LTGEP prepared by the CEB. Over the past decade, there have been constant contentions between CEB and PUCSL over the LTGEP. In 2018, the LTGEP 2018–2037 draft submitted by the CEB was not approved by the PUCSL, citing that the plan is not in line with the national policy that more renewables should be added, not more coal (PUCSL 2018). The PUCSL, in turn, proposed an alternative plan, which was not accepted by the CEB. This dispute continued for over a year and was settled only after the intervention of the President; eventually, CEB had the final say. The dispute resolution by the President in favor of CEB undermined the role of the PUCSL and the renewable energy policy.

Commenting on the matter, one of the experts on the Sri Lankan energy sector said:

This dispute outlined the issues relating to CEB plan 2018–2037 through the evaluations of the PUCSL and the submissions made during the public hearings. The blatant errors and misrepresentation in the CEB plan were made to force the adoption of other coal power plants. CEB's refusal to accept the errors and the revised plan shows their undue influence and political power. The fact that the government decided to force the PUCSL to issue an approval for the flawed plan submitted by the CEB makes a mockery of the entire process and the role of the PUCSL as the regulator of the Electricity Sector (10.12.2019, Colombo).

The internal strife between the electricity provider, the regulator and the President, who was also the minister of environment at the time and publicly championed renewable energy, indicates that the President also favored coal power plants. It was argued in the LTGEPs that this was the best way forward to address the impending energy crisis. Building a coal plant takes time, and renewable energy solutions are quicker. The decision is thus illogical and against Sri Lanka's renewable energy policy.

Coal has remained in Sri Lanka's future energy plans since the first coal power plant was constructed in 2006. Even though Sri Lanka's goal is to achieve 100% electricity generation through renewable energy by 2050, the comparison between the last three LTGEP shows how Sri Lanka has become coal-dependent. Sri Lanka revises its LTGEP every two years to include up-to-date load forecasts, plant cost, construction times and the technological data available. Table 1 shows the projected supply of electricity based on coal and natural gas. It demonstrates that coal and liquefied natural gas (LNG) plants remain central to the three LTGEPs that have been presented since the pledge to go carbon

Table 1. Sri Lanka's long-term generation plans (CEB 2014, 2017, 2019).

LTGEP	2026	2034	2037	2039
2015–2034	1400 MW Coal	3200 MW Coal		
2018–2037	900MW coal 600 MW LNG		2700MW Coal	
2020–2039	900MW Coal 1500MW LNG		1500MW LNG	2100 MW Coal 3000MW LNG

neutral. Strikingly, the most recent LTGEP (2020-2039) proposes the construction of new coal plants in 2039.

The above comparison shows that Sri Lanka's energy future is heavily dependent on coal and gas. Sri Lanka does not have coal or LNG resources and needs to import both, but it has good conditions for solar and wind uptake. Local and external actors influence Sri Lanka's persistent emphasis on fossil fuels. The CEB's insistence on coal in the LTGEPs is based on its master plan supported by Japan. Not included in the 2015–2035 LTGEP, LNG was only introduced into the energy mix after an Indian coal power plant was canceled through a court ruling in 2016. After the court ruling, in a bilateral meeting between India and Sri Lanka, Sri Lanka's President assured that India would be given the opportunity to build an LNG plant instead (Balachandran 2016). In an interview with Reuters news agency, Sri Lanka's petroleum minister said: "We do not want to hurt India. So the President has offered an LNG plant instead of the coal plant" (Reuters 2016). This is one among many indications that external actors greatly influence the energy transition pathways of Sri Lanka, and that energy is becoming a geopolitical tool.

International actors

Sri Lanka planned to build a coal power plant in 1995 with the assistance of Japan (World Bank 2019). However, it did not materialize due to public protests and the unwillingness of the successive governments (ADB 2017). There were no external actors in the energy sector until 2006.

Financially, Sri Lanka has traditionally been borrowing from the International Monetary Fund (IMF), World Bank and ADB (Kelegama 2000). Japan and the West were the main aid donor partners, with India being the key trade partner. In 2005, Sri Lanka elected a new President and a government that decided to invite China to assist Sri Lanka.

The year 2006 became a turning point for the Sri Lankan energy sector with three key events taking place that involved geopolitics actors and changed Sri Lanka's energy trajectory. Sri Lanka was looking for aid to build power plants to meet rising energy demand. Japan offered to build a coal power plant in 1997, but successive governments did not pursue the idea, citing public protest and environmental concerns (Amarawickrama and Hunt 2005). With the new government seeking China's help, China offered to build the coal power plant, and construction began in 2006. Meanwhile, India had for long been looking for a strategic foothold in the Eastern part of Sri Lanka, especially the port in Trincomalee. This was reinforced by the growing presence of China in Sri Lanka and the Indian Ocean. At the same time that China started constructing its power plant, India won a bid to build and own a coal power plant in Sampoor, close to the Trincomalee Harbor. Japan, as the lead aid donor for Sri Lanka, offered technical and financial assistance to make a comprehensive electricity sector master plan in 2006 (Ratnayake 2004). In this master plan, coal became a significant part of Sri Lanka's energy generation. Sri Lanka thus became an arena for geopolitical contestation between three major international actors in the year 2006. On the one hand, these events pushed Sri Lanka into uncharted coal territory due to cheap coal power being supported by external actors. On the other hand, energy supply became a significant sphere for the actors to increase influence and pursue hegemonic ambitions.

The China-funded power plant became operational in 2011. With a capacity of 900MW, it is the largest power station in Sri Lanka. The Indian-funded coal power

plant stalled due to public protests, and in 2016 the Sri Lankan court ruled against it, citing environmental concerns (Dhir and Sushil 2019). Even though China's coal plant also faced resistance, it was able to become operational, but India's coal plant was shelved. This indicates a shift in Sri Lanka's international relations towards China after a long period of close but at times contentious relations with India. The Sri Lankan government headed by President Rajapaksa was clearly seen as moving closer to China than India.

Around this time, public outcry against the environmental consequences of externally funded projects was increasing but the political impact of environmental activism varied between different projects and external funders. China proposed building a port city in the name of Colombo International Financial City by reclaiming 269 hectares of land from the sea, which threatened severe environmental impacts (Ruwanpura, Rowe, and Chan 2020). In contrast to India's coal power plant, activists could not stop this or other Chinese projects. This showed key factors at play: on the one hand, many Sri Lankans do not like India's regional hegemony, so it was easy to mobilize public support against the Indian coal power plant; on the other hand, China was seen as a friend and unlikely to cause damage, making the public less hostile. Furthermore, China's projects are taking place with active support from the government, whereas Indian projects are primarily to appease a powerful neighbor and lack the full backing of the Sri Lankan government.

The expectation among environmentalists and activists was that the court ruling against the Indian power plant would be the final nail in the coffin of coal power in Sri Lanka, but this was not the case. During the interviews, almost all the environmentalists, activists and members of the public said that they felt that the court ruling would change the tide towards renewables and coal would be phased out. In contrast, policymakers and bureaucrats felt the ruling would deepen Sri Lanka's energy crisis. They see coal in a favorable light and prioritize energy security over environmental concerns. Coal power plants have been included in the energy plans throughout, even though the stated policy has been to move towards renewables (CEB 2017, 2019). In 2020 amid the Covid-19 pandemic, the President of Sri Lanka ordered two new coal power plants (Wijedasa 2020). Domestic political-economic concerns thus superseded environmental and policy concerns and converged with the interests of external actors.

The three key external actors in the Sri Lankan energy spectrum have influenced, assisted, and dominated the Sri Lankan energy landscape and are expected to do so for years to come. As outlined in the Triple I framework, external actors have played a role in formulating policy, investing in energy infrastructure and providing technical know-how, within a context where socio-politico-economic considerations act as opportunities and barriers. The following section will demonstrate how the three external actors made energy transitions a geopolitical battleground in Sri Lanka and how they shaped its energy pathways. The actors engage in different spheres: Japan influences policymaking and implementation; China does so through investments; and India through regional cooperation.

Global and regional allegiances and collaborations also come into play in the Sri Lankan energy context, especially in the form of two dominant but competing geopolitical initiatives. China's Belt and Road Initiative is the "new normal" in the South Asian setting and has challenged India, the US and Japan's sphere of influence in the region.

This has created new allegiances against China, such as India's Bay of Bengal Initiative, which is seen as a counter to China and supported by the US and Japan. Energy transitions are an area where both initiatives push for cooperation, cohabitation, and control in Sri Lanka.

Japan

Sri Lanka and Japan have cooperated closely since the end of the Second World War. Strong Buddhist roots and longstanding development cooperation are cornerstones of this (Ratnayake 2004). Japan was the largest aid donor to Sri Lanka until 2007 and remains the second largest (Weerakoon and Jayasuriya 2019). It was also the first country to offer aid to build a coal power plant in 1997, although it did not materialize (Ratnayake 2004). In 2006, Japan International Cooperation Agency (JICA) assisted the CEB with aid and technical support to plan and develop a comprehensive electricity sector master plan for energy generation, transmission and distribution for the whole country (ADB 2015). Coal became a central part of both the original master plan and the revised version supported by JICA ten years later in 2016 (World Bank 2019). The revised master plan includes expansion of non-conventional renewable energy sources, private sector participation, pumped storage power plants, optimal operation of coal thermal power plants, and utilization of LNG. JICA has been cooperating with CEB for a long time through technical cooperation as well as the provision of loans. Through the master plan, Japan influences Sri Lanka's energy policy. It involves financing through policy directives and creates space for its private sector to engage in Sri Lanka's energy sector.

One of the interviewees, who has a long experience of collaborating with CEB, was very critical of this relationship between Japan and the CEB:

Japan's longstanding cooperation and collaboration with the senior and middle-level officials of the CEB has had a lasting impact. Traditionally CEB engineers have always preferred high-optimised hydro and mini-hydropower generation. When coal was first floated as an idea, there was much resistance within the CEB. Sri Lanka has pioneered solar PVs from the 1970s. Further, a lot of people and experts felt that among available fossil fuel options coal is the worst. JICA over the years has built up its reputation as a coal champion, and visits to Japan's coal plants convinced a lot of CEB engineers that coal is a good option. Lately, Japan has floated the concept of "clean coal", which was bought by CEB without any critical outlook (06.01.2020, Colombo).

The CEB is the crucial driver of coal power plants in Sri Lanka, and Japan has been in the pipeline for several years to build a coal power plant in Sri Lanka. Japan argues that it has "clean coal technology" (Guan 2017; Yoshida 1997), and this claim is used by the CEB to justify coal plants. Japanese support for international coal plants has long been part of its export strategy (Trencher et al. 2019). The Japanese government provides funding to developing countries for new coal-fired power plants, and large Japanese multinationals provide their coal technology to build plants (Wallace 2019). Japan's primary tool has been its involvement in policy framing, which successfully intertwines policy and investment, thereby pairing with innovation in the name of clean coal technology to assert influence. The promotion of Japan's clean coal technology justified the building of coal plants based on cost-effectiveness, and environmental sustainability has the buy-in of the policymakers and politicians.

China and the Belt and Road Initiative

Sri Lanka and China also have a longstanding state-to-state relationship, cemented through the rubber-rice pact in 1952 that exchanged rubber for rice and was operational for three decades as a successful south-south cooperation project (Kelegama 2014). There is also a long history of political relations. The 1952 pact was signed when China was under sanctions; Sri Lanka supported China for its admission to the UN in 1971 and to the World Trade Organization in 2001 (Kelegama 2014; Fernando 2010). It is noteworthy that Sri Lanka-China relations have never been hostile, which is not the case with several other major states.

Over the last two decades, China has increased its presence and influence in Sri Lanka through several development projects. China offered to build the coal plant in 2006 that became operational in 2011. Sri Lanka was one of the first countries to be included in China's Belt and Road Initiative (BRI), and China's projects in Sri Lanka are part of the BRI. This inclusion is partly geostrategic. A former Sri Lankan foreign ministry official commented on China's emergence in Sri Lankan affairs as follows:

Since the new government came into power in 2005, Sri Lanka was looking for financial assistance. President Rajapaksa was looking for "no strings attached" options. China was ready to offer help without political conditionalities. It became the starting point of longstanding robust trade and political relations. China's non-interference in internal affairs policy is another foreign policy aspect, which pushed Sri Lanka towards China, where the West and India were considered making uncomfortable noises on local political issues. China's economic power, cordial relations along with its political stance gave them a freeride in Sri Lanka (10.06.2020, Online)

There have been two flagship projects in Sri Lanka under the BRI. One is the Hambantota Port project in the Southern part of Sri Lanka which gave China access to a vital east-west shipping route. The second is the Colombo International Financial City (CIFC). It is situated close to Sri Lanka's main port of Colombo, which is in a strategic location and a key transshipment port in the Indian Ocean. Both BRI projects underlined Sri Lanka's geographical importance and China's geopolitical interests. The port in Hambantota is now operational, and the CIFC is to be completed by 2040. Both projects raise energy demands and also have the facilities to produce energy. It is noteworthy that connectivity is the main goal behind the BRI sea route; therefore, typically, ports are the initial investment, followed by special economic zones, and then energy projects to facilitate the energy needs of the BRI projects. In the BRI sea route, Sri Lanka plays a key role along with Pakistan, Indonesia, Myanmar, Malaysia, and Kenya. Among these countries, all except Malaysia have low electricity production, and China has invested in all these countries' energy sectors.

In 2017 China offered to build an LNG terminal at the Hambantota harbor. It was announced in August 2020 that Sri Lanka launched a floating storage LNG trading facility at the Hambantota Port, with the primary aim of trading LNG in the region utilizing its strategic location. This was seen as a first step towards making Sri Lanka an LNG hub for South Asia, as Hambantota Port is strategically located near the world's busiest shipping lanes. China's financial capabilities and innovative technological solutions have prompted Sri Lanka to work with China toward building an LNG facility. The LNG terminal is strategic in many ways. It will sell electricity to Sri Lanka, provide electricity to Chinese investments in Sri Lanka, make the port in Hambantota independent, and

fuel the ships visiting the port. Overall, it gives China a stronghold in Sri Lanka. Through its financial might, China has consolidated its political capital, and its development projects have also given them considerable social capital. China has used all the tools of engagement discussed above. The harmonization of the tools has given more leverage than any other actor competing for influence.

India and the Bay of Bengal Initiative

China's growing presence and influence in its vicinity is seen as a challenge to India, which as a neighbor and regional superpower has a complicated relationship with Sri Lanka. India's intervention in Sri Lankan affairs through Indian peacekeeping forces in 1987 left a bad taste for cordial India-Sri Lanka relations (Pfaffenberger 1988; Bullion 1994; Ouellet 2011). Being a regional and emerging power, India has much influence in Sri Lankan affairs, and energy is one of them. Since the 1970s, both countries have explored the possibility of transnational grid connectivity (UN 2018; Huda and McDonald 2016). In 2002 with the support of the United States Agency for International Development (USAID), a pre-feasibility study was conducted and was updated in 2006. Both countries approved the study, and a steering committee was appointed in 2006 (World Bank 2008; Rodrigo and Fernando 2018). The scrapped coal power plant was part of the grid connectivity plan (UN 2018).

Nevertheless, Sri Lanka promised India permission to build an LNG facility instead of a coal plant. This shift to LNG was due to three key reasons. First, the Sri Lankan government felt that LNG would be less controversial than coal. Second, initial seismic studies showed the possibility of natural gas reserves in Sri Lanka, and an Indian conglomerate confirmed this in 2015 (Sirilal 2015). Third, India was insistent on building an energy facility in Sri Lanka.

India has for long been pushing for grid connectivity (UN 2018; Pillai and Prasai 2019; Huda and McDonald 2016). The initial plan was to set up a link for 1,000MW between India and Sri Lanka, of which 30 km would be under the sea. The transmission link was to run from Madurai in Tamil Nadu to Anuradhapura in Sri Lanka's north-central province. A foreign policy analyst said:

India is considering an overhead line instead of an undersea power transmission link since underwater transmission is costly. India is exploring the option of an overhead electricity link with Sri Lanka as part of India's strategy to create a new energy ecosystem for the neighbourhood to counter China. India is foreseeing the integration of energy systems and electricity gridlines by connecting with Nepal, Bhutan, Bangladesh and Sri Lanka (26.06.2020, Online).

An Indian energy expert who also works on regional energy ecosystems commenting on India's plan stated:

India has been supplying power to Bangladesh and Nepal and has also been championing a global electricity grid that may initially aim to link countries, such as Myanmar, Thailand, Cambodia, Laos and Vietnam, with the sub-continent. India's energy diplomacy initiatives range from cross-border electricity trade to supplying petroleum products and setting up liquefied natural gas terminals. Energy is one of the critical areas which will shape India's "neighbourhood first" policy (23.08.2020, Online).

The 2018 National Renewable Energy Laboratory (NREL) report suggests that cross-border energy trade between India and Sri Lanka will decrease the cost of generating electricity, but imports from India would displace over 69% of Sri Lanka's natural gas

generation, and Sri Lanka would export 14% of its generation to India. The noteworthy point is that India benefits most from this connectivity and Sri Lanka would become more dependent on India.

Fischhendler, Herman, and Maoz (2017) show with a comprehensive historical study that energy supply and sanctions have for long been used to gain leverage and control. In South Asia, through controlling electricity supply to its neighbors, India enjoys a virtual monopoly. The foremost case is India's grid connectivity with Nepal. Nepal has rich inland water resources and vast hydropower potential, but during 2008–2017 Nepal's net import increased from 638 GWh to 2175 GWh while exports were reduced (Gaudel 2018). India's regional energy geopolitics is based on its experience with Nepal. India is now trying to push through its grid connectivity plan through the Bay of Bengal Multisectoral Technical Economic Cooperation (BIMSTEC) and create a broader coalition to counter China's BRI. In contrast to China and a number of other countries, India is not a significant donor to Sri Lanka. Its policies are primarily guided by domestic factors, geostrategic concerns of the region, and economic considerations. India's energy ambitions go beyond coal, and it is not only about selling or constructing coal power plants. It is about regional hegemony, and energy is an instrument for this ambition. Through grid connectivity, India seeks to outmanoeuvre China in the Sri Lankan energy sector. China and India use the same engagement tools but in varying degrees and combinations. It shows that even though there are three engagement tools, the different permutations and combinations allow a variable sphere of influence.

BIMSTEC is a regional multilateral organization with seven member states. Its members lie in the littoral and adjacent areas of the Bay of Bengal constituting a contiguous regional unity. India spearheads this, and it is seen as a counter initiative to China's BRI. In 2018 a Memorandum of Understanding for the grid interconnection signed by the member states sought to create a broad framework for the parties to cooperate towards the implementation of grid interconnections for the electricity trade to promote rational and optimal power transmission in the BIMSTEC region (Pattanaik 2018; Powell 2017).

The US and Japan see BIMSTEC as a legitimate counterforce to China's BRI in the region. In 2020, USAID, through its South Asia Regional Initiative for Energy Integration program, published a study to enhance energy cooperation in the BIMSTEC region. Likewise, Japan is considering BIMSTEC as a reliable partner in the region. Japan, through the ADB, is willing to invest in BIMSTEC regional power grid (Panda and Karthik 2020).

Meanwhile, India and Japan have entered into a partnership to build an LNG terminal on the West coast of Sri Lanka (Daily 2018). Both countries are also bidding for coal power plants in Sri Lanka. India's interest in energy in Sri Lanka was summarized as follows by an academic who is a geopolitical expert:

India is very keen to build an energy facility on the Eastern coast of Sri Lanka. Trincomalee harbour is strategically important for Indian naval security. India wants to have its presence since there is much resistance for Indian presence in Sri Lanka due to its history; energy facility is another way to have its presence felt. It is non-controversial. The facility can be either coal or LNG; it does not matter as far as India has a foothold (29.12.2019, Colombo).

Over the past two decades, India and Japan have been persistent about building coal power plants in Sri Lanka. Now both are building LNG facilities in Sri Lanka, which again shows that both India and Japan are vying for influence, and energy is an

effective and changeable platform. LNG presents them with a good opportunity where all three spheres of influence are in place, making the project much safer and most likely will not suffer the same fate as the Sampoor coal power plant. It also opens pathways into Sri Lanka's possible LNG exploration in future.

Sri Lanka's aggravated economic crisis has given more access and power to external actors since mid-2021; India has been the biggest beneficiary through newfound regional cooperation. In March 2022, India took over the proposed renewable energy projects initially awarded to Chinese companies in January 2021 through an ADB loan. Indian companies were also awarded a 500 MW wind farm project, leasing of oil tanks and oil distribution in Sri Lanka. These are significant gains, and energy has been used to reposition India as a strong neighbor. Likewise, the US has renewed its interests in Sri Lanka to counter China. It brings the BIMSTEC and US together in the Sri Lankan energy sphere. USAID began its new program in energy in Sri Lanka – the first of its kind – in 2021 and has awarded 19 million USD to energy-related projects. A US energy firm was able to secure an LNG deal overnight and has a long-term power purchase agreement with the government of Sri Lanka that undermines energy security and sovereignty. These latest developments point to the importance of energy as a tool of engagement and outline how energy has become a geopolitical battleground.

Summary

The Sri Lankan case has shown that energy has become an increasingly important space for geopolitical actors, where major states both converge in strategic alliances and compete and rival each other. The international actors have pursued different strategies for involvement, investment, and innovation, where innovation has been the weaker link within the triple I framework for all the actors. This has also been a contributing factor behind the slow diffusion of renewables and the growing dependence on coal. [Table 2](#) summarizes the actions taken by the key external actors within the realm of the triple I framework.

Energy transitions provide a space for the actors to make their presence felt using the tools of engagement. The Sri Lankan government has engaged with different international actors in the energy sector knowing well that there is contestation among them to assert control. In 2008, the Sri Lankan Prime Minister Ranil Wickramasinghe noted that Sri Lanka is part of the new phenomenon called “multi-layered regionalism” emerging in Asia (Wickremesinghe 2018). The competition for energy infrastructure projects in Sri Lanka is related to political influence, increased naval competition and economic advancement.

For a long time, Sri Lanka aspired to become a trade and maritime hub of the Indian Ocean region but failed due to civil war and financial constraints. Over the past decade, infrastructure in the form of harbors and terminals has been built through external support but creating new forms of dependence. The tools of engagement discussed in this article offer prospects for reduced oil dependence through energy transitions but may create new forms of path dependencies through technology and finance.

Conclusion

In recent years, global and regional order and governance have changed with the emergence of “new” powers. Actors who were at the margins of the geopolitical order are now

Table 2. Summary of external engagement within the Triple I framework.

Actors	Involvement	Investment	Innovation
Japan	Facilitated electricity sector master plan for Sri Lanka Power sector policy reform initiative with ADB	Financial assistance through JICA for energy sector Funding for Hydropower development	Technical support for CEB and “clean coal” concept Feasibility study on the use of LNG
China	Historical relationship provides space for policy influence Political relationship and “loan diplomacy” Social capital (China’s goodwill) transcends boundaries	Funded the first coal power plant and still maintains LNG facility in Hambantota Harbor Colombo Port city necessitates electricity needs Sri Lanka being part of BRI involves energy project funding	Chinese solar photovoltaics in the market China at the forefront in promoting LNG technology Chinese energy efficiency products in the market
India	Regional superpower status gives policy influence Cross border connectivity in the Sri Lankan energy policy agenda Outmanoeuvred China in winning bids to build solar parks	Controls Sri Lanka petroleum supplies Investing in LNG facility along with Japan Private investments in renewable energy projects Indian company provides coal	Private sector involvement brings new technologies and know how. Produces knowledge transfer through joint ventures
USA	Emerging actor in the Sri Lankan energy landscape Technical Assistance on renewable energy through USAID	US company awarded LNG deal Financing renewable energy projects	Innovation assistance to local electric car industry

at the core of geopolitics, giving rise to new power centers. Disputes are taking place between new allegiances and within new contested spaces.

The case of Sri Lanka indicates that the geopolitics of energy is at the forefront in reshaping relations. Traditional powers are diminishing, and new powers are taking lead roles. Taking lead roles exemplified by Sri Lanka’s prior longstanding relationship with Japan and new configurations created by the emergence of China and India’s renewed interest in cross-border energy trade. It was expected that the emergence of renewable energy would underplay the geopolitics of energy and create affordability and availability for developing countries, which will eventually help them achieve their climate targets. Energy has politicized the relations and has become a key foreign policy tool through different spheres of influence, as shown by the Triple I framework and the case study. As the case study demonstrates, there is a competition between the actors, but there is also an unholy alliance around coal. The actors push in the same direction but do that in different ways with special interests in mind. The energy transition is one of many new arenas for geopolitical contestation.

In the Sri Lankan case, energy transitions are used by geopolitical actors for three key purposes: 1) territorial control, where energy infrastructures have become routes to geopolitical manifestations; 2) hegemony, as part of the grand strategies and initiatives; and 3) influence, to gain a certain amount of control and counter other actors influence.

Developing countries have committed to high renewable energy targets, and yet they tend to miss them considerably. Energy has become a geopolitical battleground since countries fail to build up indigenous capacities and know their energy sources and are in need of a long-term sustainable and coherent energy transition policy. If not, they will continue to be dependent on external actors that, in turn, could create monopolies, debt, political tensions, security threats and policy challenges.

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