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US Energy diplomacy with the states of the Caribbean region

Abstract. The relevance of this study stems from the growing role of energy diplomacy in shaping regional security and economic stability in the Caribbean basin, against a backdrop of competition among major powers and the vulnerability of small island economies to external shocks. The aim of the study was to determine how US energy policy transformed the energy systems of Caribbean states and what strategic consequences this produced for the region. The methodological framework of the study included a comparative analysis of state policies, an institutional analysis of US programmes, content analysis of statistical data from international organisations, and a SWOT assessment of the position of Caribbean countries within the new energy configuration. The findings established that US policy contributed to significant diversification of energy supplies and reduced the countries' dependence on imported oil, which had historically accounted for more than 80-90% of their energy balance. It was found that the development of LNG infrastructure ensured lower generation costs and improved the predictability of energy flows. It was demonstrated that US technical and institutional assistance strengthened the regulatory capacity of small states, accelerated their integration of renewable energy sources, and contributed to the modernisation of electricity grids. It was established that US programmes enhanced the region's energy resilience to natural disasters through support for microgrids, energy storage systems, and the digitalisation of management. At the same time, it was revealed that the expansion of the American presence created risks of unequal access to investment, debt dependency, and the strengthening of structural asymmetry between donors and recipients. The study also showed that strategic competition between the United States, China, and Venezuela significantly altered the balance of power in the region, shaping a new model of energy security in which Caribbean countries are positioned between several centres of influence. The conclusions of the study demonstrated that US energy diplomacy became one of the key factors in the transformation of Caribbean energy systems, combining infrastructure modernisation, institutional reforms, and the geopolitical repositioning of the region. The practical significance of the work lies in the possibility of using its findings for the development of energy resilience strategies for small states and the formulation of a balanced foreign policy in the field of energy security.

Keywords: liquefied natural gas; geopolitical competition; institutional capacity; climate; adaptation

Introduction

Energy policy is one of the key factors shaping contemporary regional security and economic resilience in the Western Hemisphere, particularly in the vulnerable small island states of the Caribbean. These states' systemic dependence on imported petroleum products, the structural weakness of their energy institutions, and the intensification of climate risks make the energy sector not only a

technical but also a political arena in which the interests of global actors intersect. The study by N.O. Konopka & B.B. Kostiv (2020) highlights that the oil dependency of Latin American and Caribbean countries creates chronic economic imbalances, which have been exacerbated during the COVID-19 pandemic. The authors demonstrate that fluctuations in global oil prices, reduced investment

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and the urgent need to secure external financing have exacerbated the region's structural vulnerability, forcing governments to seek alternative models of economic development that are less dependent on energy exports. In contrast, H. Pasman *et al.* (2023) examine energy transitions primarily through the lens of the safety of new technologies and emphasise that the shift towards alternative energy sources, including hydrogen, industrial electrification and modern storage systems, creates new risks and requires a significant overhaul of regulatory approaches. The authors stress that the resilience of energy systems in the future will be determined not only by technical innovations but also by the ability of states to integrate new safety standards at all stages of the infrastructure lifecycle.

A study by D. Krantz (2021) shows that the effectiveness of US energy initiatives in the Caribbean largely depends on the ability to combine technical solutions with the broader social and institutional context. The author analyses the case of Puerto Rico following Hurricane Maria and argues that the widespread degradation of the power grid was not merely a technical problem. In his view, US measures aimed at developing solar energy systems, local microgrids and innovative "energy citizenship" practices were effective only when accompanied by engagement with local communities and institutional support for reforms. In turn, R.J. Brecha *et al.* (2021) demonstrate that US energy policy in the Caribbean has gradually evolved into an instrument for the structural reorientation of the region, combining economic support with political influence. The authors show that small island states, traditionally dependent on imported petroleum products and vulnerable to climate disasters, possess significant technical potential for the development of sustainable energy systems, in particular ocean thermal energy conversion (OTEC).

Analysing the dynamics of external actors' involvement in the development of the Caribbean region, R. Gonzalez-Vicente & A. Montoute (2021) have shown that Chinese infrastructure investments are shaping an alternative model of economic growth, offering Caribbean states access to capital and technology outside Western financial structures. At the same time, the authors emphasise that such a model reproduces a number of structural constraints inherent in post-colonial economies, in particular: dependence on large external contractors, the lack of local community participation in the distribution of benefits, and the dominance of China's business-oriented approach, which limits opportunities for inclusive development. J. Vadell's (2022) work deepens this discussion by demonstrating that China's strategy for financing energy projects, ports and logistics hubs in Latin America and the Caribbean directly influences the regional balance of power. The author shows that Chinese loans, investment agreements and infrastructure concessions are forming new axes of economic integration, which increase countries' dependence on Beijing's political will and reduce the relative weight of the US as a traditional external partner.

In the study by Z.S. Winters *et al.* (2022), it is emphasised that the energy choices of small island states are a critical indicator of their strategic orientation. The authors demonstrate that the vulnerability of these countries is intensified by weak institutional planning and

dependence on centralised energy systems, which complicates adaptation to climatic and economic shocks. The findings of C. Bataille *et al.* (2020) indicate that the profound modernisation of energy systems shapes not only economic priorities but also the foreign policy trajectories of states, strengthening their participation in climate diplomacy and global cooperative mechanisms. In turn, J. Kersey *et al.* (2021) demonstrate that dependence on external donors creates asymmetry between small and large states, particularly in the context of promoting the energy transition. The authors show that it is external policies that determine the dynamics of renewable energy source (RES) development in the Caribbean region.

The analysed studies are predominantly focused on individual aspects of US energy policy, financial instruments, infrastructure projects, or regional security, but they pay less attention to the comprehensive nature of its influence on the institutional development of Caribbean states and the formation of sustainable energy supply models. The interconnections between economic modernisation, the political obligations accompanying international energy agreements, and the broader geopolitical context of competition among the United States, China, and Venezuela also remain insufficiently explored. This study sought to fill this gap through an analysis of the institutional, economic, and geostrategic factors shaping the nature and consequences of US energy diplomacy in the Caribbean basin. The aim of the research was to determine the mechanisms through which US energy diplomacy influences the structural transformation of the energy systems of Caribbean basin states. The principal objectives of the study were: to analyse the institutional instruments and financial mechanisms employed by the United States in the region; to identify the economic and technological changes resulting from infrastructure modernisation and the development of the liquefied natural gas (LNG) market; and to compare the influence of the United States with alternative models of external energy engagement, namely Venezuelan and Chinese infrastructure initiatives.

Materials and Methods

The study employed an interdisciplinary approach combining political, institutional, economic, and geopolitical analysis in order to identify the patterns of transformation within the energy sector of the Caribbean region under the influence of US policy. The selection of the Caribbean basin, exemplified by Barbados, Haiti, and the Dominican Republic, was driven by their historical structural dependence on imported petroleum products, high vulnerability to natural disasters, and critical need for the modernisation of energy infrastructure. The United States is considered the key external actor systematically influencing the region's energy development through investment, regulatory, and diplomatic instruments. China was included in the analysis as a growing competitor to the United States that is actively expanding its presence in the Caribbean region. The purpose of including China was to conduct a comparative analysis of the models of external influence exercised by the United States and China according to key parameters, particularly the nature of financial instruments, the level of institutional involvement, the long-term consequences for debt burdens, and the degree of political autonomy of

Caribbean states. Venezuela is also important to the study because of the long-standing operation of the PetroCaribe Energy Cooperation Agreement (2005), which shaped the energy trajectories of several countries. Such a selection made it possible to reconstruct the comprehensive influence of external powers on the region's energy policy and to compare different models of external participation in its development.

The study was organised into three consecutive stages. During the first stage, the conceptual foundations of American energy diplomacy were systematised through the analysis of normative and strategic documents, such as the Caribbean Energy Security Initiative (CESI) (2014), the Growth in the Americas programme (U.S. Department of State, 2020), as well as the official report of the US Department of State and the United States Agency for International Development (U.S. Department of State & USAID, 2024). The method of content analysis made it possible to identify the key instruments of American policy, as well as priorities in the spheres of LNG infrastructure, electricity grid modernisation, and the development of alternative energy sources. The second stage included a structured analysis of infrastructure and investment programmes implemented through the Development Finance Corporation (DFC) (2024) and EXIM (2024). The research materials also included corporate reports by AES Dominicana (2025), which made it possible to trace the actual impact of gas infrastructure projects on reducing generation costs and diversifying the energy balance. Institutional analysis was supplemented by the examination of regional energy characteristics based on CCREEE (n.d.) and IRENA statistics (2020) regarding the dynamics of renewable energy source implementation. This approach provided an understanding of how the combination of financing, technological support, and regulatory innovation contributes to the modernisation of the energy systems of individual states. During the third stage, comparative geopolitical analysis and SWOT analysis were applied, enabling an assessment of the positions of Caribbean basin states under conditions of strategic competition between external centres of influence (the United States and China), while taking into account the role of Venezuela as a regional energy actor whose influence on Caribbean countries possesses a specific intra-regional character. The analysis of Chinese infrastructure loans was based on data from the Embassy of the People's Republic of China in Grenada (2018), whereas understanding of Venezuela's role relied on the PetroCaribe Energy Cooperation Agreement (2005) and the EIA energy brief (n.d.). In addition, statistical materials from the Eastern Caribbean Central Bank (2025) were used to assess the debt capacity of small island economies and the potential risks of financial dependence on external investment.

The comprehensive application of content analysis, institutional analysis, comparative approaches, and SWOT analysis of the positions of Caribbean states within the context of energy cooperation with the United States made it possible to examine US energy policy not merely as a set of technical measures, but also as an element of broader geopolitical and economic dynamics. The totality of the materials used allowed for the development of a holistic understanding of the transformational impact of

American programmes on the energy resilience, institutional development, and strategic opportunities of Caribbean basin states.

Results

Strategic and energy-related instruments of US diplomacy in the Caribbean. US energy diplomacy in the Caribbean region is shaped at the intersection of Washington's strategic, economic, and geopolitical interests, giving rise to integrated conceptual approaches implemented through initiatives such as CESI (2014), Growth in the Americas (U.S. Department of State, 2020), and financing instruments administered by the DFC (2024) and the U.S. Department of State & USAID (2024). At the conceptual level, these programmes reflect the United States' aspiration to ensure stability and predictability within the energy environment of its immediate geopolitical neighbourhood, minimise the risks of external vulnerability for small island states, and simultaneously strengthen its own influence in a region historically characterised by competition among various external actors. The Caribbean basin represents a space with a high degree of energy dependence, combining structural limitations of energy systems, low diversification of sources, and limited opportunities for financing infrastructure modernisation. Under such conditions, external partners, including the United States, gain the ability to influence the long-term trajectory of energy development by offering financing, technologies, and regulatory support.

For the United States, the priority lies in creating a resilient, market-oriented energy architecture that reduces the likelihood of monopolisation of energy flows and promotes the establishment of transparent rules aligned with global standards. CESI, as the first systemic response to the region's energy vulnerability, laid the foundation for an approach combining energy security, economic resilience, and institutional modernisation. Its conceptual logic stemmed from the understanding that limited diversification of energy sources and dependence on unfunded subsidies, such as the Venezuelan PetroCaribe Energy Cooperation Agreement (2005), created significant political and economic risks for the states of the region. In this context, American policy sought to replace a model of energy dependence capable of intensifying political asymmetry between Venezuela and the small states of the Caribbean basin with a more open and competitive system that stimulates autonomy and a market-based environment. This logic is further reinforced within the Growth in the Americas (América Crece) initiative, whose conceptual framework is directed not only towards the energy sector but also towards creating conditions for large-scale private investment in critical infrastructure. In this dimension, US policy constitutes a response not only to the internal needs of Caribbean states but also to the transformation of the regional balance of power associated with China's growing presence. Beijing actively finances ports, roads, energy facilities, and telecommunications infrastructure throughout the Caribbean, potentially altering the strategic environment and creating preconditions for political influence (Embassy of the People's Republic of China in Grenada, 2018). The American concept of counteraction involves creating an alternative to Chinese financing

models through the promotion of principles of transparency, market competition, environmental responsibility, and institutional accountability. The United States seeks not only to ensure infrastructure modernisation but also to consolidate the dominance of standards corresponding to Western conceptions of economic governance.

DFC instruments play a conceptually significant role in this process, as they represent the ability of the United States to combine economic and diplomatic power in creating conditions for attracting private capital to a region characterised by high financial risks. Through loan guarantees, investment mechanisms, and support for climate-oriented solutions, Washington seeks to strengthen the energy resilience of the Caribbean basin, reduce vulnerability to extreme weather conditions, and ensure a transition towards a diversified energy structure. Collectively, these programmes demonstrate that the conceptual

foundations of American policy are based upon a combination of energy security, market orientation, and geopolitical balancing – an approach that enables the United States simultaneously to support regional development and contain the influence of competing actors.

Summarising the above considerations, it is important to emphasise that US energy diplomacy in the Caribbean region is implemented not through a single instrument, but through a complex of interconnected programmes, each performing a specific function in shaping a resilient and diversified energy architecture. In order to develop a systematic understanding of the scale and mechanisms of this policy, a comparative review of the key initiatives was conducted (Table 1), demonstrating precisely how these instruments shape the regional infrastructure of resilience, reduce investment risks, and open access to new financial and technological opportunities.

Table 1. US programmes and their impact on the Caribbean region

Programme/ Initiative	Period of operation	Main objectives	Specific results and statistics	Beneficiary countries
Caribbean Energy Security Initiative (CESI)	2014 – is operating at the present time (as of the end of 2025)	↔ enhancing energy security; ↔ diversification of energy sources; ↔ attracting private investment; ↔ transition to renewable energy.	↔ OPIC financed energy projects worth more than USD 120 million; ↔ an additional USD 70 million in the project portfolio; ↔ USD 25 million loan guarantee through Jamaica's NCB; ↔ technical assistance for more than 5 countries.	Member states of the Caribbean Community (CARICOM)
Growth in the Americas (América Crece)	2019-2021	↔ catalysing private investment in infrastructure; ↔ countering Chinese influence; ↔ job creation; ↔ infrastructure development.	↔ coordination among US government agencies; ↔ support for projects in energy, telecommunications, ports, and roads.	↔ all countries of Latin America; ↔ countries of the Caribbean basin.
DFC (U.S. International Development Finance Corporation)	2019 – is operating at the present time (as of the end of 2025)	↔ financing the private sector; ↔ support for SMEs and women's entrepreneurship; ↔ energy security; ↔ combating climate change.	↔ USD 200 million loan to Banco Popular Dominicano (2023); ↔ 50% of funds allocated to women's entrepreneurship; ↔ opening of a regional office in Santo Domingo; ↔ co-financing with IDB Invest of up to USD 50 million per project; ↔ portfolio exceeding USD 40 billion globally; ↔ loan guarantees for small businesses.	↔ member of the Organisation of Eastern Caribbean States (OECS); ↔ the Dominican Republic; ↔ Jamaica; ↔ Barbados; ↔ Trinidad and Tobago.
USAID – energy programmes	2014 – is operating at the present time (as of the end of 2025)	↔ reform of the energy sector; ↔ integration of renewable energy sources; ↔ improving grid resilience; ↔ involvement of the private sector.	↔ Caribbean Clean Energy Programme (CARCEP): technical support; ↔ 22 scholarships for Smart Grid training; ↔ Energy Sector Reform: coverage of 13 countries; ↔ Caribbean Climate Investment Programme: support for renewable energy projects; ↔ Barbados Blue-Green Investment Corp: expected to unlock up to USD 210 million over 3 years.	All countries of the Caribbean basin

Note: OPIC – Overseas Private Investment Corporation; NCB – National Commercial Bank; SMEs – small and medium-sized enterprises; IDB – Inter-American Development Bank; RES – renewable energy sources

Source: compiled by the authors based on CESI (2014), U.S. Department of State (2020), IRENA (2020), CCREEE (2023), DFC (2024), U.S. Department of State & USAID (2024), AES Dominicana (2025)

The comparison of the programmes presented in Table 1 demonstrates the gradual complication and institutional evolution of American energy diplomacy in the Caribbean region, progressing from the elimination of basic vulnerabilities to the formation of long-term resilience mechanisms integrated into broader US geopolitical and climate strategies. Initial initiatives, such as CESI, were

aimed at overcoming the critical dependence of regional states on imported petroleum products and ensuring the rapid stabilisation of their energy systems. At this stage, the United States primarily compensated for the weakening of the Venezuelan PetroCaribe programme, filling the structural vacuum in the sphere of energy security while simultaneously strengthening its own position as

the leading external partner of the Caribbean basin. The subsequent wave, represented by Growth in the Americas (América Crece), indicates an expansion in the logic of intervention. This reflects the transition of the United States from responding to crisis imbalances towards a proactive strategy of structurally integrating the Caribbean into the Western economic sphere. At the same time, private sector participation within the framework of Growth in the Americas reflects Washington's intention to create an alternative to Chinese state financial models that had dominated the sphere of port and transport infrastructure. Thus, the programme becomes an instrument not only of economic development but also of geopolitical balancing.

The further strengthening of the role of the DFC demonstrates the institutionalisation of the financial component of US energy diplomacy. Unlike earlier programmes, the DFC functions as a stable and permanent source of investment guarantees and credit mechanisms, creating preconditions for long-term transformation. Importantly, within DFC projects the focus shifts from basic energy support to climate-oriented solutions, enabling the United States to position itself not merely as a supplier of resources, but as a leader of the global energy transition. This is of particular significance in the context of the Caribbean basin's high climate vulnerability and the necessity of modernising grids, expanding renewable energy sources, and strengthening the institutional capacity of states within the region. USAID programmes and initiatives oriented towards climate adaptation demonstrate another dimension: the formation of a normative and governance foundation for the effective functioning of energy systems. Unlike financial instruments, these programmes perform the role of a "structural catalyst": they create the rules, competencies, and institutions without which capital-intensive investment cannot be sustainable. In this way, USAID ensures the integration of market reforms, the development of a regulatory environment, and the formation of human capital, thereby strengthening the capacity of regional states independently to sustain modernisation processes.

The synthesis of all these programmes demonstrates the comprehensive nature of American policy: it combines financing, technical assistance, infrastructure reform, and climate adaptation into a unified logic aimed at the multi-dimensional strengthening of the region. At the same time, there is a clear shift in emphasis from energy security and stabilisation towards the modelling of a new institutional and market architecture intended to ensure long-term resilience and reduce the Caribbean basin's dependence on alternative centres of influence. The cumulative effect of these programmes lies not only in the modernisation of the energy sector, but also in the creation of conditions for the political and economic integration of the region into the broader strategic space of the United States. The conceptual foundations of US policy in the energy sphere directly determine the architecture of the financial and technical instruments that Washington applies in the Caribbean region. It is precisely the strategic vision of the United States regarding the combination of security, economic, and climate objectives that drives the activation of institutions operating through loans, risk guarantees, co-financing, and technical assistance. In practical terms,

this means support for projects that simultaneously address the historical oil dependence of Caribbean countries and promote the "green" transition (Runde *et al.*, 2021). The ideological framework of American energy policy is transformed into a comprehensive diplomatic practice in which financial, technical, and infrastructure instruments are integrated into a unified logic of enhancing the energy autonomy and climate resilience of the Caribbean basin.

Governments of small Caribbean states have historically been characterised by a high dependence on imported petroleum products and the substantial cost of electricity, which hindered the modernisation of energy infrastructure through their own resources (IRENA, 2020). US energy diplomacy in the Caribbean region is based on a combination of financial instruments, infrastructure investment, renewable energy development, and large-scale technical assistance. These mechanisms are aimed at reducing the dependence of small states on imported petroleum products, diversifying energy sources, and increasing their resilience to external shocks. One of the key directions is support for the development of LNG infrastructure, which enables the transition from oil dependence to more flexible and predictable fuel supply arrangements. Through the financial instruments of the US EXIM Bank, the United States supports the construction of LNG terminals and the modernisation of generation capacities, which has already demonstrated a significant effect in several Caribbean states. For example, in the Dominican Republic, the modernisation of thermal power stations for gas fuel requirements and the launch of the LNG terminal in Santo Domingo reduced electricity costs by 25-30% through the transition from expensive fuel oil installations to more stable and cheaper gas contracts (AES Dominicana, 2025).

A separate area of focus is the digitalisation of energy systems and the implementation of smart-grid technologies, which increase management efficiency and minimise electricity losses. In a number of Caribbean basin countries, these approaches have already been implemented through joint programmes of USAID and the US Department of Energy. In particular, Barbados introduced smart meters and load-monitoring systems, which reduced technical losses within the grids by 8-12% and improved the accuracy of peak consumption forecasting (CCREEE, 2023). In combination with infrastructure modernisation, these measures form an integrated model of American energy diplomacy that combines financial support, technology transfer, regulatory reform, and climate-oriented motivation. Such a model enables the United States to influence the regional energy agenda while simultaneously creating conditions for the long-term energy and climate resilience of the Caribbean basin. The United States employs a combination of investment mechanisms, advisory support, and institutional assistance, allowing it to shape a policy aimed not only at the operational resolution of energy imbalances within the Caribbean basin but also at the long-term structural transformation of the energy sector of small states. Such a policy possesses a multidimensional character: it influences the region simultaneously through economic incentives, technological modernisation, and the evolution of regulatory norms. These approaches are based on the understanding that

traditional dependence on petroleum products, combined with high tariffs and the vulnerability of energy systems to extreme weather events, creates not merely economic challenges but also threats to the political and social stability of small island states. On the one hand, such approaches contribute to strengthening the economic independence of the region: grid modernisation, the reduction of technical losses, access to cheaper fuel resources (particularly LNG), and the scaling-up of renewable energy gradually reduce the vulnerability of Caribbean economies to price volatility within the global oil market. This means that the United States is effectively participating in the formation of new models of energy security in which diversification of sources and reduction of carbon intensity become not only climate objectives but also strategies of survival for small island countries. At the same time, however, this economic resilience carries its own geopolitical cost. The financial participation of American institutions and the involvement of US companies create durable infrastructural and technological linkages, as a result of which regional energy transformations become increasingly integrated into the broader strategic interests of Washington. On the other hand, such mechanisms create a foundation for US strategic influence, since modernisation processes are accompanied by the transfer of American standards, ranging from energy-efficiency requirements to principles of regulatory transparency and corporate governance. These standards become “normative structural elements” of regional reforms, and states accepting American investment and technical assistance effectively adapt their regulatory frameworks to the requirements of the transatlantic financial and technological architecture. In the long term, this creates enduring institutional synchronisation and reduces the scope for alternative models, particularly Chinese or Venezuelan formats of cooperation competing for influence in the region.

The implications of US energy policy for the countries of the Caribbean. US policy in the Caribbean energy sector between 2000 and 2025 has brought about a series of profound structural shifts, manifested in changes to the fuel mix, the modernisation of critical infrastructure, increased institutional capacity, and greater resilience of small island states to external shocks. The synergistic impact of the CESI and Growth in the Americas (América Crece) programmes, USAID initiatives and DFC instruments has shaped a new configuration of energy policy in a region that has historically relied on imported petroleum products and has been extremely vulnerable to fluctuations in global oil prices. The importance of this process is growing amid global energy transition and climate instability, which significantly increases the value of external support for infrastructure modernisation. A key outcome has been the diversification of energy supply, which is gradually changing the fuel mix in most Caribbean countries. According to IRENA (2012), in 2010 the share of oil in electricity generation in a number of countries exceeded 90%, and in some cases reached 95-98%, making the region one of the most dependent on imported fuel in the world. US programmes aimed at developing LNG infrastructure and supporting renewable energy sources have made it possible to significantly redress this imbalance. In the Dominican Republic, which is one of the largest

energy markets in the Caribbean, following the modernisation of the “AES Andrés” LNG terminal and an increase in gas imports, the share of oil in electricity generation fell from over 50% in 2012 to less than 7% in 2021 (AES Dominicana, 2025). The development of the liquefied natural gas market has become one of the key factors in shaping the updated energy supply architecture of the Caribbean region. LNG serves as a transition fuel, enabling countries to stabilise the operation of their power systems, reduce electricity generation costs and create the technical conditions for the further integration of renewable energy sources. US policy in this area relies on the financial instruments of the EXIM Bank, the investment mechanisms of the DFC, and technical support from USAID, forming a comprehensive institutional and infrastructural approach to the development of the LNG market.

Another consequence is the impact of US programmes on the institutional and technical development of countries in the region. Most Caribbean states have historically had limited capacity for strategic planning, regulatory oversight and infrastructure management, which has created barriers to attracting investment and introducing new technologies. Programmes run by USAID, CESI and the Organization of American States (OAS) have played a significant role in enhancing institutional capacity, including the creation of national energy strategies, the development of monitoring systems, the drafting of regulations for the transition to renewable energy, and the development of roadmaps for the transition to sustainable energy. Between 2015 and 2023, 16 countries in the region adopted updated national energy plans, a significant proportion of which were developed with the involvement of USAID and the Caribbean Centre for Energy and Environmental Sustainability (CCREEE, n.d.). Taken together, these results demonstrate that the effectiveness of US policy is measured not only by the volume of investment or the number of modernised facilities, but also by the depth of institutional reforms, the increased autonomy of local energy agencies, and long-term changes in the development strategies of Caribbean states. The US is establishing the structural framework for the region’s transition to a more sustainable, diversified and innovative energy model that meets the requirements of both economic adaptation and climate resilience.

The deepening of energy cooperation between the US and the countries of the Caribbean region brings not only opportunities for modernisation but also a number of systemic risks. A major challenge is the rising debt burden. According to the Eastern Caribbean Central Bank’s 2024 report, the average public debt ratio in the Caribbean region stands at around 77.39% of GDP. In such circumstances, even the financing of projects with high socio-economic returns can create long-term budgetary risks. Financial dependence on the US, by its very nature, also entails dependence on external political priorities. Changes in administrations in Washington, revisions to strategic priorities, transformations in the legislative framework, or shifts in global energy policy can directly affect the fate of key programmes in the Caribbean region. For example, the EXIM Activity Report (2023) demonstrates that the bank often focuses on supporting large export contracts and may shift its financing focus depending on US policy,

which sometimes conflicts with the environmental goals or long-term interests of recipient countries. Such shifts could make Caribbean countries vulnerable to changes in the external environment, as their energy transition may prove to be inextricably linked to donor policies. Taken together, these factors suggest that US energy policy, despite its benefits in terms of infrastructure modernisation, creates a number of long-term risks: financial, institutional and political. Increased debt burdens, unequal access to investment, dependence on external political priorities and potential restrictions on sovereignty pose real challenges for small island states. In these circumstances, the strategic task is to create mechanisms that will enable countries not only to benefit from external projects but also to minimise dependence: to diversify funding sources, strengthen institutional capacity, expand regional co-operation and build up their own investment capabilities. Only under such conditions will external support become an instrument of sustainable development, rather than a new form of structural vulnerability.

US energy policy in the Caribbean region is shaped not only as an instrument of technical modernisation or economic development, but also as a key element of broader geopolitical processes influencing the balance of power in the region. The United States' interaction with its two main competitors – China and Venezuela – plays a significant role, as both have been actively building their own models of presence in the region. Traditionally, Venezuela provided a significant portion of the region's energy supply through the PetroCaribe programme, which enabled Caribbean states to purchase oil on preferential terms, thereby exerting considerable political influence. Following a sharp decline in oil production in Venezuela and the political crisis of 2015-2019, the region faced an urgent need to diversify its energy sources (EIA, n.d.). It was at this point that the US stepped up its energy diplomacy, offering alternatives in the form of investment in LNG, support for renewable energy and reform of the regulatory environment. Such a policy creates the conditions for a gradual shift in the regional energy balance away from the Venezuelan model towards an infrastructure-oriented and market-integrated architecture supported by the US (López, 2023). This is of strategic importance as it reduces the residual scope for the restoration of Venezuela's energy influence should the domestic political situation in Venezuela change.

At the same time, competition is intensifying in the region between the US and China, whose model of

economic engagement is based on large-scale infrastructure investment, lending, and the construction of transport, telecommunications and energy infrastructure. According to a SELA analytical report (2024), the Caribbean is part of a broader Chinese strategy to strengthen its economic presence in Latin America, particularly in the critical sectors of energy, port logistics and communications. Chinese loans are often offered on terms that are attractive to countries with low creditworthiness, yet simultaneously require the use of Chinese companies, technologies and labour, potentially creating long-term structural dependence. In light of this, US energy diplomacy is taking on the characteristics of a strategic tool designed to curb the growth of China's presence and shape a more cohesive regional order centred on transparent financial practices and market mechanisms (Hosein *et al.*, 2025). US programmes promote models that include competitive procurement, private sector participation and strengthened regulatory independence. The contest between the US and China in the region is not only over infrastructure assets, but also over institutional standards that will shape the long-term development of the Caribbean energy sector.

Given the intensification of strategic competition between the US, China and Venezuela, the Caribbean energy sector is becoming one of the key dimensions of geopolitical balancing, within which small island states are forced to manoeuvre between external centres of power. US investments aimed at modernising energy infrastructure, developing the LNG market and institutional reforms offer an alternative to both the Venezuelan model of political-energy patronage and the Chinese infrastructure-credit paradigm. At the same time, the growing number of external actors in the region creates a complex configuration of opportunities and risks: co-operation with the US opens up access to financing and technology, but at the same time may deepen financial dependence, create structural technological asymmetry and limit states' autonomy in determining their own energy strategies. This is precisely why assessing the position of Caribbean countries in this environment requires a systematic analysis of internal strengths and weaknesses, as well as external opportunities and threats, which determine the trajectories of their energy development. A summary of these factors is presented in the SWOT analysis (Table 2), which allows for a comprehensive assessment of the strategic position of these states in the context of cooperation with the US.

Table 2. SWOT analysis of the Caribbean states' position in the context of energy cooperation with the US

Strengths	Weaknesses	Opportunities	Threats
Access to US financial instruments (DFC, EXIM Bank, USAID) to compensate for the lack of domestic capital	High levels of public debt (often 70-120% of GDP), which limit the ability to service new obligations	Accelerating the transition to renewable energy, and providing access to new technologies and private capital	The emergence of new financial, technological and political dependencies on the US
Improving energy resilience through microgrids, smart grids and backup systems	Uneven access to investment: institutionally stronger states attract more resources	Deepening regional integration and harmonising energy standards	Geopolitical competition between the US, China and Venezuela, which limits countries' autonomy
Diversification of energy supply: reducing dependence on oil, transitioning to LNG and RES	Technological dependence on American solutions and suppliers	Reducing vulnerability to fluctuations in global oil prices and external energy shocks	The risk of debt traps in the event of failed or suspended projects

Strengths	Weaknesses	Opportunities	Threats
Development of regulatory capacity and increased transparency of energy markets	Limited human resources and insufficient institutional capacity to implement complex projects	Developing human capital, technical expertise and institutional governance	The conditional nature of reforms: external partners may dictate the direction of energy policy

Source: compiled by the authors based on IRENA (2012), Embassy of the People's Republic of China in Grenada (2018), U.S. Department of State (2020), IRENA (2020), G.G. Dewasmes & T. Heron (2020), R. Leal-Arcas et al. (2021), CCREEE (2023), EXIM (2024), SELA (2024), U.S. Department of State & USAID (2024), DFC (2024), Eastern Caribbean Central Bank (2025), AES Dominicana (2025), CCREEE (n.d.), EIA (n.d.)

The SWOT analysis shows that the position of Caribbean states in the context of energy cooperation with the US is shaped by factors that are both complementary and contradictory. The identified strengths create the potential for accelerated modernisation of the region's energy systems; however, this potential is realised unevenly due to structural imbalances reflected in the weaknesses. First and foremost, even with access to financial resources, institutional and human resource constraints in a significant number of Caribbean states reduce the effectiveness of utilising foreign investment. This means that cooperation with the US alone does not guarantee a profound transformation of the energy sector if countries are unable to ensure the domestic capacity to implement technically complex projects and manage them in the long term. At the same time, the opportunities outlined in Table 2 suggest that Caribbean states have a unique historical chance not only to modernise their infrastructure but also to transition from dependence on fossil fuels to more sustainable energy consumption models. However, realising these opportunities requires a balanced policy that takes into account the risks of reforms being externally driven. In particular, the growing role of the US in setting technical standards, regulatory changes and financial mechanisms could lead to the formation of new forms of dependency, replacing traditional dependence on oil imports with dependence on external decisions regarding technology, governance and financing.

The threats identified in the SWOT matrix indicate that the geopolitical dynamics of the Caribbean are transforming the energy sector into an arena of competition between major powers. For Caribbean countries, this means that their energy policy may become a tool of geostrategic influence, rather than solely an internal priority. Consequently, the ability to balance relations with external partners, maintain room for independent decision-making, and diversify sources of support will be a determining factor in long-term sustainability. A SWOT analysis shows that the effectiveness of cooperation with the US depends not only on the scale of funding or the technologies implemented, but on the ability of Caribbean states to build their own institutional mechanisms that will allow to utilise external support without losing strategic autonomy. It is the balance between internal capacity and external influences that will determine whether the energy partnership with the US becomes a catalyst for sustainable development or a new dimension of dependency in the region.

An analysis of the consequences of US energy policy in the Caribbean region shows that the American presence

has become one of the key factors in the transformation of the regional energy architecture. The most significant changes can be seen in the structure of energy supply: the transition from oil dominance to a combined model, which combines LNG and renewable energy sources, has been made possible by US financial and technical instruments. Over the past decade, countries actively cooperating with US programmes have seen a reduction in electricity generation costs, an increase in the share of renewable energy, and a gradual reduction in dependence on imported petroleum products. This confirms that the development of LNG infrastructure and mechanisms to support renewable energy sources function as complementary elements of the US energy strategy aimed at reshaping the energy balances of small island states. At the same time, enhancing the region's energy resilience is not merely a technological process, but also an institutional one. Cooperation with the US has contributed to the formation of new standards for the regulation, management and planning of the energy sector. The development of microgrids, energy storage systems, digital monitoring and post-hurricane recovery mechanisms indicates that US programmes are geared towards long-term stability, rather than merely the modernisation of individual facilities. This confirms the trend towards the gradual transformation of US energy policy into an instrument of institutional influence, which contributes to a change in management logic and an increase in the regulatory capacity of recipient countries.

At the same time, the available data show that the effectiveness of these programmes is uneven. Countries with more developed institutions and lower debt burdens are quicker to adopt new technologies and attract private capital, whereas states with high levels of debt or limited administrative resources are integrating into the new energy system at a much slower pace. This creates intra-regional asymmetry, within which energy benefits are unevenly concentrated, exacerbating disparities in the levels of resilience and economic opportunities among Caribbean countries. The deepening of the US financial presence is also accompanied by an increase in dependency risks. Lending and investment guarantee mechanisms, despite their ability to stimulate infrastructure development, create long-term obligations that may worsen the debt position of individual states. In this context, US energy diplomacy emerges not only as a factor of support but also as a source of potential constraints that reduce the autonomy of small states in determining their own strategic priorities. In view of this, Caribbean countries find themselves in a situation requiring a delicate balance between the benefits of modernisation and the risks of reforms being dictated from outside.

Discussion

The findings indicate that US energy diplomacy in the Caribbean has become not merely an instrument of sectoral support, but a comprehensive mechanism for structural transformation that extends beyond technical modernisation. The analysis has demonstrated that financial incentives, technical assistance and regulatory reforms initiated by the US have set in motion the formation of a new model of energy governance, in which the diversification of fuel supplies, the development of LNG infrastructure and the deployment of renewable energy sources are becoming key elements of regional resilience. At the same time, it has been found that such processes are accompanied by a deepening of financial and institutional dependencies, forming a new type of interaction between the US and small island states, in which energy security is inextricably linked to political and economic autonomy. The findings demonstrate that US energy policy is gradually becoming a factor in the regional legitimisation of new cooperation mechanisms, which determine the balance of power in a broader geopolitical context and influence the strategic orientation of the Caribbean basin. The study not only clarifies the understanding of the nature of US influence on regional energy systems, but also lays the groundwork for a further comparative analysis of the American, Chinese and Venezuelan models of energy diplomacy. The conclusions drawn allow for a critical examination of the dynamics of interaction between foreign policy interests and internal structural changes, identifying the national specificities of transformations in the Caribbean.

In the works of E.E. Pereira & A.E. Steenge (2022) and K.U. Shah *et al.* (2021), the Caribbean region is interpreted as an area of heightened vulnerability, where the structural characteristics of small states (limited resource base, high import dependency, institutional fragmentation) give rise to chronic risks of economic and energy instability. E.E. Pereira & A.E. Steenge emphasise that the resilience of small island states is determined by their ability to build effective institutional linkages and maintain “systemic interest” from external actors, which partially compensates for their natural resource constraints. The findings of this study correlate with conclusions regarding the key role of external support, yet simultaneously demonstrate a significant shift: between 2020 and 2025, the development of LNG infrastructure and the modernisation of electricity grids in Caribbean states reduced dependence on traditional petroleum products to a far greater extent than their previous vulnerability models had predicted. In other words, the identified trend towards energy supply diversification refines the conceptual assumptions of E.E. Pereira & A.E. Steenge, showing that institutional dependence can evolve towards functional resilience provided there is active investment participation from external partners. The study by K.U. Shah *et al.* emphasises that the key barriers to the development of small island states are not only energy import dependence but also limited institutional capacity to implement energy efficiency policies. The authors demonstrate that the lack of systematic interaction between political, economic and technical institutions hinders the development of energy reforms in the Caribbean Small Island Developing States (Caribbean SIDS). The findings of this study are partly consistent

with their conclusion regarding structural institutional constraints, but complement it by demonstrating that US technical and regulatory support programmes have partially offset these gaps. The development of regulatory frameworks for LNG, the improvement of tariff systems and the introduction of strategic planning tools indicate that the institutional barriers identified by K.U. Shah *et al.* can be removed or significantly mitigated under conditions of long-term external influence.

The present study refines and expands upon the arguments put forward by J.E. Serrano-Moreno (2023) and J. Zelicovich & P. Yamin (2024), who examined the growth of American influence in the Caribbean through the prism of geopolitical rivalry with China and the mechanisms of economic diplomacy. The findings confirmed J.E. Serrano-Moreno’s conclusion that China’s increased activity under the “Belt and Road” initiative is prompting the United States to expand its own instruments of engagement; however, the nature of the interaction identified is less one-sided than the author had assumed. Empirical analysis has shown that Caribbean states utilise American programmes not only as a form of external support but also as a tool for implementing their own energy transition strategies, which contradicts the notion of the region’s passivity in J.E. Serrano-Moreno’s models. At the same time, the study’s findings correlate with the argument put forward by J. Zelicovich & P. Yamin regarding the prevalence of “positive incentives” in US economic diplomacy: in most cases, US support is provided in the form of partnership rather than coercion. However, contrary to the general conclusion of these authors, it has been established that the intensity and nature of US engagement varies depending on the foreign policy behaviour of specific states: countries that expand cooperation with China face stricter conditions for access to financing and heightened regulatory control. This indicates a greater complexity of the process than the authors suggested above: US policy creates not only dependencies but also scope for autonomous action by Caribbean states, which are able to adapt external resources to their own strategic goals. The findings of this study complement the theoretical models of both authors, demonstrating that US energy diplomacy in the region functions as a hybrid instrument, combining incentives, conditionality and scope for local strategic manoeuvrability.

As shown by the research of M. Dougé-Prosper & M. Schuller (2021), the prolonged dependence of Caribbean countries, as exemplified by Haiti, on preferential Venezuelan supplies under PetroCaribe created not only economic but also political vulnerability, exacerbating debt obligations and deepening the crisis of confidence in state institutions. The authors’ analysis is based on the conclusion that even after the reduction in PetroCaribe supplies, deferred financial obligations and the uneven redistribution of resources continued to sustain the region’s systemic dependence. A similar emphasis on structural vulnerability is also evident in the work of M.-H. Pierre & M. Güzel (2021), where PetroCaribe is viewed as a catalyst for socio-political mobilisation and digital protest, revealing the scale of distrust in the mechanisms for utilising Venezuelan funds and the failure of states to ensure transparency. They conclude that PetroCaribe continues to play

a role in the region's political economy even after the programme's de facto winding down, reproducing patterns of dependency and social inequality. However, the findings of this study reveal a different dynamic that both complements and corrects the conclusions of both groups of authors. The construction and expansion of LNG infrastructure with US participation between 2018 and 2025 not only offset the reduction in Venezuelan supplies but also reduced the dependency ratio on petroleum products in a number of countries by more than a third. This contradicts the assertion that PetroCaribe continues to be a systemic element of the regional energy architecture: the analysis shows that its influence has largely shifted from the economic sphere to the political and symbolic spheres, whilst actual energy dependence is gradually decreasing. At the same time, the findings of M. Dougé-Prosper & M. Schuller regarding the political nature of dependence are not disputed; the study shows that the replacement of Venezuelan supplies with US investment mechanisms is creating new forms of financial and regulatory dependence, although these differ in structure and degree of flexibility.

In the works of M. Zhao (2021) and A.M. Khan (2024), China's infrastructure activities are systematically described as a key element of Beijing's global strategy, aimed at establishing alternative centres of influence and displacing the US from its traditional spheres of dominance. M. Zhao emphasises that the "Belt and Road" initiative has become an instrument of expansion that not only creates new logistics corridors but also transforms the political and economic ties between China and countries in need of infrastructure resources, creating long-term debt obligations and dependence on Chinese capital for them. In a similar vein, A.M. Khan (2024) views Chinese projects as part of a broader competition for the status of a global investor, emphasising that China's infrastructure diplomacy operates through financial incentives, credit lines and strategic investments that have the potential to shift the balance of power in regions where the interests of major powers clash. Both authors argue that the acceleration of China's investment expansion is a direct challenge to American influence. However, the results of this study allow to refine these generalisations. The analysis showed that between 2020 and 2024, the scale and structural depth of Chinese infrastructure initiatives in the Caribbean lagged behind those of the US, particularly in the areas of energy grid modernisation, LNG infrastructure development and the implementation of technical assistance programmes. This refutes M. Zhao's assumption regarding the dominance of the Chinese model in all regional contexts and demonstrates that in the Caribbean, the priority for access to investment and political partnership remains with the US. The study's findings are partly at odds with A.M. Khan's thesis regarding the uniform expansion of Chinese financial mechanisms: empirical data indicate that, during the period under study, Caribbean states not only failed to increase their debt obligations to China but, in a number of cases, shifted their focus to US grant and loan mechanisms due to their better integration into regional energy strategies. These discrepancies allow to draw an important analytical conclusion: although the authors' conceptual framework correctly delineates the global nature of the Chinese challenge, the

empirical configuration of the Caribbean region demonstrates the fluidity and non-linearity of geopolitical competition, where dominance is not static and depends on the synergy of financial capabilities, political influence and technical support. In conclusion, the study's findings complement previous theories by showing that geopolitical competition in the Caribbean forms not a static but a dynamic equilibrium, in which the US maintains a leading position thanks to the scale and institutional nature of its energy engagement, whilst Chinese expansion remains more limited for the time being.

In the works of R. Martyr-Koller *et al.* (2021) and S.E. Galaitsi *et al.* (2024), it is emphasised that infrastructure degradation and the vulnerability of engineering systems are fundamental constraints on the development of small island states in the Caribbean, exacerbated by rising sea levels, more frequent storms and systemic economic losses. R. Martyr-Koller *et al.* emphasise that key infrastructure assets are located in coastal zones, where the combined impact of sea-level rise, salinity, extreme rainfall and cyclones creates long-term risks of degradation. In this context, the authors note that the adaptive capacity of SIDS is limited, and mechanisms to counter infrastructure deterioration require significant external resources and technological support. A similar argument is developed by S.E. Galaitsi *et al.*, who describe Caribbean states as chronically underfunded when it comes to modernising engineering systems and emphasise that even existing adaptation programmes remain fragmented and under-resourced, preventing a full transition from a vulnerability reduction strategy to a model of long-term resilience. The findings of this study are consistent with the issues of infrastructure degradation outlined by the authors, but clarify its dynamics. The analysis showed that US programmes for modernising power grids, in particular the implementation of smart-grid solutions, energy storage systems and the reinforcement of generation facilities, partially offset the critical weaknesses described by the authors above. In practice, this manifests itself in a reduction in the frequency of large-scale blackouts, increased resilience of grids to hurricanes, and a gradual reduction in losses in the electricity transmission system. This provides an important clarification to previous approaches: foreign investment does indeed reduce infrastructure vulnerability, but its effective impact critically depends on the institutional capacity of states to adapt new technologies and sustain their operation in the long term.

Analysis by S. Moncada & L. Nguyen (2024) and L. Jansson *et al.* (2025) demonstrates that the resilience of small island states depends directly on the integration of energy solutions into the broader context of climate adaptation policy, public health and long-term strategic planning. S. Moncada & L. Nguyen, summarising the findings of a systematic review, show that effective resilience models can only be developed if short-term responses are synchronised with the actions of local communities, support from public authorities and strategic plans at the national level. The authors emphasise that energy resilience instruments constitute only one component of this process, while the fundamental prerequisite for effectiveness lies in institutional coherence and governments' ability to implement "planetary health" approaches that recognise

the interdependence of environmental and social systems. The findings of this study confirm the authors' general argument regarding the importance of multi-level coordination, while also extending it through empirical evidence showing that US infrastructure investments provided a tangible reduction in risks following extreme climate events. This demonstrates that, at the practical level, energy diplomacy may be as significant for resilience as healthcare measures or local mobilisation initiatives.

In turn, the work by L. Jansson *et al.* (2025), which highlights the lack of integration of urbanisation processes into SIDS' climate strategies, indicates that infrastructure adaptation in vulnerable cities often lags behind needs. The authors view the vulnerability of SIDS as the result of a combination of climate threats and social disparities, compounded by insufficient attention to sustainable urban development. The present study is partly consistent with their findings: the modernisation of electricity grids and the introduction of decentralised energy systems do indeed reduce climate risks; however, if the urbanisation component is overlooked, the effect of these programmes is not fully realised. The data obtained show that the impact of US energy projects on urban resilience is stronger in those countries where authorities possess the necessary institutional capacity to integrate technological solutions into urban planning, whereas in other cases, investments yield fragmented results. Overall, the present study refines the theoretical propositions of both works. Firstly, it demonstrates that energy modernisation is not an isolated sphere, but a key element of comprehensive adaptation strategies, confirming the conclusions of S. Moncada & L. Nguyen (2024) regarding the need for a holistic approach. Secondly, the results indicate that the structural institutional barriers highlighted by L. Jansson *et al.* (2025) do indeed affect the effectiveness of programmes, but their impact is variable and depends on the degree to which energy planning is integrated into the broader climate policy framework.

In the works of M. Witter (2021) and P.S. Mohan (2022), Caribbean states are portrayed as economically vulnerable entities whose development is systematically hampered by structural poverty, high debt pressure and a chronic lack of investment in productive and energy infrastructure. M. Witter, drawing on the critical tradition of economic thought in the Caribbean region, demonstrates that historical development models have shaped a macro-economic environment in which states have limited scope for modernisation breakthroughs. This approach emphasises that the lack of investment in key sectors, particularly energy, is not a random phenomenon but the result of long-standing institutional trends. P.S. Mohan, in turn, shows that even with significant progress towards decarbonisation targets, the Caribbean region remains critically dependent on international climate finance, as domestic resources, private capital and fiscal reform mechanisms do not provide the necessary scale of funding for the modernisation of the energy sector. The findings of this study confirm the central arguments of both authors: financial constraints do indeed remain a defining barrier to the transition to modern energy systems. Empirical analysis shows that Caribbean states are unable to independently finance the reconstruction of generation capacity, the

upgrading of power grids and the development of LNG infrastructure without external support, which is consistent with M. Witter's conclusions regarding the structural constraints of regional economies. This study complements previous theoretical approaches by demonstrating that the transformation of energy infrastructure in the Caribbean region is taking place under conditions of a complex compromise: external financing is both a critical resource for modernisation and a source of new vulnerability.

The studies by D.M. Cavalcanti *et al.* (2025) and A. Dreher (2025) present a rather critical view of the effectiveness of international technical assistance, including USAID programmes. D.M. Cavalcanti *et al.*, drawing on a large-scale analysis of data from 2021, demonstrate that USAID programmes can have a significant impact on social and health outcomes; however, their study focuses on the global dimension and does not draw direct conclusions about the depth of institutional reforms in specific sectors, particularly in the area of regulatory governance. A. Dreher, in turn, argues that official development assistance often fails to achieve the true goals of institutional transformation due to competing political, commercial and geopolitical priorities, which undermines its long-term effectiveness. In his model, official development assistance appears as an instrument of short-term influence rather than a mechanism for structural modernisation. The findings of this study partly echo these arguments, yet at the same time introduce fundamental clarifications. On the one hand, A. Dreher's conclusions regarding donors' mixed motives are confirmed. Indeed, US technical assistance in the Caribbean is not only developmental but also geopolitical in nature. However, contrary to the assertion that the impact of donor programmes is merely declarative, empirical analysis shows that in a number of cases (Barbados, the Dominican Republic) USAID's advisory initiatives have led to the adoption of specific regulatory acts, changes in tariff regulation structures, and the introduction of mechanisms for integrating renewable sources into national power systems. These findings directly contradict the notion of a lack of institutional depth in aid, as embedded in the interpretations of the authors mentioned above. The reasons for this discrepancy can be explained by the fact that most of the studies on which the authors rely cover the period up to 2018, whereas the most significant reforms in the Caribbean region took place after 2020, within the framework of the Caribbean Energy Initiative 2.0, the USAID Climate Strategy (2022-2030) and technical support programmes in the field of smart grids and regulatory framework updates.

To summarise the discussion, it can be stated that the findings of this study have confirmed the multidimensional nature of US energy diplomacy in the Caribbean region, whilst broadening the understanding of its institutional and geopolitical implications. The analysis has shown that US initiatives are not limited to technical modernisation or financial support, but form a comprehensive architecture of influence that combines elements of development, regulatory reform and strategic balancing between external actors. The consistency of the findings with a number of previous studies suggests that US energy policy does indeed strengthen the resilience of small island states; however, the identified discrepancies demonstrate that its

effect is not unequivocally positive and depends on local institutional capacity, the scale of geopolitical competition and the specifics of national priorities. The identified combination of incentive mechanisms does not fully fit into interpretations where US policy is viewed solely as a development tool or exclusively as a mechanism of influence. The analysis conducted demonstrates that the actual effect of energy diplomacy is shaped at the intersection of external strategies and internal regulatory dynamics.

Conclusions

The study established that US policy contributed to a stable and long-term trend towards reducing the dependence of Caribbean states on imported oil through the development of LNG infrastructure, the diversification of supply sources, and the creation of technological preconditions for the integration of alternative energy sources. It was demonstrated that the expansion of LNG terminals, the modernisation of generation capacities, and the transition of some states to gas contracts not only produced economic benefits but also reduced the vulnerability of energy systems to external shocks, particularly fluctuations in global oil prices. It was proven that the modernisation of grid infrastructure and the introduction of demand-management systems significantly enhanced the ability of small island economies to withstand the consequences of natural disasters, which in the Caribbean basin are systemic in nature and cause substantial destruction every year. It was found that US advisory and technical programmes contributed to the institutional strengthening of states, particularly in the areas of regulatory reform, tariff policy modernisation, the introduction of competitive market mechanisms, and the development of strategic planning, thereby creating conditions for the more independent implementation of energy policy in the long term.

The results of the analysis confirmed the uneven distribution of investment across countries, which creates an asymmetry in access to finance and may exacerbate the structural dependence of certain states on the US. It

was found that, alongside economic benefits, Washington's policy recreates risks of financial and regulatory dependence, which potentially limit countries' ability to set their own long-term development priorities. It is shown that US competition with China and Venezuela for influence in the Caribbean region has altered the nature of the regional balance of power, creating for small states both new opportunities for diversifying partnerships and new constraints on foreign policy manoeuvring. The findings allow for a conceptual generalisation that US energy policy in the Caribbean has become an instrument for shaping regional stability and, at the same time, a channel of strategic influence that redefines the balance of external forces and determines the development trajectories of small states. They deepen understanding of how infrastructure investment, technological support, and geopolitical competition create a complex regime of interdependence that combines modernisation with the potential loss of autonomy.

At the same time, the study has certain limitations, notably the fragmentary nature of available statistical data on the volume and structure of US investment in the region, as well as the lack of comprehensive reporting on individual cooperation programmes, which complicates the quantitative assessment of their actual impact. Nevertheless, the findings provide a basis for further academic analysis. A promising direction for future research is the examination of how global technological and political transformations will shape the strategic behaviour of Caribbean states in the coming decades.

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Conflict of Interest

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