

**OPTIMIZATION OF TRANSNATIONAL  
GOVERNANCE BY THE MEKONG RIVER  
COMMISSION IN MEETING CLEAN AND  
AFFORDABLE ENERGY: THE 7<sup>TH</sup> SUSTAINABLE  
DEVELOPMENT GOALS IN THE MEKONG RIVER  
BASIN**

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**Abstrak:** Penelitian ini fokus terhadap optimalisasi tata kelola transnasional di kawasan Sungai Mekong oleh Mekong River Commission (MRC) dalam upaya memenuhi energi bersih dan terjangkau sesuai dengan tujuan pembangunan berkelanjutan (SDGs ke-7). Peningkatan pembangunan proyek bendungan tenaga air di kawasan Sungai Mekong menimbulkan pertentangan antara kebutuhan energi regional, dampak sosial lintas batas, dan resiko terhadap degradasi lingkungan. Dengan demikian, kegelisahan akademis muncul karena MRC tidak memiliki kekuatan hukum yang mengikat dengan negara anggota untuk mengikuti prinsip atau standar keberlanjutan yang ditetapkan, sehingga efektivitas tata kelola di lintas batas dipertanyakan. Penelitian ini menggunakan pendekatan kualitatif deskriptif dengan analisis dokumen yang mencakup laporan strategis, jurnal ilmiah dan kebijakan MRC seperti Basin Development Strategy 2021-2030 dan Sustainable Hydropower Development Strategy. Hasil penelitian membuktikan bahwa MRC berperan sebagai teknokratik broker atau perantara dalam proses kebijakan yang memprioritaskan analisis, data ilmiah dan keahlian teknis dalam merumuskan keputusan yang efisien dan rasional. Temuan menunjukkan koordinasi operasional, mekanisme konsultasi regional dan pertukaran data real-time, serta standarisasi teknokratik yang bersifat non koersif. Temuan juga memperlihatkan tantangan struktural MRC, termasuk keterbatasan legalitas yang tidak mengikat dan asimetri kekuasaan antarnegara yang tidak seimbang. Meski begitu, MRC tetap mampu mengoptimalkan tata kelola transnasional yang adaptif, berbasis pengetahuan dan kolaboratif dalam pengelolaan pembangkit listrik tenaga air yang berkelanjutan di kawasan Sungai Mekong.

**Kata Kunci:** Mekong River Commission, Tata Kelola Transnasional, Pembangkit Listrik Tenaga Air, Energi Bersih, Sungai Mekong.

**Abstract:** This study focuses on the optimization of transnational governance in the Mekong River basin by the Mekong River Commission in an effort to meet clean and affordable energy needs in line with sustainable development goals (SDG 7). The increase in hydropower dam projects in the Mekong River basin has led to conflicts between regional energy needs, cross border social impacts, and environmental degradation risk. Thus, academic concerns have arisen because the MRC does not have the legal authority to bind member countries to follow established sustainability principles or standards, thereby calling into question the effectiveness of cross-border governance. This research utilizes descriptive qualitative approach with document analysis covering strategic reports, scientific journals, and MRC policies such as the Basin Development Strategy 2021-2030 and the Sustainable Hydropower Development Strategy was used. The results of the study prove that the MRC acts as a technocratic broker or intermediary in the policy process that prioritizes analysis, scientific data, and technical expertise in developing efficient and rational decisions. The findings show operational coordination, regional consultation mechanisms, real-time data exchange, and noncoercive technocratic standardization. The findings also reveal the MRC's structural challenges, including the limitations of nonbinding legality and the imbalance of power between countries. Nevertheless, the MRC has been able to optimize adaptive, knowledge-based, and collaborative transnational governance in the Mekong River basin's sustainable hydropower management.

**Keywords:** Mekong River Commission, Transnational Governance, Hydropower, Clean Energy, Mekong River.

## INTRODUCTION

Clean and affordable energy is one of the main targets of the Sustainable Development Goals (SDG) 7, which promotes universal access to modern, environmentally friendly, and efficient energy. In Southeast Asia, renewable energy sources in the form of hydropower play a strategic role, with the Mekong River being particularly important. The transboundary nature of the Mekong River renders its management very complex, involving political, economic, and ecological dynamics across the Mekong River basin countries<sup>1</sup>.

The Mekong River is the longest river in Southeast Asia, the seventh longest in Asia, and the twelfth longest in the world, with a length of 2,700 miles or 4,350 km. The Mekong River flows through six countries, stretching from Tibet in China to Laos, Cambodia, Thailand, and Myanmar, and ending in the South China Sea, south of Ho Chi Minh City, Vietnam<sup>2</sup>. It is a river with a thousand benefits for the people of the Mekong River Basin. Water resource management and monitoring of all conditions in the river area are actions that are urgently needed by the communities around the Mekong. Hence, the establishment of the Mekong River Commission (MRC) is the right answer to the Mekong River management dilemma.

The Mekong River Commission (MRC) is an intergovernmental organization that works directly with the four countries of the Mekong River, i.e Cambodia, Laos, Thailand, and Vietnam, in the common interest of water resource management and sustainable development in the Mekong River<sup>3</sup>. As a regional facilitation and advisory body governed by the ministers of water and environment of four countries, the MRC aims to ensure that the Lower Mekong Basin's Mekong River is developed in the

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<sup>1</sup> Tilly, Mark. "Trouble on the Mekong," [lowyinstitute.org](https://www.lowyinstitute.org/the-interpreter/trouble-mekong) (2021): <https://www.lowyinstitute.org/the-interpreter/trouble-mekong>

<sup>2</sup> Britannica. "Mekong River," last modified 2025, [britannica.com: https://www.britannica.com/place/Mekong-River#ref48030](https://www.britannica.com/place/Mekong-River#ref48030)

<sup>3</sup> Mekong-US Partnership. "MRC," last modified 2023, [https://mekonguspartnership.org/partners/mekong-river-commission-mrc/#:~:text=The%20Mekong%20River%20Commission%20\(MRC,Friends%20of%20the%20Mekong%20observer](https://mekonguspartnership.org/partners/mekong-river-commission-mrc/#:~:text=The%20Mekong%20River%20Commission%20(MRC,Friends%20of%20the%20Mekong%20observer)

most efficient manner that benefits all member countries and minimizes harmful effects on people and the environment<sup>4</sup>.

The MRC also serves its member countries by facilitating policy coordination, sharing information, and developing science-based development strategies. The MRC plays a key role in regional decision-making and policy implementation to ensure that hydropower is not exploited to compromise the environmental balance and welfare of the people living in the Mekong region<sup>5</sup>. As a shared water resource flowing through six countries, the management of the Mekong River faces many challenges due to its open access. This means that the river can be used by anyone and there should be no restrictions on other parties who wish to benefit from these water resources<sup>6</sup>. The main issue that arises is how the MRC governance mechanism can maintain a balance between the interests of transboundary environmental sustainability, community welfare, and energy development.

Interaction between MRC member countries in implementing the targets of SDG 7 occurs through established policy coordination patterns, crossborder hydropower project consultations, and data exchange<sup>7</sup>. However, problems arise in operational implementation due to imbalances between upstream and downstream bargaining positions, such as Laos, which focuses on energy imports, while downstream countries such as Thailand and Vietnam are more sensitive to ecological impacts<sup>8</sup>, non-

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<sup>4</sup> MRC. "Mekong River Monitoring and Forecasting," last modified 2025, <https://www.mrcmekong.org/>

<sup>5</sup> MRC. "Hydropower," last modified 2025, <https://www.mrcmekong.org/hydropower/>

<sup>6</sup> Haefner, A. "Water governance in the Mekong region: the role and impact of civil society organizations," *Water International* 49 (2024): 310-317, <https://doi.org/10.1080/02508060.2024.2321777>

<sup>7</sup> Jinyu Gao, et al. "Soft-cooperation via data sharing eases transboundary conflicts in the Lancang-Mekong River Basin," *Journal of Hydrology* 606 (2022). <https://doi.org/10.1016/j.jhydrol.2022.127464>

<sup>8</sup> Greater Mekong. "The LMB Sustainable Hydropower Development Strategy," last modified 2018,

binding governance, and differences in regional energy needs, which cause concerns about the Mekong River region's uneven achievement of SDG 7.

In view of the above issues, this paper emphasizes the importance of cross-actor involvement, referring to Djelic and Andersson's thinking on transnational governance, which is no longer centered on the nation-state, but rather a constellation of cross-actors<sup>9</sup>. Optimizing transnational governance in the Mekong River Basin has become a strategic necessity as hydropower development increases, affecting countries across borders. The complexity of the Mekong River, involving energy, ecological, and social interests across six countries, highlights the limitations of national policy approaches to managing shared water resources. In this context, the MRC serves as a transnational governance institution that coordinates member states interests through a noncoercive, science-based mechanism and regional consensus.

Through functional and technocratic indicators, this study positions the optimization of MRC governance as a knowledge-based, adaptive process that contributes to achieving clean and affordable energy in accordance with the 7th sustainable development goal (SDG). This approach emphasizes that the effectiveness of transboundary governance is determined not solely by legal compliance, but by the institutional capacity to manage complexity and shared risks collaboratively. Nevertheless, this study examines the role of MRC as an external party to the nation-state in driving the success of SDG 7 through renewable hydro energy management to maintain high energy quality and create equitable energy access for countries along the Mekong River.

This research seeks to examine how the Mekong River Commission (MRC) optimize transnational governance in the management of

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<https://greatermekong.org/sites/default/files/Attachment%2012.%20MRC%20presentation.pdf>

<sup>9</sup> Djelic & Andersson. "TRANSNATIONAL GOVERNANCE Introduction: A World of Governance – The Rise of Transnational Regulation". Institutional dynamics of regulation: Cambridge University (2006): 1-28. DOI: 10.1017/CBO9780511488665.001

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hydropower on the Mekong River, and how the transnational governance mechanism implemented by the MRC contribute to Sustainable Development Goals (SDGs) 7 in the development of clean and affordable energy in the Mekong River Basin. In this study, the author refers to the idea that transnational governance arises on the basis of cross-actor relationships involving states, non-state actors, international institutions, civil society, and the private sector, which create new regulations outside the realm and structure of a single state<sup>10</sup>. This thinking is reinforced by the theory that effective global governance depends on inter-state cooperation and transnational networks<sup>11</sup>.

This theory is relevant to this study because the MRC established new regulations outside the state structure through coordination between countries in the Mekong River Basin to achieve clean and affordable energy in the Mekong River Basin. The issue of clean energy in the Mekong River Basin cannot be resolved by the regulations of a single country because water flow, electricity networks, and dam construction are transboundary in nature. Nevertheless, the management of the Mekong River requires a “transnational governance” model, as the rules and coordination between countries are conducted through collaborative and consensus-based interactions between countries<sup>12</sup>. This makes the MRC not just a transnational forum but also an arena for multi- and cross-actor collaboration that connects development, social environmental interests in achieving SDGs 7.

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<sup>10</sup> Djelic & Andersson. “TRANSNATIONAL GOVERNANCE Introduction: A World of Governance – The Rise of Transnational Regulation”. Institutional dynamics of regulation: Cambridge University (2006): 1-28. DOI: 10.1017/CBO9780511488665.001

<sup>11</sup> Keohane, Robert O. After Hegemony: Cooperation and Discord in the World Political Economy. Princeton university Press, 2005: 1-209

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<sup>12</sup> Djelic & Andersson. “TRANSNATIONAL GOVERNANCE Introduction: A World of Governance – The Rise of Transnational Regulation”. Institutional dynamics of regulation: Cambridge University (2006): 1-28. DOI: 10.1017/CBO9780511488665.001

## **METHOD**

The author employs a descriptive qualitative research method with a policy and institutional analysis approach. A qualitative method can be used to contextually interpret socio-political phenomena, which is relevant for examining the meaning, processes, and dynamics between actors within the framework of transnational policy<sup>13</sup>. This research focuses on gaining an in-depth understanding of the transnational governance model implemented by the MRC in the management of hydropower plants on the Mekong River to achieve clean and affordable energy.

Thus, the unit of analysis that manages the River Basin Development Strategy and Sustainable Hydropower Development Strategy in this study, as clearly stated in the MRC organizational structure, consists of member countries, non-member dialogue partners, international partners, donors, experts, the Joint Committee, the Council, and the Secretariat, which are accountable for administrative and technical activities<sup>14</sup>.

## **RESULTS AND DISCUSSION**

### **Mekong River Commission as a Transnational Governance Institution**

The Mekong River Commission (MRC) was established in 1995 through the Agreement on the Cooperation for Sustainable Development of the Mekong River Basin in Chiang Rai, Thailand, by four MRC member countries: Cambodia, Laos, Thailand, and Vietnam. The MRC plays an important role as a transnational governance body for regulating water use and resources in the Mekong River. Although it does not have a binding legal authority, the MRC functions as a coordination forum for establishing crossborder norms for mutual benefit<sup>15</sup>.

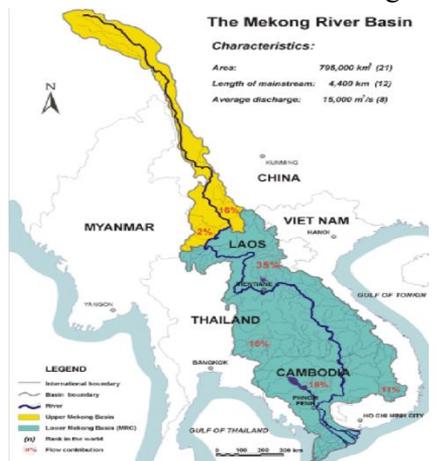
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<sup>13</sup> Creswell, J. W. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (5<sup>th</sup> ed.). SAGE Publications, 2018

<sup>14</sup> MRC. "Governance and Organisational Structure," last modified 2024. <https://www.mrcmekong.org/governance-and-organisational-structure/>

<sup>15</sup> MRC. "Mission of MRC," last modified 2025, <https://www.mrcmekong.org/>

The risk of increased conflict between countries has encouraged the MRC to engage in transnational governance as a mechanism for consultation and data exchange between countries<sup>16</sup>. Power imbalances between upstream and downstream countries, ecological conflicts such as dam construction that causes ecosystem damage, declining fish populations that are a source of livelihood for communities in the Mekong region, and poor soil quality require transnational governance involving multiple actors beyond national governments and national policies<sup>17</sup>. Nevertheless, the MRC, which consists of four countries in the Mekong region, agreed to cooperate in all areas of sustainable development, including irrigation, hydropower, navigation, flood control, fisheries, floating timber, recreation, and tourism, including the utilization, monitoring, and management of water related resources in the Mekong River Basin<sup>18</sup>.



Picture 1: Peter H. Gleick – map of the Mekong River Basin

<sup>16</sup> Kamput, K. “Genealogical Discourse within the Transition of the Mekong River Commission: Development of Underdevelopment and Developing Alternative Sustainable Livelihoods,” *Journal of Mekong Societies* 12, no. 3 (2016): 131–166, <https://so03.tci-thaijo.org/index.php/mekongjournal/article/view/73321>

<sup>17</sup> Haefner, A. “Water governance in the Mekong region: the role and impact of civil society organizations,” *Water International* 49 (2024): 310-317, <https://doi.org/10.1080/02508060.2024.2321777>

<sup>18</sup> MRC. “Functions of MRC,” last modified <https://www.mrcmekong.org/>

The above is a map of the Mekong River Basin, as marked in green on the map, which is the lower reaches of the Mekong River surrounded by four countries, all of which are part of the MRC: Vietnam, Laos, Thailand, and Cambodia. The problem currently facing the Mekong is the proliferation of dam construction driven by energy demand from economic development and private sector investors. As of 2021, there are 13 dams in the main Mekong River basin, with a total installed capacity of 5,300 megawatts. Five dams are located in China, i.e., Jinghong, Manwan, Dachaoshan, Nuozhadu, and Goupitan; four are in Laos, i.e., Xayaburi, Don Sahong, Pak Beng, and Pak Lay; and the remaining four are in Cambodia, i.e., Lower Sesan, Stung Treng, Kratie, and Sambor. On the Mekong River, there are 100 dams and other hydropower infrastructure projects that are planned or already under construction<sup>19</sup>.

Regarding the strategic location of the Mekong region, Myanmar only has 2% of the Mekong River flow and does not have much interest in water management that produces energy, so there is very little interest in joining the MRC. According to Watt Botkosal, Deputy Secretary General of the Mekong Committee of Cambodia, “China wants to develop its own dams, so if China joins the MRC, the dams that China will develop must comply with MRC procedures, which require consultation.”<sup>20</sup>

The author emphasizes China's ambition to develop its own dams because if it chooses to join the MRC, then every action China takes on the Mekong River must go through stages agreed upon by MRC members, while China seems unwilling to suffer losses. From one of the issues that has arisen, the author concludes that the MRC remains an alternative for the transnational governance of sustainable water management in the Mekong River, even though not all countries in the Mekong River Basin are

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<sup>19</sup> FME. “How many dams are there on the Mekong River?,” *Fabulous Mekong Eco-Tours* (2021): <https://fme.travel/how-many-dams-are-there-on-the-mekong-river/>

<sup>20</sup> VOA. “On Mekong Commission, a Stark Absence of Two Countries”. Last modified 2012, <https://www.voacambodia.com/a/on-mekong-commission-a-stark-absence-of-two-countries--136675808/1360370.html#>

members of the MRC, such as Myanmar and China, which are the only MRC dialogue partners.<sup>21</sup> However, Myanmar and China continue to coordinate with the MRC, and the MRC continues to carry out transnational governance in the Mekong River Basin.

This phenomenon is closely related to the thinking of Djelic and Andersson that the imbalance in the distribution of environmental benefits and risks described above is possible to empower the MRC in the governance of the Mekong River to meet clean energy needs and ensure that the distribution of benefits remains well organized. The MRC serves as a normative cooperation mechanism that can bridge the interests of energy and ecosystem protection across borders. Nevertheless, the MRC governance model described above can be described as “transnational governance” i.e governance beyond the state, namely regulation that arises from relationships between actors across countries.

### **Optimization of MRC in Hydropower Management in the Mekong River**

The irregular construction of dams and the uneven distribution of benefits and hazards posed by environmental risks in the Mekong River have prompted the MRC to optimize the management of hydropower plants in the Mekong River through a strategy of establishing and developing programs in the Mekong River Basin. As a facilitator and coordination channel comprising the four Mekong riparian countries and two other countries (China and Myanmar) as dialogue partners, the MRC has formulated a strategy to balance governance in the Mekong River<sup>22</sup>. In addition to member countries' contributions to operational governance funding, the MRC also receives financial assistance from its partners, such as the European Union, the United States, Australia, Belgium, the Netherlands, Finland, Japan, Germany, France, Luxembourg, New

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<sup>21</sup> Ibid.

<sup>22</sup> Iwlearn. “About the MRC,” Last modified 2009, [https://archive.iwlearn.net/mrcmekong.org/about\\_mrc](https://archive.iwlearn.net/mrcmekong.org/about_mrc)

Zealand, Sweden, and the World Bank. These partnerships ensure that operational readiness and governance run as planned<sup>23</sup>.

SDG 7 promotes universal access to clean, affordable, sustainable, and reliable energy. Without proper governance, high hydropower potential 53,000 MW, mostly located in Laos and China<sup>24</sup>. High hydropower potential without proper governance poses a significant risk; unregulated hydropower development will cause socio-political tensions and hinder ecological sustainability. Nevertheless, the MRC's contribution here is strongly emphasized to create hydropower development based on regulated and sustainable principles through the Basin Development Strategy (BDS) and the Sustainable Hydropower Development Strategy (SHDS) 2021-2030<sup>25</sup>. The following are the strategies developed by the MRC for managing the Mekong River:

### **1. Basin Development Strategy for the Mekong River Basin 2021-2030**

BDS is a watershed management strategy that promotes the transformation of Mekong River management from planning to operational management, particularly in the management of hydropower, which is a source of change to the hydrology of the Mekong River's<sup>26</sup>. Unregulated dam construction has resulted in decreased sedimentation, increased water

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<sup>23</sup> MRC. "The integrated water resources management-based Basin Development Strategy for the Lower Mekong Basin 2021–2030 and the MRC Strategic Plan 2021–2025," Vientiane: MRC Secretariat (2021). <https://www.mrcmekong.org/wp-content/uploads/2024/08/BDS-2021-2030.pdf>

<sup>24</sup> IWMI, "Re-conceptualizing dam design and management for enhanced water and food security," Last modified 2017, <https://archive.iwmi.org/wle/solutions/dams/>

<sup>25</sup> MRC. "Sustainable Hydropower Development Strategy: A basin-wide strategy for a changing Mekong River Basin," (2023): <https://www.mrcmekong.org/wp-content/uploads/2022/06/Sustainable-Hydropower-Development-Strategy-A-Basin-wide-Strategy-for-a-Changing-Mekong-River-Basin.pdf>

<sup>26</sup> MRC. "The integrated water resources management-based Basin Development Strategy for the Lower Mekong Basin 2021–2030 and the MRC Strategic Plan 2021–2025," Vientiane: MRC Secretariat (2021). <https://www.mrcmekong.org/wp-content/uploads/2024/08/BDS-2021-2030.pdf>

flow fluctuations, and impacts on ecosystems and the socioeconomic resilience of downstream communities. Nevertheless, the BDS established by the MRC provides guidance to member countries to coordinate dam operations across borders to reduce undesirable impacts, such as the risk of sudden flooding and drought, and to reduce water flow fluctuations.

BDS can be an alternative in determining the optimal and sustainable strategic location for dam projects, thereby helping countries optimize the construction of hydroelectric dams that have great potential for integrating wind and solar energy. The findings indicate that the BDS conducts regular monitoring of the Mekong River, triggering a transition from an individual or country approval approach to a regional scenario evaluation. On the other hand, BDS provides a sediment management strategy, known as sediment flushing, where sedimentation is a critical phenomenon due to dam projects, with the aim of reducing sediment or sediment release downstream<sup>27</sup>.

In optimizing the transnational governance of the MRC, the BDS has developed an operational instrument called the MRC Strategic Plans (SP) 2021-2025, which promotes the success of the BDS strategy based on integrated water resources management (IWRM) over the next five years. The SP guides the activities of the MRC and its four member countries in coordinating sustainable development in the Mekong River Basin by setting 28 outputs and 95 activities. The SP 2021-2025 is designed to achieve five strategic priorities in the MRC's transnational governance of the Mekong River, covering environmental, social, economic, climate, and cooperation dimensions.<sup>28</sup> The environmental dimension aims to restore the ecological function of the Mekong River by improving the quality of water flow and reducing the impact of sedimentation. The social dimension prioritizes ensuring access to water and energy and protecting local communities' livelihoods, especially for vulnerable groups. Finally, the economic dimension prioritizes improving the equitable distribution of multi-sector

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<sup>27</sup> Ibid

<sup>28</sup> MRC. "Strategic Plans," last modified 2021, <https://www.mrcmekong.org/strategic-plans/>

benefits across the region, such as hydropower, fisheries, navigation, and agriculture. The climate dimension priority is designed to improve water resilience in the Mekong River so that it remains stable, i.e., it does not cause sudden flooding or drought. Finally, the multi-stakeholder and multi-sector cooperation dimension priority aims to strengthen transnational coordination as the foundation for Mekong River governance optimization.

Therefore, the BDS is a visionary framework for a ten-year period from 2021 to 2030. Meanwhile, SP 2021-2025 is an exclusive operational framework or roadmap to promote the success of BDS by strengthening hydropower coordination, sediment management, monitoring, cross-border data sharing, and technical capacity. The realization of the SP within the BDS demonstrates that the MRC is not merely a consultative forum has evolved into a responsive transnational governance actor capable of integrating policy, dam operations, digitalization and data sharing as part of efforts to manage hydropower in the Mekong River in an equitable, efficient, and sustainable manner<sup>29</sup>.

## **2. Optimization of The Sustainable Hydropower Development Strategy**

The Sustainable Hydropower Development Strategy (SHDS) is one of the MRC's strategies for optimizing transnational governance in the Mekong River to ensure that hydropower development in the Mekong River is orderly, sustainable, targeted, measurable, and integrated between countries. This strategy guides projects to reduce, avoid, and mitigate the transboundary impacts of hydropower development projects in the Mekong<sup>30</sup>.

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<sup>29</sup> Williams, J. M. Is three a crowd? River basin institutions and the governance of the Mekong River. *International Journal of Water Resources. Development* 37 no. 4 (2020): 720–740. <https://doi.org/10.1080/07900627.2019.1700779>

<sup>30</sup> MRC, “Sustainable Hydropower Development Strategy A Basin-wide Strategy for a Changing Mekong River Basin,” (2022): <https://www.mrcmekong.org/publications/sustainable-hydropower-development-strategy-a-basin-wide-strategy-for-a-changing-mekong-river-basin/>. 10.52107/mrc.ajutpe

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The impact faced by local communities in the Mekong River Basin in voicing the dilemmas arising from dam projects, particularly in Laos, which abuses energy potential for short-term economic gain without considering the long-term social impact<sup>31</sup>, requires the participation of parties other than the state to coordinate and find a middle ground for mutual benefit and advantage in all dimensions, including ecological, social, and economic. To that end, the MRC provides various strategies, including SHDS, to optimize transnational governance in the Mekong River.

The SHDS has benchmarks and standards agreed upon by member countries for operations implemented for the Mekong River Basin's transnational governance. Similar to the BDS, the policies in the SHDS are not merely project evaluations, but rather operational strategies that consider the equitable distribution of benefits and impacts from upstream to downstream as a single hydrological region, so that they are not driven by the domestic interests of MRC member countries<sup>32</sup>. Optimizing MRC governance of the Mekong River to equalize the distribution of benefits and meet clean and affordable energy needs with SHDS through three main points:

First, operational coordination of dams aims to reduce risks in downstream areas and ensure a consistent and sustainable river flow regime, maintaining the river flow pattern in line with the river's natural hydrological, ecological, social, and economic functions. In SHDS operations, the MRC regulates water volume procedures at the sluice gates to prevent sudden flooding or extreme drops in water discharge that could cause downstream drought<sup>33</sup>. Developing operational guidelines for dams

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<sup>31</sup> Souksakoun, K. "Towards Sustainable Hydropower: Policy Implementation and Livelihood Transformation in the Sekong Basin, Laos," (2022): [https://www.researchgate.net/, 10.25911/7H75-PR31](https://www.researchgate.net/,10.25911/7H75-PR31)

<sup>32</sup> Intralawan, A., et al. "Reviewing benefits and costs of hydropower development in the Mekong River Basin. WIREs Water," (2019): 1-16, <https://doi.org/10.1002/wat2.1347>

<sup>33</sup> MRC. "Sustainable Hydropower Development Strategy: A basin-wide strategy for a changing Mekong River Basin," (2023): 23, <https://www.mrcmekong.org/wp-content/uploads/2022/06/Sustainable->

across seasons, as well as establishing sediment management standards, because hydropower plants upstream of the Mekong block approximately 50-90% of sediment loads, thereby negatively impacting and damaging ecosystems, especially in downstream areas. Without standardized sediment management, the continuous construction of dams disrupts the natural processes of rivers, leading to serious consequences in all dimensions, from ecological to social and economic<sup>34</sup>.

Second, SHDS implements Joint Environmental Monitoring (JEM), a joint monitoring mechanism that monitors the environmental and socioeconomic impacts of hydropower plants. Through the JEM framework, the MRC monitors the development of six indicators that assess the impact of water management and development activities in the Mekong River Basin: water quality, river flow changes, fish migration, fishermen's livelihoods, ecological health, and the Mekong River Basin's vulnerability and social impact assessment capacity. On the other hand, monitoring creates a crossborder data sharing system that fosters adaptive governance policies, meaning that they can be adjusted depending on the urgency of the situation in the Mekong River Basin<sup>35</sup>. These monitoring activities are necessary to provide data and information on the implementation of the 1995 Mekong Agreement, which outlines the form of cooperation between member countries in protecting the environment from the impact of dam projects, ensuring the welfare of communities in the region, and ensuring ecological balance in the Mekong River.

Third, future project planning and prioritization. SHDS not only regulates dam operational management but also guides strategic planning in the Mekong region by optimizing benefits and reducing future cumulative impacts. The MRC uses three important stage as instruments of

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[Hydropower-Development-Strategy-A-Basin-wide-Strategy-for-a-Changing-Mekong-River-Basin.pdf](#)

<sup>34</sup> Ericka Mega dan Yulida Nuraini Santoso, "Analisis Keretakan Metabolisme: Dampak Bendungan Plta Cina Terhadap Kerentanan Bencana Delta Mekong Vietnam," Universitas Gadjah Mada (2023): <http://etd.repository.ugm.ac.id/>

<sup>35</sup> Mekong River Commission, "Monitoring the Health of the Mekong River," Last modified 2025. <https://www.mrcmekong.org/basin-monitoring/>

transnational governance to implement these mechanisms before policies and projects are approved<sup>36</sup>.

Scenario modeling is a scheme of various future scenarios related to the six indicators above in the dam project. The Rapid Sustainability Assessment Tool (RSAT) stage is a multi-party assessment instrument that aims to establish comparative, rapid, and measurable sustainability standards for dam projects. This is an important element because RSAT is part of SHDS, which shows that hydropower is not only about affordable electricity but also about balancing energy benefits, ecological protection, hydrological stability, and food security. The final stage is the Decision Support System (DSS) as the implementation of SHDS or a data-based operational system through operational coordination and supervision.

Based on these findings, SHDS provides guidance on high-risk situations in dam projects through the use of clean energy without damaging the ecology and cross-border community rights in the Mekong River. Nevertheless, SHDS proves that the MRC, as a transnational governance institution, is capable of integrating energy planning, dam operations, and ecological protection through a multi-dimensional approach, such as cross-border collaboration, data sharing, and adaptive mechanism guidance.

When linked to “transnational governance,” the two strategies above are also carried out by entities other than the government. In line with the MRC, which is an actor outside the nation-state, forming strategies for water balance in multi-sectors, both for ecology, agriculture, and community livelihoods. The MRC's strategy proves that transnational governance does not rely on intergovernmental mechanisms, but rather on a networked governance system that includes states, companies, academics as research institutions, international organizations, and local communities in the stages of policy and decision-making across borders. Nevertheless,

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<sup>36</sup> MRC, “Sustainable Hydropower Development Strategy A Basin-wide Strategy for a Changing Mekong River Basin”. (2022): 35-39 <https://www.mrcmekong.org/publications/sustainable-hydropower-development-strategy-a-basin-wide-strategy-for-a-changing-mekong-river-basin/>. 10.52107/mrc.ajutpe

the network system within the MRC proves that the MRC's operational strategy for the Mekong River is not decided unilaterally, but rather through mutual agreement and coordination among multiple parties. The MRC integrates multiple actors into a single network through partnerships that facilitate crossborder coordination.

### **MRC Regulatory Mechanism in the Mekong River Basin as Transnational Governance**

This subchapter links the correlation between Djelic and Andersson's thinking on transnational governance with the MRC's regulatory mechanisms for the management of the Mekong River. In this context, the restructuring of the governance of the Mekong River Basin governance is not carried out by a single actor, but through multi-actor interactions across borders, thus being referred to as "multi-level and polycentric governance."<sup>37</sup>

The regulatory mechanisms provided for the operationalization of MRC strategic programs, such as the BDS and SHDS in this study, are based on the idea of "transnational governance"<sup>38</sup> through the use of three key characteristics of transnational governance:

#### **1. MRC Regulatory Mechanism as Re-regulation beyond the state**

The concept of re-regulation beyond the state is in the "transnational governance" for transnational governance systems because regulation does not require a country to fully control cross-border issues but rather to negotiate and coordinate them through non-state norms, policies, standards, and rules, also known as soft law. Transnational governance does not replace the role of the state but creates a series of multi-actors that support

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<sup>37</sup> Djelic & Andersson. "TRANSNATIONAL GOVERNANCE Introduction: A World of Governance – The Rise of Transnational Regulation". Institutional dynamics of regulation: Cambridge University (2006): 1-28. DOI: 10.1017/CBO9780511488665.001

<sup>38</sup> Ibid

each other and are bound to a multi-sectoral social situation through knowledge, cross-border coordination, and technical standards<sup>39</sup>.

Both BDS and SHDS strategic programs are MRC instruments that do not have binding legal or soft regulations, as those rules are created on the basis of legitimacy, inter-state pressure, and reputation. It is clarified that rules are not formed because of legal obligations, meaning that the MRC does not act like a government that can determine legal capacity and then impose harsh sanctions, but rather influences the actions and behavior of countries and companies through non-coercive or non-compulsory mechanisms such as consultation, scientific data, technical standards, and regional cooperation, this term is called soft steering<sup>40</sup>.

## **2. Mekong River Commission as a Hybrid Authority**

The MRC, in its character as a hybrid authority or layered power, proves that it is not a single regulator, but rather an entity that facilitates policy (technocratic broker) so that it can mediate among various actors involved in Mekong River governance, such as countries, donors, international organizations, the private sector, and academics. In line with the characteristics of soft governance and transnational rule-setting if MRC's operationalizes its technocratic broker function through the BDS and SHDS by regulating the entire basin pattern, technical standards, and data systems that are mandatory references for countries and companies in dam projects<sup>41</sup>.

The MRC emphasizes its hybrid authority character because it is a combination of the state, donors, companies, and academics that are part of its governance. Through this character, can create technical standards that are difficult to bypass because they require donor funding, become parameters for project legitimacy, and form the basis for cross-border coordination as applied in the SHDS operational phase.

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<sup>39</sup> Ibid

<sup>40</sup> Ibid

<sup>41</sup> Ibid

### **Mekong River Commission's Normalization through Soft Instruments**

Normalization through soft instruments is a characteristic of governance based on standardization for water sustainability. This characteristic refers to the behavior of a country or transnational actor that has shared principles and standards, not because of binding legal obligations. The mechanism is multi-sectoral in nature; thus, the established standardization allows all actors involved in the management of the Mekong River to follow common rules<sup>42</sup>.

In the context of Mekong River management, the MRC does not have veto power to prevent countries or operators from undertaking dam projects, such as Laos, which continues to build the Xayaburi Dam despite Vietnam and Cambodia objections. On the other hand, the MRC still has a role and is very influential on issues arising in the Mekong River because countries and companies do not want operations outside the scope of technocratic standards that have been recognized by domestic and transnational parties, meaning that the MRC soft instruments form new operational rules that develop into established “default standards.” Nevertheless, “transnational governance” emphasizes that transnational governance mechanisms through soft instruments reflect structured and acceptable coordination within an organization without binding laws.

Transnational governance is normalized through the BDS and SHDS frameworks through continuously developed technical standards. Instruments such as the Decision Support System (DSS), Rapid Sustainability Assessment Tool (RSAT), Joint Environmental Monitoring (JEM), and the Procedure for Notification, Prior Consultation and Agreement (PNPCA) mechanism form a new structure that makes countries and actors involved in dam projects follow guidelines not out of necessity, but because of the need for access to funding, legitimacy, and technocratic credibility. Nevertheless, the MRC operationalizes transnational governance functions through soft instruments<sup>43</sup>.

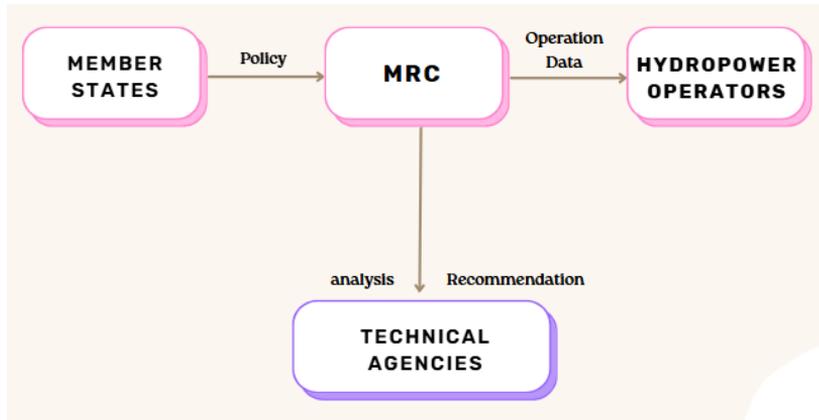
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<sup>42</sup> Ibid

<sup>43</sup> Ibid

This study is appropriate in using the concept of “transnational governance” for three main reasons. First, the concept of soft law as defined by the MRC does not have binding legal characteristics<sup>44</sup>. Second, the concept of networks implied in Mekong governance involves multiple actors, including nonstate actors<sup>45</sup>. Third, in accordance with the concept of gradual institutional layering, the Mekong does not create a new governance system, but rather strengthens governance through procedures that have already been mentioned<sup>46</sup>, such as BDS and SHDS.

Specifically, the MRC plays a crucial role in optimizing governance in the Mekong River as a form of maintenance and support for the seventh sustainable development goal of providing clean and affordable energy. An overview of the MRC coordination in optimizing transnational governance operations in the Mekong River:



Picture 2: by author – MRC Coordination for Operational Governance in the Mekong River

Picture 2 illustrates the MRC’s transnational governance through coordination, communication, and data exchange among key MRC actors involved in the management of hydropower plants across the Mekong River

<sup>44</sup> Djelic, M.-L., & Sahlin-Andersson, K. (Eds.). *Transnational Governance: Institutional Dynamics of Regulation*. Cambridge University Press. See Introduction, (2006): 1–28

<sup>45</sup> Ibid: “Scientization”: 31-52

<sup>46</sup> Ibid: “Marketization”: 53-73

Basin. The study aims to confirm operational decisions on hydropower plants based on crossborder coordination, scientific evaluation, and shared data:

Member states that play a role as decision-makers then establish national policies and energy priorities that can be managed to produce clean and affordable energy. As decision-makers, they must have project plan data on energy needs and water discharge (the volume of water flowing in a river per unit of time) that must be submitted and coordinated with other member countries. Member countries develop policy guidelines to be integrated with basin-wide policies to confirm these policies. For example, Laos submitted data on the Xayaburi dam project to the MRC for review and evaluation in an initial consultation process based on the notification, prior consultation, and agreement (PNPCA) procedure<sup>47</sup>.

Member states of the MRC develop national energy plans by developing policies and sharing project data. The MRC then acts as a facilitator, providing various considerations to relevant parties through coordination, followed by the preparation of plans and the publication of operational guidelines, as well as the establishment of sustainability standards and the creation of a coordination schedule. In addition, the MRC also acts as a data aggregator (a platform that collects raw data from many sources, processes the data, and presents it in a more understandable format), a data exchange platform, and a Decision Support System (DSS) provider, thereby providing all the data needed to optimize governance in the Mekong River.

Hydropower Operators are responsible for controlling, maintaining, and operating dams in accordance with applicable permits. MRC provides real-time and historical data, specifically data on inflow, outflow, reservoir elevation or water level in the dam at a given time, turbine status, sediment

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<sup>47</sup> MRC, (2011). "Xayaburi Hydropower project", [mrcmekong.org: https://www.mrcmekong.org/news\\_and\\_events/xayaburi-hydropower-project/](https://www.mrcmekong.org/news_and_events/xayaburi-hydropower-project/)

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discharge, and fish migration events, or analyzes how often fish successfully pass through the facilities provided for fish passage around the dam. The task of the hydroelectric power plant operator is to always upload and update these data to the DSS, implement changes in accordance with emergency safety regulations, and participate in joint environmental monitoring (JEM) trials.

Technical agencies provide science-based technical analysis to the MRC regarding complex issues occurring in the dam area. Technical agencies serve as centers for technical recommendations, such as those related to project operational schedules, mitigation designs, risk, and planning evaluations, and can be an option for redistributing benefits through accurate data analysis and assumptions. Technical institutions are important for optimizing development in the Mekong River because they cover the welfare of life in six countries, have a complex hydrological system, and monitor cross-border ecological impacts so that decisions to optimize governance in the Mekong River are not merely based on politics or diplomacy.

The above coordination works through a mechanism that begins with data collection, and planning, followed by regional consultation, then adjustment to national policy, project implementation, joint monitoring, and finally an adaptive revision stage. Adjusting existing policies, this optimization of governance will be updated every five years, and dam operations will be adjusted to river conditions.

### **MRC's Contribution in Reaching the 7<sup>TH</sup> Sustainable Development Goal**

This sub-chapter addresses the second issue regarding the extent to which the MRC's transnational governance mechanism can contribute to SDG 7, namely the development of clean and affordable energy in the Mekong River Basin. Holistically, the MRC and its member countries have a relationship that reflects a pattern of shared responsibility in realizing SDG 7, namely a position where countries have the power and legal mandate as the main parties responsible for achieving the SDGs, while the

MRC is a facilitator of coordination and science-based policies that span borders.

The MRC's commitment to supporting and reaching the SDG 7 target is explicitly integrated into the SHDS point, which states that “coordinated hydropower planning and operation across the basin is needed to optimize energy generation while reducing downstream impacts.”<sup>48</sup> Similarly, SDG 7 is integrated as one of the objectives in the optimization of the MRC strategy in the BDS point, as evidenced by the graph entitled “past and projected electricity generation from hydropower,”<sup>49</sup> which links the clean energy transition to the role of hydropower in the Mekong region. The points in both the BDS and SHDS state that the MRC is committed to SDG 7, but in an operational context. Meanwhile, in formal governance, member countries are the actors capable of implementing SDG 7<sup>50</sup> because MRC contributes as a transnational coordinator, technical facilitator, and provider of operational frameworks so that hydropower development is aligned with SDG principles.

Regarding BDS and SHDS strategies, there is no explicit statement about the many MRC meetings for SDG 7. However, SDG 7 has been internalized as part of the water and energy programs and agendas in the forum. Below is an analysis of SDG 7 indicators in the MRC forum through BDS and SHDS, emphasizing four main dimensions of energy access, i.e., renewable energy, international cooperation, and energy efficiency:

The MRC has not formulated a specific program explicitly aimed at SDG 7, but the meetings and mechanisms in BDS and SHDS shows a strong

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<sup>48</sup> MRC, “Sustainable Hydropower Development Strategy A Basin-wide Strategy for a Changing Mekong River Basin”. (2022): 9 <https://www.mrcmekong.org/publications/sustainable-hydropower-development-strategy-a-basin-wide-strategy-for-a-changing-mekong-river-basin/>. 10.52107/mrc.ajutpe

<sup>49</sup> MRC. “The integrated water resources management–based Basin Development Strategy for the Lower Mekong Basin 2021–2030 and the MRC Strategic Plan 2021–2025,” Vientiane: MRC Secretariat (2021): 19-21 <https://www.mrcmekong.org/wp-content/uploads/2024/08/BDS-2021-2030.pdf>

<sup>50</sup> Ibid: 32

link to these indicators through a Crossborder Energy Governance (CEG) approach.

### **7.1 Increased share of renewable energy**

Was reflected in the SHDS technical meeting that discussed the coordination of hydropower development and operation on the Mekong River. Technical workshops and the Hydropower Technical Working Group consistently emphasized the standardization of dam design, optimization of reservoir operation, and reduction of cumulative transboundary impacts. This discourse shows that the MRC views HPPs as a strategic source of renewable energy for the region, but they must be managed on a basin-wide basis to distribute their benefits evenly and sustainably<sup>51</sup>.

### **7.2 Improved efficiency**

Improved energy efficiency was implicitly addressed at the BDS and SHDS meetings through discussions on dam operation coordination and sustainable flow regimes. These meetings promoted the synchronization of water releases between dams to minimize energy losses, reduce the risk of flooding and drought, and maintain crossborder electricity supply stability. Thus, energy efficiency is understood not only in terms of power generation technical aspects but also in the context of regional hydrological governance<sup>52</sup>.

### **7.3 strengthening international cooperation in clean energy**

This indicator is most clearly reflected in the structure of the BDS and SHDS meetings. These forums involve MRC member countries, the secretariat, dialogue partners, and international donors in the planning, evaluation, and data-sharing processes. Mechanisms such as the PNPCA,

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<sup>51</sup> MRC, “Basin-Wide Needs, Challenges and Opportunities,” last modified 2024. <https://www.mrcmekong.org/basin-wide-needs-challenges-and-opportunities/>

<sup>52</sup> MRC, “Basin Planning,” last modified 2024. <https://www.mrcmekong.org/basin-planning/>

Joint Committee Working Groups, and SHDS workshops serve as transnational coordination spaces that strengthen knowledge exchange, policy harmonization, and technical financing for sustainable energy development in the Mekong region<sup>53</sup>.

Overall, the BDS and SHDS meetings reveal that the MRC's contribution to SDG 7 is implicit and embedded, with indicators of clean energy, efficiency, and international cooperation repressed in the process of transboundary hydropower governance. This confirms the MRC's role as a facilitator of transnational governance that enables the achievement of SDG 7 through sustainable regional coordination rather than as a direct implementer of SDGs.

The internalization of SDG 7 in the MRC program is not directed explicitly. However, the consistency of the MRC in policy substance and technical processes in several of the above meetings shows that the integration of SDG 7 principles occurs implicitly through the operationalization of BDS and SHDS in hydropower management in the Mekong River. Thus, the commitment to SDG 7 is referred to as an embedded outcome or a result that arises naturally from an action, rather than a formal action that is explicitly performed.

Transnational governance<sup>54</sup> is suitable for analyzing SDG issues because it explores how global regulations are created through soft governance, technical standardization, and multi-actor coordination, rather than through binding legal instruments. Thus, it is in line with the principles of SDGs, which depend on coordination and collaboration across countries, international institutions, donors, and non-state actors in their operational processes. Therefore, transnational governance helps understand global

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<sup>53</sup> AEDS, "Mekong river Commission Unveils Strategy and Action Plan," last modified 2025. <https://aseanenergy.org/news-clipping/mekong-river-commission-unveils-strategy-and-action-plan/>

<sup>54</sup> Djelic, M.-L., & Sahlin-Andersson, K. (Eds.). *Transnational Governance: Institutional Dynamics of Regulation*. Cambridge University Press. See Introduction, (2006):

regulations such as SDGs as interpreted in regional practices and international policies.

### **MRC's Challenges in Transnational Governance**

This subchapter discusses the obstacles and challenges faced by the MRC as a transnational governance body focused on water management in the Mekong River. The following are examples of the powerlessness of the MRC as a transnational governance body in the Mekong River.

The Mekong River is a driver of economic growth, supporting the livelihoods of millions of people through various sectors, ranging from energy and water to food. Growth depends on the health of the river itself. The Mekong Basin is one of the world's richest areas of biodiversity, with more than 20,000 plant species and 850 fish species found to date<sup>55</sup>. It is estimated that 80% of the nearly 65 million people living in the Lower Mekong River Basin depend on the river and its rich natural resources for their livelihoods, making sustainable development crucial for the environment and communities living in the basin<sup>56</sup>.

This poses a challenge for the MRC because China, the main upstream country, does not participate in the MRC framework, making it difficult to carry out comprehensive planning and mitigation without the full contribution of all countries through which the Mekong River flows<sup>57</sup>. It is important to understand the context of the MRC's transnational governance, that is the MRC platform that facilitates joint management, cooperation, and consultation on the Mekong River. It is not a regulator but a facilitator,

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<sup>55</sup> Mie Mie Kyaw, Myat Mon Kyaw & Khin San Htay. "Riverine ecosystem, water resources and abundance of catfish, *Hemibagrus spilopterus* at Myanmar segment of the Mekong river, Myanmar". *AIP Conf. Proc.* 2785, 030045 (2023) <https://doi.org/10.1063/5.0148269>

<sup>56</sup> MRC. "Functions of MRC," last modified 2025, <https://www.mrcmekong.org/>

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<sup>57</sup> Irewati, A., Rahman, A. R., Luhulima, C., Pudjiastuti, T. N., Raharjo, S. N. I., & Nufus, H. "Problematika Kerja Sama Perbatasan Sepanjang Sungai Mekong antara Tiongkok dan ASEAN Bagian Utara," *Jurnal Penelitian Politik* 13, no. 1 (2025): 83–104, <https://doi.org/10.14203/jpp.v13i1.249>

and therefore does not have the right to veto dam projects on the Mekong River. This issue poses a major challenge for the MRC in regulating dam construction on the Mekong River, making it difficult to evenly distribute the benefits of Mekong River management<sup>58</sup>.

Another challenge is the pressure to build dams, which is a regional economic priority, while there are consequences for ecological sustainability<sup>59</sup>. Although there is a process whereby the MRC acts as a representative in discussions on the project plan, responsibility for the project remains with each country, and each country has an obligation to provide compensation for damage caused by the construction of the project, compensation for both damage to the ecosystem and the adverse impacts faced by the surrounding community due to the construction of the project<sup>60</sup>.

## CONCLUSION

The above research proves that the MRC plays a strategic role as a transnational governance platform for optimizing the management and development of hydropower plants on the Mekong River to achieve clean and affordable energy in accordance with SDG 7. The findings show that the MRC operates through non-binding legal powers or soft law governance based on policy dialogue, technocratic or science-based planning approaches, and standardized data exchange. In line with what was stated

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<sup>58</sup> Risa Susanto. "Transboundary Water Conflict: An International Legal Study of Mekong River Utilization," *Low Journal*. 1, no. 1 (2025): 087-112, <file:///C:/Users/MSI/Downloads/13333-Article%20Text-49294-2-10-20250930.pdf>

<sup>59</sup> WRM Bulletin. "'Energy Trade or Our Life': The Struggle Against the Dams in the Mekong River Mainstream," [wrm.org.uy](https://www.wrm.org.uy). (2022): <https://www.wrm.org.uy/bulletin-articles/the-struggle-against-the-dams-in-the-mekong-river-mainstream>

<sup>60</sup> Hensengerth, Oliver. "Inclusive governance of hydropower on shared rivers? Toward an international legal geography of the Lower Mekong basin," *Sec. Climate Law and Policy* 6 (2024): <https://doi.org/10.3389/fclim.2024.1275049>

by Djelic and Andersson, the MRC's transnational governance creates a collaborative, adaptive, and science-based governance mechanism.

On the other hand, this study found an instrument developed by the MRC as a transnational governance strategy, that is the BDS and SHDS. The MRC can optimize cross-border energy policies, promote the integration of ecological and energy security, and increase transparency in dam operations through the use of these two instruments. This study proves that the epistemic relations between member countries, donors, hydropower plant operators, and technical institutions greatly influence the parameters of MRC coordination success, thereby creating a hybrid authority structure that does not depend on the political authority of the state but also on the power of scientific data and institutional mechanisms.

Therefore, despite the complex geopolitical considerations surrounding the Mekong and the fact that member countries have not yet fully complied with the policy, the above research confirms that the MRC is an ongoing process that still requires the expansion of cross-border data cooperation, strengthening of institutional capacity, and improvement of public accountability mechanisms to optimize transnational governance in the Mekong River. The analysis shows that the MRC has made a significant contribution to the hydropower plant's transparent, measurable, structured, and sustainability-oriented governance system in the Mekong River. Therefore, this is an important foundation for the Mekong River region to achieve SDG 7, namely affordable and clean energy.

To achieve SDG 7, this research shows that the Mekong River Commission's (MRC) contribution to achieving SDG 7 lies not in its binding implementation capacity but rather in its role as a facilitator of knowledge-based transnational governance. Through the BDS and SHDS, the MRC implicitly internalizes SDG indicators about access to affordable and reliable energy. i.e., 7.1 on increasing the share of renewable energy, 7.2 on energy efficiency, and 7.3 on strengthening international cooperation in clean energy development through transboundary hydropower management. However, achieving clean and affordable energy in the Mekong River basin remains contingent on the political commitment of

member states. Thus, the effectiveness of SDG 7 reflects the structural limits of noncoercive transnational governance.

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