

# Regional Energy Trends

## Report 2020

Tracking **SDG 7** in the ASEAN Region

7 AFFORDABLE AND  
CLEAN ENERGY



The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) serves as the United Nations regional hub promoting cooperation among countries to achieve inclusive and sustainable development. As the largest regional intergovernmental platform with 53 Member States and 9 Associate Members, ESCAP has emerged as a strong regional think-tank offering countries sound analytical products that provide insight into the evolving economic, social and environmental dynamics of the region. The Commission's strategic focus is to deliver on the 2030 Agenda for Sustainable Development, which it does by reinforcing and deepening regional cooperation and integration to advance connectivity, financial cooperation and market integration. ESCAP's research and analysis coupled with its policy advisory services, capacity-building and technical assistance to Governments aims to support countries' sustainable and inclusive development ambitions.

The Association of Southeast Asian Nations (ASEAN) is a regional intergovernmental organization that promotes intergovernmental cooperation and facilitates economic growth, social progress and cultural development in the region comprising Brunei Darussalam, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Viet Nam. Established on 1 January 1999, the ASEAN Centre for Energy (ACE) is an intergovernmental organization that independently represents the interests of the 10 ASEAN Member States (AMS) in the energy sector. The Centre serves as a catalyst, think tank and knowledge hub for the economic growth and integration of the ASEAN region by initiating and facilitating multilateral collaborations as well as joint and collective activities on energy. It is guided by a Governing Council composed of senior officials on energy from each AMS.



**ASEAN Centre for Energy**  
One Community for Sustainable Energy



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## Foreword

Energy, for all societies, is a prerequisite for socioeconomic progress. Sustainable Development Goal 7, which focuses on access to affordable, reliable, sustainable and modern energy for all, provides a guiding framework for evolving national energy systems in a way that can support a broad range of development objectives. Air quality and climate policies, better education, creating successful enterprises, addressing gender inequalities and building modern health systems are all areas where energy plays a central role.

The ASEAN region offers many examples of successful, innovative approaches to advancing sustainable energy, and has growing importance within the global energy scene. Yet, energy inequality is still a reality for a share of the region's population, limiting the ability of many citizens to participate in modern lifestyles and pursue productive activities. Current energy options are still having negative impacts to the health of people and climate. Energy continues to be wasted where efficient technologies and better practices could be applied to boost economic output and reduce the strain on rapidly expanding energy systems.

"Resilience" is a theme that has grown in importance during the COVID-19 pandemic. The sudden shifts in how people live and work, and the subsequent changes in energy use patterns, have had ripple effects throughout the Asia-Pacific energy sector, exposing and deepening vulnerabilities at all levels. While the full impacts of the pandemic have yet to be fully assessed, it is clear that "business as usual" is not the best option for moving forward in a post-COVID-19 world.

In the short term, economic recovery is paramount, but we must not lose sight of our commitments to achieving the Sustainable Development Goals and taking climate action. As the approach to strengthening and expanding the ASEAN region's energy systems is reconsidered in the light of the pandemic, opportunities have arisen to build back in a greener, healthier and more equitable manner. Synergistic solutions present the greatest opportunities.

Our institutions stand ready to assist with supportive platforms for identifying the most effective solutions to shared challenges. We look forward to strengthening long-term cooperative efforts toward this objective. Together, we offer this report, which provides insights into where action is most needed and highlights regional examples of successful approaches. We hope this can support a decisive pivot towards a sustainable energy future for ASEAN.

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## Executive summary

The ASEAN region's rapid economic growth, growing population, and pace of urbanization are driving a continuing rise in energy demand. Meeting this rising demand is placing pressure on energy systems and challenging policymakers to meet energy needs while balancing commitments to global, regional and national agendas on climate change and sustainable energy. Decisive action by the region's policymakers is needed in order to transition and expand energy systems to sustainably and equitably deliver modern energy services, and to stimulate socioeconomic development. The urgency of the sustainable energy transition has only become more pressing in light of the recent setbacks that nations have experienced due to the Covid-19 pandemic. Tracking the region's progress toward achieving targets under Sustainable Development Goal 7 (SDG 7) in the areas of ensuring universal access to electricity and clean cooking, increasing the renewable energy share of the energy mix, and accelerating energy efficiency serves to illuminate the trends and challenges leading up to 2030.

Across all areas, progress is evident. Several ASEAN countries have achieved 100% electrification, while clean cooking technology and supply chains are being actively developed to phase out the use of polluting household solid fuels. Renewable energy installations and production are on a strong upward trend, increasing their share of the energy mix. The energy required to produce each United States dollar of GDP is falling as energy efficiency is being enhanced in industrial, construction and transport sectors, and the region's energy intensity remains among the world's lowest.

However, national advancements in these areas are highly varied, and the rates of progress are too slow in many cases to fully realize the 2030 vision. Twenty-nine million people lack access to electricity, many located in "last mile" communities in rural areas and island communities, while the quality of service delivery needs improvement even within nations that have achieved universal electrification. The household transition from traditional solid biomass

to modern cooking fuels and technology remains the most neglected theme within the sustainable energy agenda, at the cost of hundreds of thousands of lives annually. Some 219 million people still cook with solid biofuels such as wood and charcoal, which emit harmful pollutants to which women and children are more likely to be exposed. Without a significant push, universal access to clean cooking is unlikely to be achieved. If the global climate objective of limiting temperature rise is to be realized, the share of renewable energy in power systems must expand more rapidly, while greater energy efficiency measures must be introduced to further reduce future energy demand growth. If ASEAN is to support the achievement of the SDG 7 target to double the rate of energy intensity improvement, much more aggressive measures are needed than the path set by current policies. Enabling all of these SDG 7 objectives is investment in clean energy, which is falling well short of required levels. More work is needed to meet the challenges of rapidly evolving energy markets, including comprehensive planning and robust policy and regulatory frameworks that reduce investment risks and support the building of sustainable, equitable, and resilient energy systems.

Alongside the many challenges faced by the region, are significant opportunities. The ASEAN Member States are highly diverse in terms of economic, geographic and social situations, which influence their pathways towards a sustainable energy transition. However, they have joined together under the ASEAN platform, and have set a global example for regional cooperation with shared objectives to advance the sustainable energy agenda. Many of the strategies and tools needed to advance sustainable energy already exist within the region and can serve as learning examples to regional economies. In support of knowledge-sharing among Member States, this publication not only provides an overview of progress towards global SDG 7 targets and regional targets under the ASEAN framework, but also offers a country-by-country review of efforts under each of the major themes.



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