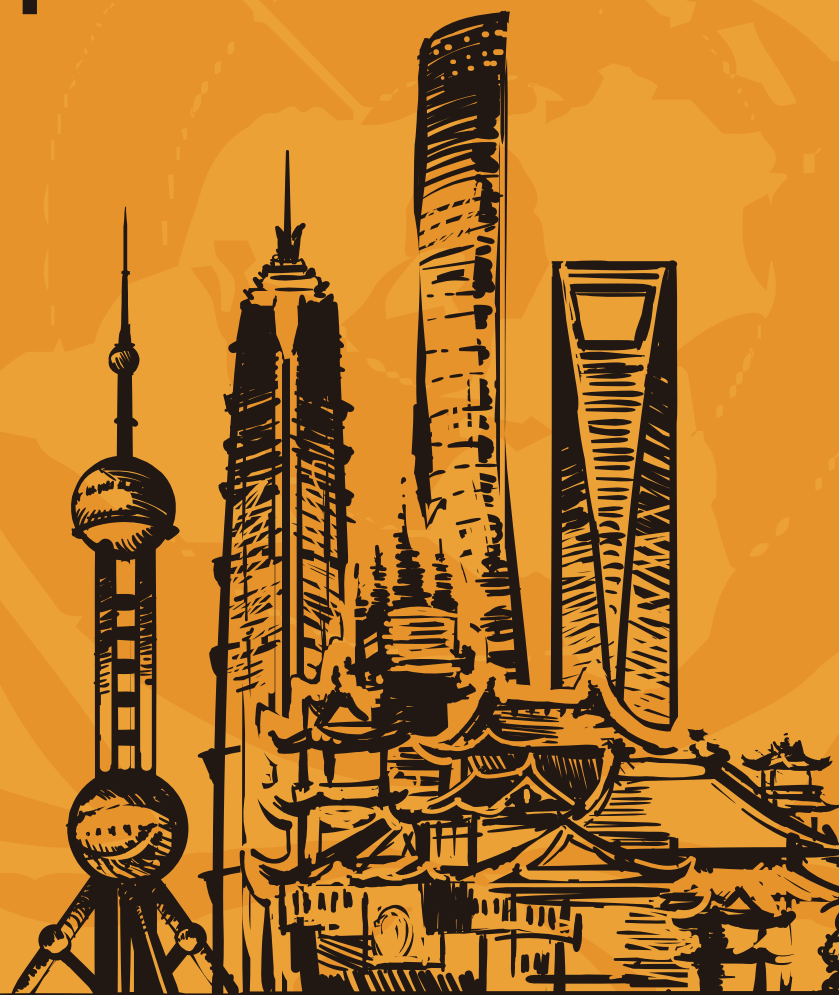
2025

MUNUC-SFLS Conference

上海外国语大学附属外国语学校
芝加哥大学国际模拟联合国大会

Asia-Pacific Economic Cooperation (APEC)



Asian-Pacific Economic Cooperation

APEC

MUNUC-SFLS

Model United Nations of the University of Chicago

`History of the Committee:

The Asia-Pacific Economic Cooperation (APEC) is an intergovernmental forum consisting of 21 member economies from the Pacific Rim, dedicated to promoting free trade across the Asia-Pacific region and creating greater prosperity for the people of the region by promoting balanced, inclusive, sustainable, innovative and secure growth and by accelerating regional economic integration.[1] APEC ensures that goods, services, investments, and people move easily across borders as members facilitate trade through faster customs procedures at borders; more favorable business climates behind the border; and aligning regulations and standards across the region.[2]

The organization was established in 1989 after the success of ASEAN's post-ministerial conferences in the mid-1980s, as a response to the increasing interdependence of Asia-Pacific economies and the formation of regional trade blocs in other parts of the world.[3] The idea of APEC was first publicly broached by the former prime minister of Australia, Bob Hawke, during a speech in Seoul in 1989, before 12 Asia-Pacific economies met in Canberra to establish APEC ten months later.[4] The founding members consisted of Australia; Brunei Darussalam; Canada; Indonesia; Japan; Korea; Malaysia; New Zealand; the Philippines; Singapore; Thailand; and the United States.[5] Nine other members joined in consecutive years, from China, Hong Kong SAR, and Chinese Taipei joining in 1991 to most recently in 1998 when Peru, Russia, and Vietnam joined, taking the full membership to 21.[6]

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[1] APEC, "About APEC," APEC, January 2024, https://www.apec.org/about-us/about-apec.
[2] *Ibid.*
[3] Eduardo Pedrosa and Andrew Elek, "Back to Canberra: Founding APEC," essay, in *The Evolution of PECC: The First 25 Years* (Singapore, Singapore: PECC, 2005), 65–85.
[4] APEC, "History," APEC, October 2023, https://www.apec.org/about-us/about-apec/history.
[5] *Ibid.*
[6] *Ibid.*

APEC met as an informal senior official- and ministerial-level dialogue before former US President Bill Clinton established the practice of an annual APEC Economic Leaders' Meeting in 1993 to provide greater strategic vision and direction for cooperation in the region.[7]

Headquartered in Singapore, APEC has the main goal of opening new markets for agricultural products and raw materials outside of Europe and is one of the oldest and most influential multilateral organizations in the Asia-Pacific region.[8] It has helped its members and constituents promote regional economic integration and trade, make trade and business across borders easier, implement faster customs procedures, increase energy efficiency and introduce renewables, nurture small businesses, and enhance social equity in the Asia Pacific region through structural reforms, the APEC business travel card, the APEC supply chain connectivity, an environmental goods list, and green towns in the Asia-Pacific.[9]

In APEC, all members have an equal say, and decision-making is reached by consensus with no binding commitments or treaty obligations as commitments are undertaken on a voluntary basis, and capacity-building projects help members implement APEC initiatives.[10] APEC's structure is based on both a "bottom-up" and "top-down" approach, with four core committees and their respective working groups providing strategic policy recommendations to APEC leaders and ministers who annually set the vision for overarching goals and initiatives.[11] Members also take individual and collective actions to carry out APEC initiatives in their individual economies with the assistance of APEC capacity-building projects.[12] The heads of government from all APEC members, except Chinese Taipei (which is represented by a ministerial-level official as its economic leader), attend the annual APEC Economic Leaders' Meeting that is hosted in different member countries rotated yearly.[13] APEC has three official observers:

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[7] *Ibid.*
[8] Shulong Chu, "The East Asia Summit: Looking for an Identity," *Brookings Institution*, February 1, 2007, https://www.brookings.edu/articles/the-east-asia-summit-looking-for-an-identity/.
[9] APEC, "Achievements and Benefits," APEC, October 2023, https://www.apec.org/about-us/about-apec/achievements-and-benefits.
[10] APEC, "About APEC," APEC, January 2024, https://www.apec.org/about-us/about-apec.
[11] *Ibid.*
[12] *Ibid.*
[13] *Ibid.*

the Association of Southeast Asian Nations Secretariat (ASEAN), the Pacific Economic Cooperation Council (PECC), and the Pacific Islands Forum (PIF).[14]

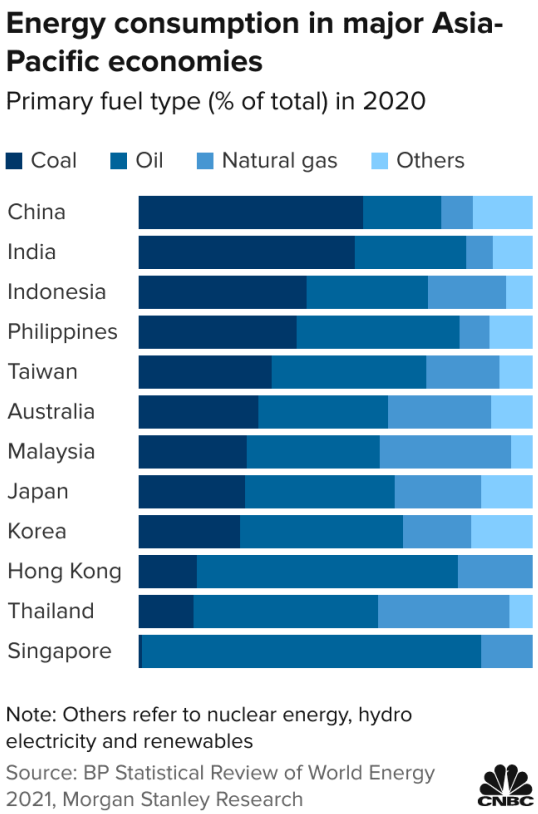
[14] APEC, "APEC Observers," APEC, October 2023, https://www.apec.org/About-Us/How-APEC-Operates/APEC-Observers.

Transitioning From Fossil Fuels To Green Energy

Statement of the Problem

Despite the looming threat of climate change, fossil [15] fuels persist across the globe as a primary source that many nations rely on for energy consumption, notably in the Asia-Pacific region. The Asia-Pacific region accounts for over 50% of global energy consumption, with 85% coming from fossil fuels.[16] The countries in this region serve as some of the biggest fossil fuel consumers in the world, with fossil fuels accounting for 82% of energy consumption in China and 88% in India.[17]

[18] The Asia-Pacific region has 43% of the world's coal reserves, and 27 countries in the region account for 76% of global coal generation capacity[19]. The region has 2.6% of the



[15] CNBC. "COP26 Charts Show Asia-Pacific's Heavy Reliance on Coal for Energy." Last modified November 8, 2021. https://www.cnbc.com/2021/11/08/cop26-charts-show-asia-pacifics-heavy-reliance-on-coal-for-energy.html.

[16] International Renewable Energy Agency (IRENA). "Asia and the Pacific." Accessed August 24, 2024. https://www.irena.org/How-we-work/Asia-and-Pacific.

[17] Reuters. "China, India Struggle to Curb Fossil Fuels." Last modified October 19, 2023. https://www.reuters.com/markets/commodities/china-india-struggle-curb-fossil-fuels-kemp-2023-10-19/.

[18] Expert Market Research. Asia Pacific Renewable Energy Market. Accessed August 24, 2024. https://www.expertmarketresearch.com/reports/asia-pacific-renewable-energy-market.

[19] Climate Analytics. Coal Phase-Out and Energy Transition Pathways for Asia and the Pacific. https://climateanalytics.org/publications/coal-phase-out-and-energy-transition-pathways-for-asia-and-the-pacific.

world's oil reserves, and 9% of the world's gas reserves, which is the third-largest in the world.[20]

However, the region's heavy reliance on fossil fuels massively contributes to global carbon dioxide emissions, posing disastrous[21] threats to the climate and existential risks for the planet. Because of these effects that are largely perpetuated through the heavy usage of fossil fuels, it is imperative that the nations in these regions address these issues and find ways to effectively transition to more sustainable energy sources, such as renewable energy.

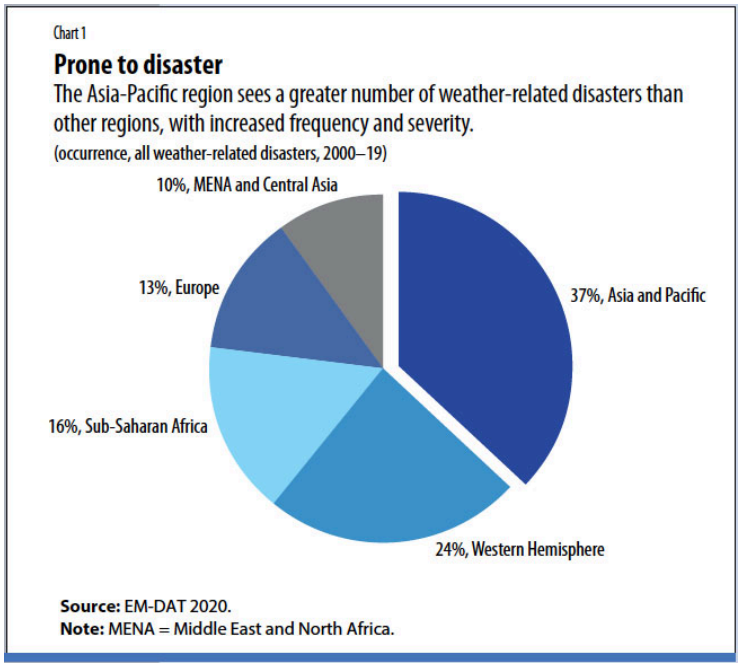
Negative Effects of Fossil Fuel Use and Climate Change

Pacific Island states and Asian coastal nations are particularly vulnerable to the effects of climate change, such as extreme weather phenomena and rising sea levels. Due to climate change from increased fossil fuel emissions, there has been an increase in the frequency and severity of natural disasters like cyclones. Countries in the Asia-Pacific region already have experienced around six natural disasters a year over the past three decades, which is twice as many as faced by Latin America and three times as many as sub-Saharan Africa. In 2022, these extreme weather events

[20] United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). Coal Phase-Out and Energy Transition Pathways. February 25, 2021. https://www.unescap.org/sites/default/d8files/knowledge-products/Coal-Phase-Out-and-Energy-Transition-Pathways-25-Feb-2021.pdf.

[21] DU Clarion. "What Does It Mean to Divest from Fossil Fuels?" Last modified January 20, 2022. https://duclarion.com/2022/01/what-does-it-mean-to-divest-from-fossil-fuels/.

led to over 7,500 deaths, with economic damage estimated at the equivalent of $57 billion. These hazards also led to 32.6 million internal displacements worldwide in that year alone, 70% of which occurred in [22]the Asia-Pacific region specifically. The countries most susceptible to these disasters tend to be those with higher poverty rates, which threatens the livelihoods, homes, and job prospects of the most vulnerable members of society who are not able to easily recover from the damages.



Another significant effect of climate change is rising sea levels. The Asia-Pacific region holds 70 percent of the global population that is susceptible to sea level rise, and this crisis also has both catastrophic effects on individual homes and livelihoods as well as the region's economy. The Asia-Pacific economy is largely dependent on its[23] coastlines due to the presence of large coastal cities like Tokyo and Mumbai, and the prevalence of industries like tourism, fishing, and trade in the coastal areas. Natural hazards like cyclones and rising sea levels affect the populations of these cities and stability of these industries, having direct links to the economic strength of the societies that compose this region.

Moreover, changing temperatures and weather patterns due to climate change

[22] Flickr. "Photo by Direct Relief". https://www.flickr.

[23] International Monetary Fund (IMF). "Global Financial Stability Report: A Decade after the Global Financial Crisis." IMF eLibrary 58, no. 3 (2023). https://www.elibrary.imf.org/view/journals/022/0058/003/article-A017-en.xml.

increase the risk of infectious diseases, including pandemics. Fossil fuel consumption and climate change additionally largely contribute to a loss of biodiversity with destruction of habitats due to pollution from power plants, climate-provoked natural hazards, and phenomena like[24] rising sea[25] levels. Since 1970, the Asia-Pacific region has already been facing the third-largest biodiversity decline in the world after Latin America and Africa, which only continues to be exacerbated by the current climate crisis. This loss of biodiversity fuels zoonotic diseases, which further negatively impacts the population of this region[26].

Hindrances To Transition

While a transition away from fossil fuels to renewable energy is essential, this feat is particularly challenging for nations in the Asia-Pacific region, due to concerns regarding financing, regulation, and the amount of land required. Renewable energy projects are incredibly expensive to set up, and Asia's banks have a record of being reluctant to fund these projects due to their perceived risk and low return. In order to meet the decarbonization target, Southeast Asia alone will need to spend at least $367 billion over the next five years. Especially after the pandemic, regional governments are wary of incurring more debt, making them more hesitant to promote and fund this energy transition.[27] This has already been witnessed

[24] PxHere. "Photo," accessed August 24, 2024. https://pxhere.com/en/photo/684114.
[25] Reuters. "Asian Tropical Coastlines Most Vulnerable to Rising Seas: Study." Last modified June 29, 2021. https://www.reuters.com/business/environment/asian-tropical-coastlines-most-vulnerable-rising-seas-study-2021-06-29/.
[26] United Nations Development Programme (UNDP). "Asia-Pacific Climate Change Poses Existential Threat: Extreme Weather Worsening Poverty and Risks to Public Health, Says UNDP Report." Last modified August 23, 2022. https://www.undp.org/asia-pacific/news/asia-pacific-climate-change-poses-existential-threat-extreme-weather-worsening-poverty-and-risks-public-health-says-undp-report.

[27] Center for Strategic and International Studies (CSIS). "Clean Energy and Decarbonization in Southeast Asia: An Overview of Obstacles and Opportunities". https://www.csis.org/analysis/clean-energy-and-decarbonization-southeast-asia-overview-obstacles-and-opportunities.

in Indonesia, whose leaders invested only $3 billion into renewable energy between 2017 and 2021, even though an estimated $25 billion per year through 2030 is what is actually needed in order to have a real impact in reducing [28] emissions.

In addition, the common usage of remote areas for renewable energy projects makes it challenging to obtain the environmental and land use permits required to develop these programs. Renewable energy sources also require larger plots of land than non-renewable power plants, which may be difficult to obtain in densely populated nations or those with smaller land masses that lack available space.[29] Moreover, many power grids across the Asia-Pacific region are not designed for renewable energy production. This would require a complete shift in necessary equipment, rather than expanding existing infrastructure. In lower-income countries that rely heavily on fossil fuels, many jobs depend on the current energy structure. When shifting toward renewable energy, it is important to ensure that there are adequate opportunities provided for those whose jobs will ultimately be lost.[30]

An overhaul of the current reliance of the Asia-Pacific region's energy system on fossil fuels is not a simple feat. In order to achieve an effective and sustainable transition to renewable sources of energy, the nations of APEC must come together and address the many factors discussed above that pose unique challenges to achieving this solution. Despite the challenges, it is paramount that these crises be addressed by the leaders of these nations in order to protect the people that reside in this region from the effects of climate change, as well as the overall fate of the planet.

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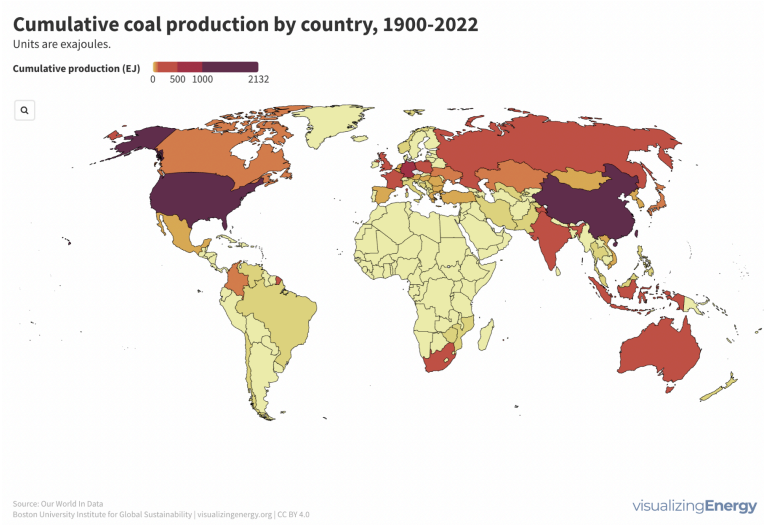
[28] The Caravel. "Climate Crossroads: Beware the Blank Checks of Climate Finance." Last modified October 20, 2021.
https://www.thecaravelgu.com/blog/2021/10/20/climate-crossroads-beware-the-blank-checks-of-climate-finance.
[29] Gibson, Dunn & Crutcher LLP. "Renewable Energy Disputes in the Asia-Pacific: Emerging Trends and Challenges"
https://www.gibsondunn.com/renewable-energy-disputes-in-the-asia-pacific-emerging-trends-and-challenges.

[30] PwC Indonesia. "A Just and Orderly Energy Transition".
https://www.pwc.com/id/en/pwc-presence-at-the-b20-forum/a-just-and-orderly-energy-transition.html.

History of Problem:

Just this past year, World Bank East Asia and Pacific Vice-President Manuela V. Ferro said, "The East Asia and Pacific region is making a strong contribution to world economic growth, even as it faces a more challenging and uncertain global environment, aging population, and the impacts of climate change."[31] Ferro added to his praise by encouraging the region to sustain its "growth momentum," a momentum which has historically been dependent on the energy derived from fossil fuels.



Currently, the Asia- Pacific region consumes roughly half of the world's energy production.[32] Based on statistics from the last ten years, this consumption does not seem to be going down at all, despite numerous concerns over the region's heavy reliance on harmful fossil fuels.[33] As the region continues to grow economically, so does its demand for energy. As it stands, the region does not intend to give up its use of energy anytime soon, however it is considering other, more cleaner, sources of energy that can sustain its growing economy. Through this search the region hopes to preserve its economic success thus far, while

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[31]World Bank, "East Asia and Pacific to Sustain Growth Amid Global Headwinds," *Press Release*, March 31, 2024, https://www.worldbank.org/en/news/press-release/2024/03/31/east-asia-and-pacific-to-sustain-growth-amid-global-headwinds#:~:text=%E2%80%9CThe%20East%20Asia%20and%20Pacific,Ferro.

[32] Katharina Buchholz, "Asia Will Use Half of the World's Electricity by 2025," *World Economic Forum*, February 17, 2023, https://www.weforum.org/agenda/2023/02/electricity-demand-asia-energy/#:~:text=Data%20Journalist%2C%20Statista-,Asia%20will%20use%20half%20of%20the%20world's%20electricity%20by%202025,fired%20electricity%20in%20many%20places.

[33]"Primary Energy Consumption in the Asia Pacific Region," *Statista*, accessed September 3, 2024, https://www.statista.com/statistics/265591/primary-energy-consumption-in-asia-pacific/#:~:text=Primary%20energy%20consumption%20in%20the,comparison%20to%20the%20previous%20year.

upholding global commitments towards combating climate change. Despite working on its green transition, the region's long use and dependence on fossil fuels is one that has not been easy to let go.

Coal's History in Asia and the Pacific

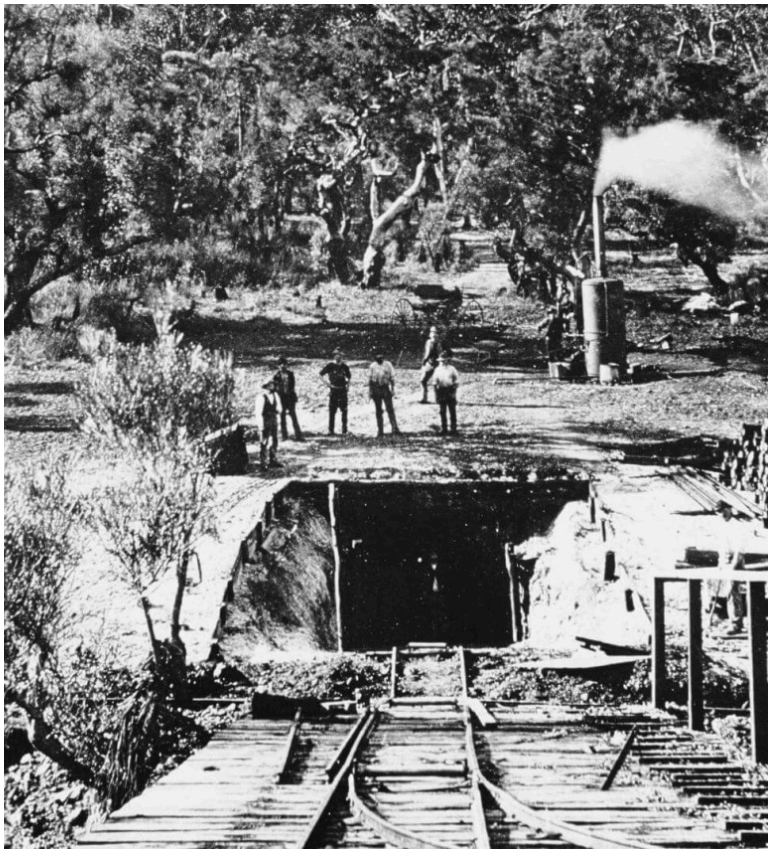
Coal is the most used fossil fuel in the Asia-Pacific region. It accounts for more than half of the energy generated and consumed in the region, and has contributed greatly to the growth and development of the region through the last few centuries.[34] One of the primary reasons Asia is the largest consumer of coal is due to the fact that the region is about 3/5th's of the world's coal reserves.[35] Though natural gas and other mineral resources have risen in use amongst fossil fuels, coal continues to reign as a dependable and traditional source of energy for the region.

Though coal is often associated with Europe's industrial revolution, which occurred during the late 1700s to the mid-1800s, China began using the resource long before. Roughly 3,000 years ago, pre-modern China opened the first coal mine in the world, the Fushan Mine.[36] Coal was originally used for carving crafts and occasionally burned for heat– it was through the opening of the Fushan Mine that China

[34] "Mapped: Asia's Biggest Sources of Electricity by Country," *Visual Capitalist*, accessed September 3, 2024, https://www.visualcapitalist.com/mapped-asias-biggest-sources-of-electricity-by-country/.
[35] "Asia - Mineral Resources," *Encyclopædia Britannica*, last modified March 31, 2023, https://www.britannica.com/place/Asia/Mineral-resources.
[36] "Unearthing Ancient Mysteries: Ancient China," *Alberta's Energy Heritage*, accessed September 3, 2024, http://history.alberta.ca/energyheritage/coal/early-coal-history-to-1900/unearthing-ancient-mysteries/ancient-china.aspx#:~:text=By%20around%20the%20third%20century,derived%20charcoal%20in%20blast%20furnaces.

"took a significant step toward meeting their energy needs."[37] The use of coal for heat-energy supported ancient China's advancement and saved the nation from a deforestation crisis it endured in the early centuries, due to the common practice of burning wood-derived charcoal. Around the 1100s, the use of wood for heat-energy practically vanished and coal took over.

Though China has a longstanding history with coal, Australia and Indonesia are two member economies that currently rank on top as exporters of coal. Australia first discovered its coal reserves in the 1790s; areas such as the young colony of New South Wales quickly made use of its coal reserves and used it as "fuel for heating and cooking, and later steam locomotion."[38] By the early 1900s, Australia was exporting several million tonnes of coal. This growth followed Australia through and after the Second World War, when countless countries, particularly those in Asia and the Pacific, were introduced to new machinery and reinventing their economies.[39]

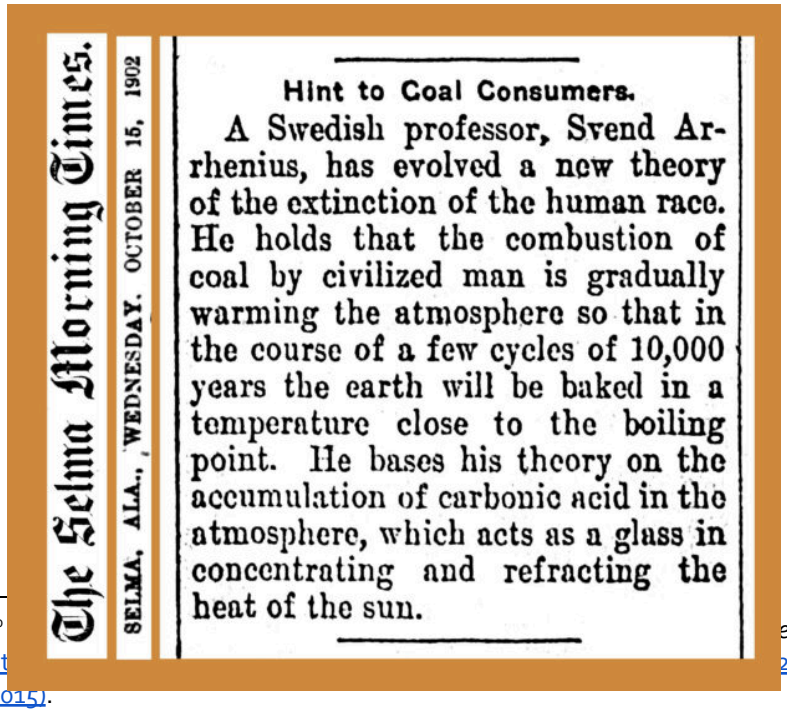


[37] Ibid, 7.
[38] "Mining History," *Australian Mining History Association*, accessed September 3, 2024, https://www.mininghistory.asn.au/mining-history/.
[39] Lauren Waldhuter, "Changing Climate of Coal Mining in Australia," *ABC Rural*, December 6, 2020, https://www.abc.net.au/news/rural/2020-12-06/changing-climate-of-coal-mining-australia-environment/12918334.

Like Australia, Indonesia also has had a long history of being in the coal industry. It opened its first mine in 1849 and experienced success in the coal export industry up until the Second World War, where it experienced a long-period of decline.[40] World War Two disrupted trade throughout the world, but affected Asia-Pacific economies the most during and in the years following after the war. In the case of Indonesia, it took 40 years for the country to recover its standing in the coal industry. Through the opening of new coal mines in the 1980s and the liberalization of Indonesia's investment and mining laws, the nation was able to return and eventually surpass its former glory; for the past two decades, Indonesia has consistently ranked as the top exporter of coal in the world.

History of Climate Change

According to the United Nations, "Fossil fuels – coal, oil and gas – are by far the largest contributor to global climate change, accounting for over 75 percent cent of global greenhouse gas emissions and nearly 90 percent per cent of all carbon dioxide emissions."[41] Today much of the world recognizes climate change as a global concern and has implemented sustainable models to attempt to combat its effects. Despite companies and governments taking the matter more seriously, this was not always the case.



The Selma Morning Times.
SELMA, ALA., WEDNESDAY, OCTOBER 15, 1902

Hint to Coal Consumers.

A Swedish professor, Svend Arrhenius, has evolved a new theory of the extinction of the human race. He holds that the combustion of coal by civilized man is gradually warming the atmosphere so that in the course of a few cycles of 10,000 years the earth will be baked in a temperature close to the boiling point. He bases his theory on the accumulation of carbonic acid in the atmosphere, which acts as a glass in concentrating and refracting the heat of the sun.

In 1896, Swedish scientist Svante Arrhenius published a paper titled

[40] ...enceDirect, 2016, ht...29#:~:text=1.,2005%20(Lucarelli%2C%202015).

[41] United Nations, "Causes and Effects of Climate Change," *United Nations Climate Change*, accessed September 3, 2024, https://www.un.org/en/climatechange/science/causes-effects-climate-change#:~:text=Fossil%20fuels%20%E2%80%93%20coal%2C%20oil%20and,they%20trap%20the%20sun's%20heat.

"On the Influence of Carbonic Acid in the Air upon the Temperature of the Ground."[42] This paper was the first of many to theorize about the negative effects coal burning had on the world and its contribution to the globe's hotter temperatures. Following Arrhenius' publication, other journals and newspapers began warning the public of climate change and its possible consequences. Pictured on the left, on October 15, 1902, the Selma Morning Times published a chilling warning to the public about the possible "extinction of the human race."[43] Warnings such as those made by the Selma Morning Times continued to grow through the 1900s as the Western conservation movement grew. Though numerous scientific and literary publications, most notably Aldo Leopold's "A Sand County Almanac: And Sketches Here and There," Paul R. Ehrlich's "The Population Bomb," and Rachel Carson's "Silent Spring," did not gain notoriety immediately following their publication in the 1940-60s, these publications were crucial to the environmental movement of the 1970s, which greatly pushed for greater awareness of the problem. Despite greater public awareness regarding climate change emerging in the 1970s, various investigations have shown that multi-national fossil fuel companies had known about the issue at least 11 years before it became mainstream.[44] They also verified that the origin of climate change denial is largely traced back to millions of dollars poured into misinformation promoted by fossil fuel giants.

Though climate change denial persits in the twenty-first century, it is nowhere near where it was before. The international community has taken many steps to discuss climate change, the 1972 United Nations Conference on the Human Environment in Stockholm was the first conference to discuss the matter of climate change and since then various international committees have congregated to address the issue.[45]

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[42]Svante Arrhenius, "On the Influence of Carbonic Acid in the Air upon the Temperature of the Ground," *The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science*, 1896, https://www.rsc.org/images/Arrhenius1896_tcm18-173546.pdf.

[43]"Article Warns of the Dangers of Burning Coal," *Zinn Education Project*, accessed September 3, 2024, https://www.zinnedproject.org/news/tdih/article-warns-of-burning-coal/.

[44]Shannon Hall, "Exxon Knew About Climate Change Almost 40 Years Ago," *Scientific American*, October 26, 2015, https://www.scientificamerican.com/article/exxon-knew-about-climate-change-almost-40-years-ago/.

[45] United Nations, "United Nations Conference on the Human Environment," *United Nations*, accessed September 3, 2024, https://www.un.org/en/conferences/environment.

Past Actions

As a forum for economic cooperation, the Asia-Pacific Economic Cooperation (APEC) has expressed continued support and initiated movements or projects to support the reduction of fossil fuel use, transition to renewable energy, and mitigating the impacts of climate change for its members. To spearhead and organize its efforts for clean energy transition while uplifting the role of energy in the regional economy, the multinational organizations formed the Energy Working Group (EWG) in 1990, which is supported by four expert groups, one task force, and two research centers.[46]

Use of Fossil Fuel

APEC leaders have stated their commitment to reducing member states' dependency on fossil fuels. In 2021, Economic Leaders of APEC met amid the COVID-19 pandemic recovery and released a statement to emphasize APEC's efforts to support the adoption of renewable energy and environmental-friendly technologies as part of sustainable energy transitions to reduce its members' dependence on fossil fuels while acknowledging the importance of stable energy markets.[47] A year later, APEC leaders further highlighted the commitment to rationalize and phase out inefficient fossil fuel subsidies that encourage wasteful consumption while recognizing the importance of providing those in need with essential energy services.[48]

In addition to continued support and commitment, APEC has taken steps to provide resources for member states to achieve their goals for reducing fossil fuel use and carbon emissions. In 2022, the Asia Pacific Energy Research Centre (APERC) released an Energy Demand and Supply Outlook that details current and projected energy consumption and production in the region, including trajectories to achieve

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[46] Asia-Pacific Economic Cooperation (APEC), "APEC Advances Green and Low-Carbon Hydrogen Transition," *APEC Press Release*, April 10, 2024, https://www.apec.org/press/news-releases/2024/apec-advances-green-and-low-carbon-hydrogen-transition#:~:text=APEC%20member%20economies%20are%20laying,green%20and%20low%2Dcarbon%20hydrogen.

[47] Asia-Pacific Economic Cooperation (APEC), "2021 Leaders' Declaration," *APEC Meeting Papers*, November 12, 2021, https://www.apec.org/meeting-papers/leaders-declarations/2021/2021-leaders-declaration.

[48] IBID

net-zero carbon emissions by 2030 and 2050, as well as reducing energy-intensive industries by a half.[49] The organization has also conducted programs to achieve the mission, including workshops for policy-makers and government officials and a movement to collect data and research on energy transition.[50]

To further support the reduction of fossil fuel use in the region, APEC established the Expert Group on Clean Fossil Energy (EGCFE) which has facilitated workshops, symposiums, and joint meetings between leaders on the topic of decarbonization of fossil fuels, clean hydrogen energy, and promoting energy efficiency and energy management systems.[51] In the future, the working group aims to launch more projects to achieve its goals while considering the supply and demand side and the utilization of clean energy and energy efficiency in realizing energy transition.

Transitioning To Renewable Energy

As APEC tries to reduce its dependency on fossil fuels, it has also committed and taken measures to transition to green energy sources. In 2023, APEC leaders released the Golden Gate Declaration that recognizes the efforts required for members to accelerate their sustainable, just, affordable, and inclusive energy transitions through various pathways to achieve global net-zero greenhouse gas emissions and carbon neutrality targets by 2050 while taking into account different domestic circumstances.[52] To this end, the multilateral organization seeks to create new jobs and investments while ensuring energy, security, resilience, and access in the region. Furthermore, the statement also expressed commitment to triple renewable energy capacity globally based on member states' domestic circumstances by 2030

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[49] Asia-Pacific Economic Cooperation (APEC), *APEC Energy Demand and Supply Outlook, 8th Edition – Volume I*, September 2022, https://www.apec.org/docs/default-source/publications/2022/9/apec-energy-demand-and-supply-outlook-8th-edition---volume-i/222_ewg_apec-energy-demand-and-supply-outlook_vol-1_0.pdf?sfvrsn=d452b4a3_2.

[50] https://aimp2.apec.org/sites/PDB/Lists/Proposals/DispForm.aspx?ID=672

[51] Asia-Pacific Economic Cooperation (APEC), "APEC Energy Ministerial Meeting 2023," *APEC Energy Working Group*, October 14, 2023, https://aperc.or.jp/file/2024/6/14/1030_Joint_Mtg_EGCFE_Update_report.pdf.

[52] Asia-Pacific Economic Cooperation (APEC), "APEC Energy Ministerial Meeting 2023," *APEC Energy Working Group*, October 14, 2023, https://aperc.or.jp/file/2024/6/14/1030_Joint_Mtg_EGCFE_Update_report.pdf.

through a transition towards low and zero-emissions vehicles, sustainable aviation fuels, and low and zero-emission maritime shipping and port decarbonization.[53]

In addition to the most recent leaders' statement, APEC had formulated the Aotearoa Plan of Action that details its strategy to deliver existing commitments on energy issues, including accelerating progress towards the 2030 target of doubling the share of renewable energy in the region's power production and use, from 2010 levels by 2030, while reducing the aggregate energy intensity by 45%, from 2005 levels, by 2035.[54] Furthermore, recent developments have shown that APEC aims to further reduce the cost of low-carbon hydrogen, wind, and solar energy as decreasing costs of renewable energy in the last 15 years has prompted more widespread use,[55] while reducing methane emissions by leakage detection technology transfer.[56]

To oversee and advise its efforts for a clean energy transition, APEC established three expert groups under the EWG. These include the Energy Data and Analysis (EGEDA), which provides policy-relevant energy information through collecting energy data, and the Energy Efficiency and Conservation (EGEEC), which improves the analytical, technical, operational, and policy capacity for energy efficiency and conservation within member economies, and the New and Renewable Energy Technologies (EGNRET), which facilitates an increase in the use of new and renewable energy technologies in the region.[57]

Addressing the Effects of Climate Change

With increasing fossil fuel use, atmospheric carbon dioxide content, and average global temperature, APEC members are already facing the impacts of climate change. Recognizing this, the

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[53] Ibid.

[54] Asia-Pacific Economic Cooperation (APEC), "Strong, Balanced, Secure, Sustainable, and Inclusive Growth," *Aotearoa Plan of Action*, accessed September 3, 2024, https://aotearoaplanofaction.apec.org/strong-balanced-secure-sustainable-and-inclusive-growth.html.

[55] https://www.apec.org/press/news-releases/2024/apec-advances-green-and-low-carbon-hydrogen-transition#:~:text=APEC%20member%20economies%20are%20laying,green%20and%20low%2Dcarbon%20hydrogen.

[56] https://www.apec.org/press/news-releases/2023/apec-prioritizes-clean-energy-transition-on-track-to-doubling-renewable-energy-mix

[57] https://www.apec.org/groups/som-steering-committee-on-economic-and-technical-cooperation/working-groups/energy

multinational organization has made multiple promises and plans. As part of the Putrajaya Vision 2040, APEC is committed to promoting economic policies, cooperation, and growth that support global efforts to address environmental challenges, including climate change, extreme weather, and natural disasters.[58] APEC leaders have also affirmed the importance of sustainable financing, capacity building, technical assistance, and innovation for members to face climate change issues.[59]

To help member states face the threats of climate change, APEC develops and encourages policies and programs that promote capacity building and sustainable growth while allowing flexibility for members to implement policies consistent with their domestic and international obligations. Some examples of these policies include structural reform, facilitating trade in environmental goods and services, supporting public finance, including tax policy and rationalizing and phasing out inefficient fossil fuel subsidies, creating sustainable infrastructure and transport, promoting sustainable growth across sectors, encouraging the development of cost-effective low and zero emissions technologies, providing insight into carbon pricing mechanisms, and ensuring energy security, access, reliability and resilience through energy transition.[60]

In a further effort to assist member states in mitigating the negative effects of climate change, APEC has established several subsidiaries that focus on specific aspects of climate change. First, the APEC Climate Center (APCC) was established in 2005 to produce and provide accurate and reliable climate prediction information based on empirical analysis while conducting research and development for better technology in climate forecasting, which can help member states to anticipate changing climate in the future.[61] Second, the Emergency Preparedness Working Group (EPWG) was formed to build capacity in the region so that APEC member economies can better mitigate, prepare for, respond to, and recover from emergencies and natural disasters[62] according to its Disaster Risk Reduction Action Plan.[63]

[58] https://www.apec.org/meeting-papers/leaders-declarations/2020/2020_aelm/annex-a
[59] https://www.apec.org/meeting-papers/leaders-declarations/2022/2022-leaders-declaration
[60] https://aotearoaplanofaction.apec.org/strong-balanced-secure-sustainable-and-inclusive-growth.html
[61] https://www.apcc21.org/content/intro?lang=en
[62]https://www.apec.org/groups/som-steering-committee-on-economic-and-technical-cooperation/working-groups/emergency-preparedness
[63] https://mddb.apec.org/Documents/2016/EPWG/SDMOF/16_epwg_sdmof_003.pdf

Third, the Agricultural Technical Cooperation Working Group (ATCWG) was established as part of an effort to protect the region's agricultural production and food security, which includes plans to adjust and mitigate the impact of climate change for APEC members.[64] Finally, the Oceans and Fisheries Working Group (OFWG) that was formed in 2011 aims to implement initiatives and programs that enhance the fisheries and marine industry's resilience towards climate change while promoting sustainable and efficient management.[65]

[64]https://www.apec.org/groups/som-steering-committee-on-economic-and-technical-cooperation/working-groups/agricultural-technical-cooperation
[65]https://www.apec.org/groups/som-steering-committee-on-economic-and-technical-cooperation/working-groups/ocean-and-fisheries

Possible Solutions

As previously described, the Asia-Pacific Economic Cooperation (APEC) has made multiple commitments, targets, and efforts to support reducing fossil fuels, transitioning to renewable energy, and mitigating the negative impacts of climate change. Despite this, further and concrete steps can still be taken by the organization for its members. It is worth noting, however, that APEC's mission is to promote free trade. Furthermore, it does not have binding enforcing abilities upon its members, nor does it respect domestic priorities, as laid out in the Non-Binding Just Energy Transition Principles for APEC Cooperation.[66]

Reducing Fossil Fuel Use

APEC could further its efforts to reduce fossil fuel use by introducing new targets for different fossil fuels, including oil, gas, and coal, for the region and its members. These targets should be based on member states' interests, capabilities, and agreement and accompanied by incentives to achieve them. For example, countries that meet these targets could benefit from reduced customs fees.

Another way for countries to reduce fossil fuel emissions is to impose carbon pricing, which means charging products or industries based on their carbon footprint. To establish this, the organization can partner with other international or non-governmental organizations to monitor energy-intensive productions that still use fossil fuels and engage with national governments or other member states to charge the products of those industries, which could be done through Value-Added Tax or increased customs fees. A challenge to this method is the cooperation between actors in the system and the willingness of member states to charge additional taxes, which can reduce the demand and supply of the products.

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[66] Asia-Pacific Economic Cooperation (APEC), "Non-Binding Just Energy Transition Principles for APEC Cooperation," *APEC Energy Ministerial Meeting Papers*, October 20, 2023, https://www.apec.org/meeting-papers/sectoral-ministerial-meetings/energy/13th-apec-energy-ministerial-meeting/non-binding-just-energy-transition-principles-for-apec-cooperation.

Finally, reducing fossil fuel emissions could also be achieved through capacity building and education. APEC could support programs, workshops, symposiums, or campaigns that run from high-level individuals to grassroots movements to spread awareness of the negative effects of fossil fuels and affordable efforts to reduce their consumption. One thing to consider for this solution is the effectiveness of smaller programs and decisions on audience targeting.

Investing in Sustainable Energy

To complement the efforts to reduce fossil fuel consumption, APEC can also support the other end of the transition by providing incentives to transition from fossil fuels to renewable energy sources. One way to do this is by providing economic and trade incentives for countries or products that use green energy. For example, the organization could set a target for a share of the annual national budget allocated to the energy transition. Countries that satisfy such targets could be granted reduced trading or customs fees, while those who do not may be charged a higher price. On the other hand, APEC can move to a smaller scale by reducing the cost of trade for individual industries, producers, or products that are environmentally friendly or use renewable energy for their production. To do this, APEC should collaborate with national governments and local organizations to monitor the production process and certify the energy used before imposing higher or lower charges on those products.

Another mechanism that can support the transition to renewable energy is creating a mutual fund between member states to help countries in need of financial assistance. Since the transition is costly for some countries with lower incomes, a mutual fund involving contributions from all members could be sourced and close such a gap in funding. Although this may help all members transition to renewable energy and benefit everyone in the long term, member states that have to pay more may disagree and not support the move.

Furthermore, the transition to green energy can be accelerated through intergovernmental and public-private partnerships for member states. APEC could be the bridge between member states to engage in bilateral conversations that may lead to investments or funding for energy transition projects. It could also initiate talks between the public and private sectors through discussions, conventions, or meetings that would allow the more-resourced private sector to fund or support public projects in the green energy sector.

Increasing and decreasing the price of renewable energy can also be a solution. This could be done through regional or bilateral agreements to reduce barriers to the production and distribution of green energy infrastructure between member states. For example, the organization could initiate a limit on customs fees or simplified paperwork on solar power materials that exit and enter the region.

Finally, APEC can also support individual programs, initiatives, workshops, policy discussions, and movements to increase awareness of the transition. It could sponsor or create new ones while providing technical or informational support that would allow participants to learn the benefits of renewable energy and accessible ways to adopt them based on local contexts.

Supporting Climate Change Mitigation

While adopting solutions that could reduce the cause of climate change is critical, efforts to mitigate the effects of climate change are also important. First, APEC could establish an emergency fund for countries facing natural disasters due to climate change. This would be sourced from member states and distributed to a member in times of urgency under the consent of all other members, with the amount and limitations left to the decision of the committee.

Second, APEC could further increase research and development cooperation between states to allow a better understanding of climate change and its impacts on smaller or local areas within member states. Since the APEC Climate Center was established, the organization could expand its location and outreach to provide more

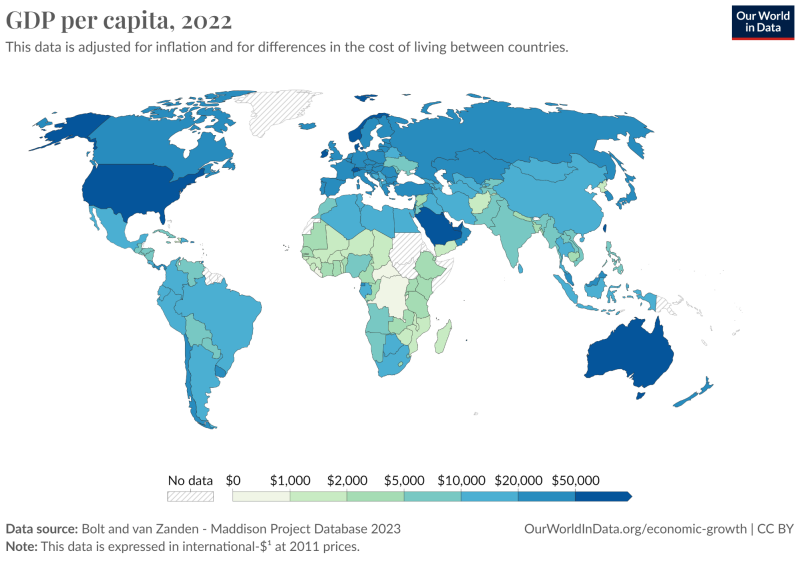
localized information and build a wider network with member states' related organizations to allow direct access to national governments.

Finally, APEC could support and initiate programs that help mitigate climate change effects in member states. This would include workshops, policy discussions, and grants that are aimed at researching climate change impacts and means to mitigate them, subsidizing transition to more climate-resilient technology, systems, or mechanisms, and building infrastructures that could dampen the negative effects of climate change. Since APEC already has working groups that focus on ocean and maritime issues as well as agricultural resilience, the committee could also consider other areas in the economy where climate change mitigation would be helpful.

Bloc Positions

Income Level

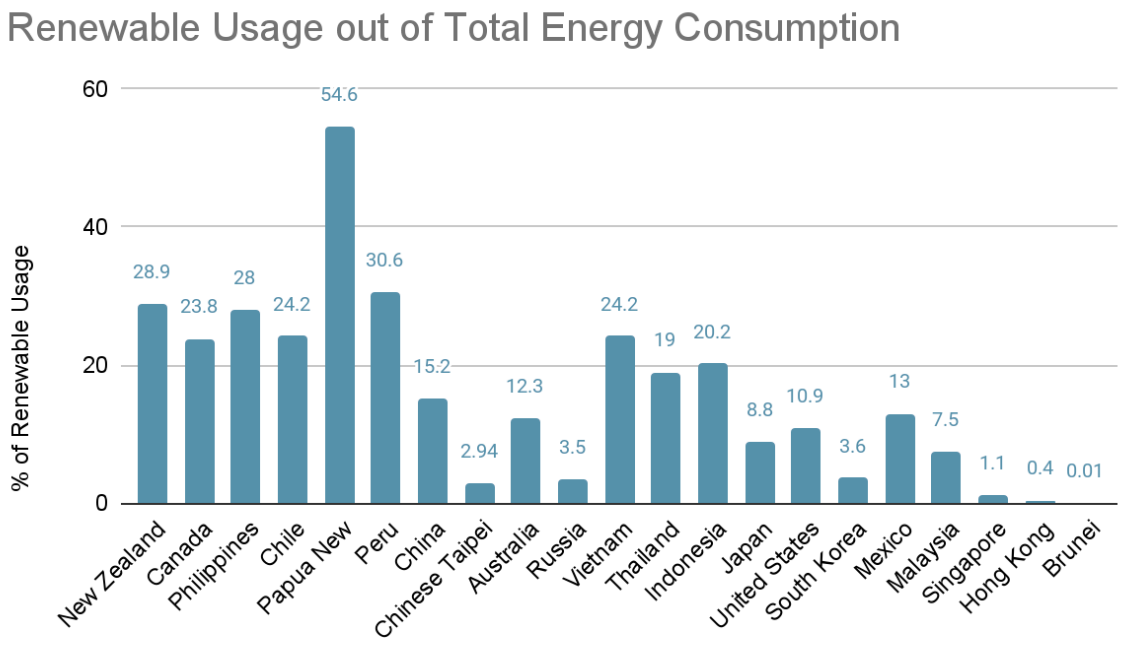
As climate change continues to impact more people in the region and efforts to reduce carbon emissions become more widespread, funding is one of the main contentions of debate. One of the measures for this is GDP per capita. Countries with higher GDP per capita are likely to have higher incomes, which translates to more resources available to fund the transition to renewable energy. As the population earns more income, the government is able to gain more income through taxes that can be used to publicly subsidize the transition, while the population has more income to spend on green technologies, such as solar panels and electric vehicles. On the other hand, countries with lower GDP per capita will have fewer resources available to support the transition. The picture below shows the different levels of GDP per capita around the world in 2022.



World GDP per Capita in 2022 (https://ourworldindata.org/grapher/gdp-per-capita-maddison)

Based on the GDP per capita data above, APEC members fall in a relatively narrow range. However, the extremes within this range can still divide the committee into two blocs. On one hand, higher income countries

may push harder for transition to green technology and impose harsher incentives. On the other hand, countries with lower income may advocate for more funding to assist their transition and more flexible regulations or incentives as they balance economic growth and green transition. Countries that fall in the first category may include Australia, Canada, and the United States, while those that could follow the second group include Peru, the Philippines, and Vietnam.



Current Energy Use

Data from World Bank statistics, 2021 and 2022

(https://data.worldbank.org/indicator/EG.FEC.RNEW.ZS?end=2022&start=1990&type=shaded&view=chart

Another important factor to consider when encouraging a mass shift toward renewable energy adoption in an effort to slow global carbon emissions is the current energy usage of each nation. While some states are more advanced in renewable energy adoption and already consume a great share of their national energy from these sources, others lag behind and remain largely dependent on fossil fuels.

There is a large variance in the types of energy consumption among APEC member states. There are some states who predominantly rely on fossil fuels as an energy source and have very limited renewable energy usage. These states will have a more difficult time switching to renewable energy, and because of this will likely advocate for greater flexibility and incentives as they shift toward adopting green policies and renewable technology. Other APEC states already have high shares of renewable energy usage out of their overall energy consumption, and will likely take a lead in rigorously promoting the adoption of green technology throughout

the region. The first category includes members like Brunei, Hong Kong, and Singapore, and this second bloc includes countries like Papua New Guinea, New Zealand, Chile, and Canada.

Glossary

Biodiversity: Biodiversity, or biological diversity, refers to the variety of life in the world or in a particular habitat or ecosystem.

Zoonotic diseases: These are infectious diseases of humans which are caused by a pathogen that can jump from a non-human to a human and vice versa. These include diseases such as Ebola and salmonellosis.

Liberalization: This refers to the removal or loosening of restrictions.

Energy Working Group: APEC's Energy Working Group (EWG), launched in 1990, seeks to maximize the energy sector's contribution to the economic and social well-being of the people in the APEC region, while mitigating the environmental effects of energy supply and use.

Asia Pacific Energy Research Centre: The Asia Pacific Energy Research Centre (APERC) was established in July 1996 in Tokyo following the directive of APEC Economic Leaders in the Osaka Action Agenda. The primary objective of APERC is to conduct research to foster understanding among APEC members of regional energy outlook, market developments and policy.

Putrajaya Vision 2040: APEC adopted the Putrajaya Vision 2040 during the 27th APEC Economic Leaders' Meeting in Malaysia, which will guide APEC's work for the next 20 years. This long-term blueprint aims for an "open, dynamic, resilient and peaceful Asia-Pacific community by 2040, for the prosperity of all our people and future generations."

Non-Binding Just Energy Transition Principles for APEC Cooperation: These are a set of principles geared towards promoting efforts to advance clean energy transitions within the APEC region that meaningfully engage the workforce, private sector companies and investors, and communities in an equitable and inclusive way. The stated principles are: Take into account domestically defined economic growth priorities.

1. Pursue positive environmental, social, and economic outcomes.
2. Deliver domestically defined equitable benefits.
3. Support inclusion and gender equality.
4. Create resilient firms, institutions, and communities.
5. Provide support for decent work and workforce development.
6. Promote healthy lives and well-being for all.

Value-Added Tax: This is consumption tax that is levied on the value added at each stage of a product's production and distribution.

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