

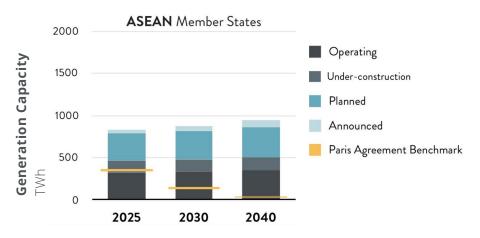
#### WHY IS COAL BAD FOR OUR CLIMATE?

Coal is a highly emitting source of energy and the <u>single largest contributor</u> of the world's Co<sub>2</sub> emissions, which causes climate change. It <u>contributes</u> to 41% of overall greenhouse gas emissions worldwide. For this reason, the UN Secretary General has urged world leaders to turn away from coal as a source of energy and to not build any new coal plants after 2020. Instead, countries are encouraged to switch to renewable and clean sources of energy such as solar and wind.

Yet, Southeast Asia is the only region where coal's share of power generation is <u>increasing</u>. South and Southeast Asia together <u>account</u> for half of the world's planned coal power expansion. When it comes to shifting from coal to renewable energy, Southeast Asia has been labelled the <u>"worlds' worst performing region"</u>.

ASEAN's share of coal in its energy supply is **critically incompatible with its commitment under <u>the Paris Agreement</u>** to "hold the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels".

Below is an illustration of the current and planned coal generation in ASEAN compared to what its Member States must achieve in accordance with the Paris Agreement.

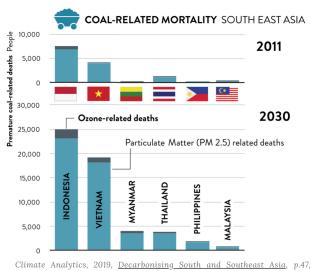


This is highly problematic as Southeast Asia is among the world's most vulnerable regions to climate change, with large and increasing populations exposed to extreme climate risks, threatening the most basic human rights of all.

### WHY IS COAL BAD FOR THE AIR?

Coal-based power generation contributes to air pollution, which causes a wide range of health problems and premature deaths. Current coal-fired power plant emissions cause 20,000 deaths per year, and this is predicted to increase to almost 70,000 deaths by 2030 if all coal power plants are built as planned.

Air pollution also has a cost. The associated external cost for ASEAN was estimated at **167 billion USD** in <u>2014</u>, and is estimated to increase by 35%, to average **225 billion USD per year** by <u>2025</u>.



edited for readability.

Switching to renewable energy would help reduce fine particulate matter, save health and other costs associated with air pollution and significantly reduce mortality from air pollution.

#### WHY IS COAL BAD FOR WATER?

Coal is one of the most water-intensive forms of electricity generation as it uses and pollutes vast amounts of water. The water consumption of a coal power plant of 1,000 MW is equivalent to the amount <u>used</u> by half a million people in a year. Water contamination from coal can also <u>cause</u> a range of serious diseases, such as cardiovascular diseases, skin and lung cancer, and gene mutation.

Power generation from solar and wind energy would instead result in near-zero water consumption.

## WHY IS COAL BAD FOR LAND?

Burning coal produces coal ash, which <u>contains</u> heavy metals (arsenic, lead, mercury) as well as radioactive substances. Its transportation <u>contaminates</u> water sources and soil. The land under and around the disposal spaces for coal ash is contaminated as toxic substances <u>enter</u> the food chain. Soil contamination can also result from acid rain caused by coal combustion.

While renewable energy also requires large areas, the land around wind turbines or solar panels can be used for agriculture and is not subject to contamination.

# WHAT NEEDS TO HAPPEN?

To limit climate change and reduce the impact of coal on human rights, such as the right to health, access to water, right to food and to a healthy environment, it is critical that ASEAN Member states immediately exit coal-based energy and instead ensure large-scale energy demand reduction and transition to renewable and low-emissions sources of energy.

## TO DO THIS ASEAN MEMBER STATES MUST:



Ensure no new coal power plants are built after 2020.



Ensure coal is phased out by 2040.

# THIS WILL REQUIRE COUNTRIES TO:



Rapidly increase renewable energy use such as from solar and wind.



Ensure large demand reductions in energy across all sectors

Policy will need to take into account human rights and gender, workers' rights, vulnerability to climate change impacts, overcoming poverty and increasing access to safe and affordable energy.

**COVID-19:** The region's plans to emerge economically from the COVID-19 crisis are a unique opportunity to advance this shift by supporting and promoting the renewable and clean energy sector. Southeast Asia is a prime location for the development of renewable energies, which would reduce the economic burden of imports, health risks, and costs arising from air pollution. It would also help revive the economy through job creation opportunities, as Asia accounts for 63% of total jobs in renewables.

# **INDONESIA**

Indonesia is the world's fifth largest coal producer. Close to 60% of <u>its electricity</u> <u>supply</u> comes from its coal fleet. Its 2014 National Energy Policy predicts a tripling of the use of domestic coal by 2050, and it is one of only five countries in the world that started new coal plant construction in 2020.

**COVID-19:** The National Recovery Programme does not provide measures for moving to a sustainable economy. Instead, it bails out coal-heavy electric utilities, without condition. Yet, the development of renewable energy could create, on average, up to 290,000 direct jobs between 2020 and 2030 in the country.

#### **RECOMMENDATIONS:**

- Decrease by 10% its current installed coal capacity before 2030 and phase out coal by 2040.
- Remove fossil fuel subsidies and barriers to renewable energy investment.
- Scale up investments into renewables to account for 50% of Indonesia's energy supply by 2030 and 100% by 2050.
- Assign conditions of decarbonization in accordance with the Paris Agreement to electric utilities such as Perusahaan Listrik Negara (PLN) in the economic bailouts from COVID-19.

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#### **MALAYSIA**

A fifth of Malaysia's energy is generated from coal-fired plants. Renewable energy still forms less than 2% of the country's total energy composition and the shift to a less carbon-intensive energy remains critically slow.

**COVID-19**: Of Malaysia's four stimulus packages the only green aspect is 13 billion MYR (3 billion USD) of infrastructure projects to upgrade to LED street lightning, rooftop solar panels, and others. The Ministry of Energy (MESTECC) will also be opening up tenders for 1,400 MW of solar generation projects.

# **RECOMMENDATIONS:**

- Introduce measures to encourage the development of renewable energy and green recovery in COVID-19 economic recovery packages.
- Ensure Malaysia phases out coal by 2040.
- Improve wind and solar market development, especially by addressing capacity constraints.

# **MYANMAR**

Despite low reliance on coal for energy, Myanmar has not committed to excluding new coal power plants. Current targets for solar and wind energy are low, aimed at 12% by 2025 and just 170MW of solar capacity.

**COVID-19**: A large stimulus package was announced in March 2020 that included encouraging rooftop solar panels and 1 GW of tender contracts for solar capacity.

#### **RECOMMENDATIONS:**

- Improve regulatory frameworks for renewable energy, notably by developing public and transparent standard power purchase agreements, tax incentives, government programs and public plans.
- Increase 2030 renewable energy target to 50%.
- Integrate additional measures to encourage the development of renewable energy and green recovery in COVID-19 economic recovery measures.
- Phase out coal entirely by 2040.

# THE PHILIPPINES

The Philippines was the first Southeast Asian country to set a moratorium on new coal and to support renewables. However, the moratorium is not included in the 'Philippines Energy Plan', which proposes expanding the share of coal in the energy mix from the already high level of 52.1% in 2018 to 55.3% by 2040.



**COVID-19**: The economic rescue plan includes some green recovery measures, one being the Corporate Recovery and Tax Incentives for Enterprises Act, which reduces taxes for renewable energy-related companies

# **RECOMMENDATIONS:**

- Ensure that reviews of the Philippine Energy Plan and Nationally Determined Contribution to the Paris Agreement integrate the moratorium on coal.
- Introduce a clear target of phasing out coal from energy supplies by 2040.
- Clarify and fully implement a coal moratorium across energy policies.
- Integrate additional measures to encourage the development of renewable energy and a green recovery in COVID-19 economic recovery measures.

# **THAILAND**

The Thai Power Development Plan aims for renewable energy projects to occupy 37% of new power capacity by 2037, while the coal-fired power capacity will be contained to the Paris Agreement-incompatible level of 12%.



**COVID-19**: There are currently no <u>identifiable green initiatives</u> in Thailand's four packages for the COVID-19 economic recovery.

#### **RECOMMENDATIONS:**

- Thailand must improve its grid capacity and regulatory framework to accommodate the further development of renewable energy.
- Integrate measures to encourage the development of renewable energy and green recovery in COVID-19 economic recovery measures.
- Update power development plan and other relevant policies to ensure Thailand exits from coal by 2040.

## VIETNAM =

The draft Power Development Plan 8 indicates that some of the planned coal capacity will be cancelled or postponed, but Vietnam still plans for the development of 18GW of coal in 2020-2025, and hosts the second largest coal pipeline in Southeast Asia.



**COVID-19**: Solar capacity has increased. However, Vietnam has not mentioned renewable energy nor a green recovery in its economic recovery stimulus packages.

#### **RECOMMENDATIONS:**

- Abandon plans for new coal-fired power generation, notably in Power Development Plan 8.
- Entirely phase out coal by 2040.
- Improve ambition of greenhouse gas emissions reduction targets for energy activities in Nationally Determined Contribution and Resolution 55.
- Integrate measures to encourage the development of renewable energy and green recovery in COVID-19 economic recovery measures.

# WHAT CAN PARLIAMENTARIANS DO?

- Urge your government to commit to phasing out coal by 2040 and not build any new coal power plants by 2020, in accordance with its international obligations, by asking a question to the relevant ministry in Parliament.
- Promote the introduction of these targets in energy legislation, as well as during the adoption of the national budget.
- Advocate for your constituency to be coal-free. Find out if there are coal power plants in your constituency and if there is untapped potential for renewable energy development there.
  Discuss with constituents about developing renewable energy projects, whether they think they would benefit and what their concerns are.
- Sign APHR's Manifesto and commit to using your position to advocate for a coal-free, just and sustainable economic recovery from COVID-19. For example by ensuring that economic recovery measures do not weaken existing environmental protection measures, include direct support and financial incentives to renewable energy systems and condition relief to private sector entities to their decarbonization in accordance with the objectives of the Paris Agreement.
- Ensure that the parliamentary committee you are a member of formally integrates climate change and coal as key concerns and works with climate experts, civil society organizations and others. In some countries, select committees can ask for and undertake enquiries on the performance of governments in achieving the Paris Agreement and request official responses.

#### FOR MORE INFORMATION:

- APHR's <u>Manifesto</u> on and <u>webinar series</u> on measures ASEAN parliamentarians can take to promote a just and sustainable economic recovery from COVID19.
- $\bullet \quad \text{Climate Analytics, June 2019,} \ \underline{\text{Decarbonising South and Southeast Asia}}.$
- Greenpeace, September 2020, <u>Southeast Asia Power Sector Scorecard</u>, Assessing the progress of national energy, transitions against a 1.5 degrees pathway.
- Internationale Nederlanden Groep, August 2020, Asia's lamentable green response to Covid-19.

If you are interested in further information or support to address these issues in your country and parliament, please contact Cannelle Guequen-Teil at: cannelle@aseanmp.org



