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## Renewables & Job Creation: Indonesia's Solution?

*By Jefferson Ng and Quah Say Jye*

### SYNOPSIS

*Indonesia faces serious climate change and environmental degradation problems. Accelerating the adoption of renewable energy and tweaking the national development strategy can be a key part of the solution.*

### COMMENTARY

INDONESIA'S RECENTLY passed omnibus law contains sweeping deregulation measures aimed at spurring economic growth and job creation. However, these deregulation measures are expected to accelerate the loss of forest cover, make the country more vulnerable to climate change, and could lead to significant economic losses.

Indonesia is one of the world's [largest emitters](#) of greenhouse gases. Carbon emissions have risen by [more than 300% since 1990](#), largely a result of massive deforestation and coal burning. Deforestation has been fuelled by the plantation economy, especially palm oil production and peat burning, with loss of forest cover estimated at six to eight per cent [of global emissions](#). In addition, Indonesia has vast coal reserves, and with [installed coal-fired capacity set to double in the next decade](#). Furthermore, Indonesia is extremely vulnerable to climate change.

### Climate Change Impacts

Average temperatures in Indonesia are expected to increase [0.8°C by 2030](#). More extreme weather, in combination with deforestation, will increase the risk of drought, forest fires, and flooding. In mid-January, heavy floods struck South Kalimantan, leading to the evacuation of more than 48,000 people. This unfortunate event was a

combination of abnormally high rainfall and the [degradation of the Barito river watershed](#) due to plantation and mining activities.

Besides the socio-ecological costs, climate change extract significant economic costs. Part of the reason for the expensive plans to relocate the capital from Jakarta to East Kalimantan ([estimated at US\\$33 billion](#)) is due to predictions that large parts of the city could be submerged by 2050. Jakarta alone accounts for around 30% of national GDP.

Many Indonesians also base their entire livelihoods on agriculture and fishing, both of which would be [severely affected](#) by the unpredictable weather patterns. If left unmitigated, Indonesia could face [losses of 132 trillion rupiah \(US\\$9.4 billion\) by the year 2050](#) due to the reduction of agricultural production, public health costs, and impacts of sea level rise.

### **Omnibus Bill on Job Creation and Environmental Degradation**

President Joko Widodo has stated that the top priority for his second term is boosting economic growth. As a result, while he claims they are important, he has put environmental issues on the [back seat](#).

The Omnibus Bill on Job Creation, the Jokowi administration's signature national development strategy, is meant to stimulate job creation and Indonesia's 'ease of doing business'. In short, it is a set of deregulation measures meant to attract investments from abroad, by simplifying the business permit process, centralising regulatory authority in the hands of the national government, and modifying laws deemed to hamper foreign investments.

Some of these measures have the potential to [increase environmental degradation in Indonesia](#). For instance, the bill erases a statutory safeguard that requires 30% of the forest area in all watersheds and islands to be preserved.

It also allows certain businesses to simply submit a statement declaring compliance to environmental standards, removes the involvement of community representatives and experts on the environmental assessment committee, and removes the legal avenues for objecting and challenging environment assessments and approvals.

These amendments are highly controversial. When set against the government's biodiesel policy, which does not require palm oil producers for biofuel production to adhere to [international certification standards](#), the weakening of environmental safeguards and community participation is likely to contribute to an increase in deforestation and environmental degradation.

### **Untapped Renewable Energy Potential**

Indonesia's physical geography provides it with options to pursue more sustainable forms of growth. The government needs to accelerate efforts to utilise its considerable wind, geothermal, hydropower, and solar energy reserves for sustainable long-term growth.

Indonesia hosts over 130 volcanoes and stores around 40% of the world's total geothermal reserves - [most of it untapped](#). Analysts also point out that the Indonesian government has [vastly underestimated](#) its capacity to develop solar power. Lying on the equator, Indonesia receives [abundant sunlight](#) compared to most other countries.

To develop renewable energy sources, the national government needs to facilitate private sector investments into projects by developing a financing regime and legal framework that is attractive to investors. According to a draft presidential regulation prepared last September 2020, the government plans to help [investors of renewable energy to recoup their capital](#) through a feed-in tariff scheme to be phased over 30 years.

A draft law on New and Renewable Energy is also on the National Priority Legislation Program for 2021. Accelerating the adoption of such policies can allow Indonesia to change course.

Examples from neighbouring countries demonstrate that with adequate political will to direct investments, a swift transition to a lower carbon economy is possible. Vietnam managed to jump from generating 0.134 GW to 4.5 GW of solar energy in just 12 months. There are also significant economic benefits. Studies have also shown how government spending on renewables can [create three times as many jobs](#) compared to investments into coal and gas.

### **Leapfrogging Old Developmental Models**

The effect of climate change and environmental degradation can intersect and magnify the environmental and economic costs. Mitigating and adapting to these challenges require Indonesia to establish and implement a holistic environmental policy that recognises these interactive effects.

Furthermore, it is easier to make course corrections earlier than later. Based on Indonesia's current trajectory, it is unlikely to achieve its pledge of reducing its carbon emissions by 29-41% under the Paris Accords by 2030 to address the longer-term threat of climate change. Rather, it is doubling down on a statist growth strategy that is likely to be environmentally damaging and difficult to reverse.

While Indonesia faces huge environmental and climate change challenges, it also has an opportunity to leapfrog old developmental models. An important component of this solution is to accelerate the adoption of new and renewable technologies. There should also be a periodic review of the Omnibus bill and the national development strategy to account for its environmental impact.

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