

2025 CLIMATE AND HEALTH POLICY PRIORITIES FOR MALAYSIA

This document summarises key priority areas of focus for Malaysia, supported by evidence from the 2025 Global Report of the Lancet Countdown.

PHASE DOWN FOSSIL FUEL SUBSIDIES AND STRENGTHEN CARBON PRICING FOR HEALTH AND A JUST TRANSITION

1

Accelerating the phase-down of fossil fuel subsidies, implementing carbon pricing mechanisms under development, and reallocating revenues toward healthcare, social protection, and clean energy investments can advance Malaysia's health and climate goals. Such reforms would promote a shift away from health-harming fossil fuels, reduce associated air pollution, and reinvest revenues into healthcare, social protection, and clean energy, strengthening national resilience and equity.

In 2022, over 22,500 deaths in Malaysia were attributable to anthropogenic PM_{2.5} air pollution, with fossil fuels responsible for 61% of these deaths (**Indicator 3.2.1**). The economic toll was also severe: the monetised value of premature mortality reached US\$21 billion, around 5% of GDP (**Indicator 4.1.4**). Despite this burden, Malaysia maintained a net-negative carbon revenue in 2023, allocating US\$6.5 billion in fossil fuel subsidies, outweighing revenues from carbon pricing (**Indicator 4.3.2**). These subsidies continue to incentivise fossil fuel use, deepen social inequities, and impose substantial public health and economic costs.

Phasing down fossil fuel subsidies and scaling up carbon pricing would help reduce fossil fuel combustion—a main source of PM_{2.5} air pollution in Malaysia, thereby improving air quality and preventing pollution-related illness and deaths. Redirecting revenues to healthcare, social protection, and clean energy investments would further strengthen resilience. Safeguards to protect low-income households during subsidy reform are essential to prevent short-term hardship and avoid widening inequalities.

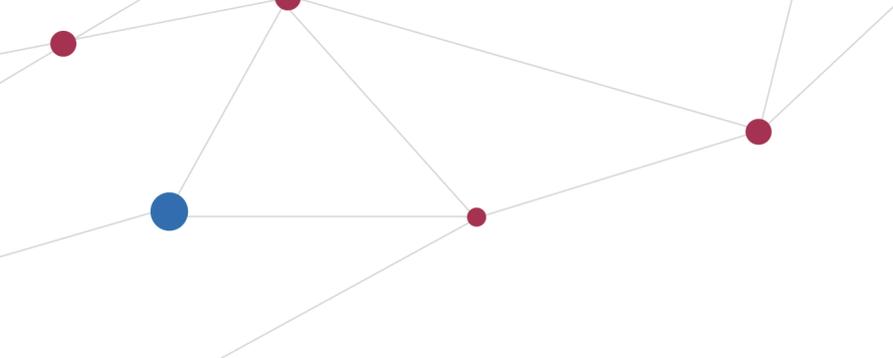
Integrating explicit health and environmental objectives within fiscal and climate policy would ensure these reforms deliver not only emission reductions but also healthier, fairer, and more climate-resilient futures for all Malaysians.

ADDRESS THERMAL STRESS TO PROTECT MARINE FOOD SECURITY

2

Strengthening Malaysia's response to ocean heating is critical to protect marine food security, coastal livelihoods, and nutrition. Rising sea surface temperatures, coral bleaching, and ocean acidification are eroding fish stocks, threatening employment in fisheries and community wellbeing.

With over 8,000 km of coastline¹ and many coastal communities dependent on fisheries for food and income, sustained ocean heating poses an escalating threat to Malaysia's marine economy. Coastal average sea surface temperatures have risen by 0.37 °C from 1981–2010 to 2022–2024 (**Indicator 1.4**), intensifying coral bleaching and degrading marine habitats. These changes have already reduced capture productivity, with per-capita fisheries GDP declining from 1.2% in 2017 to 0.7% in 2024^{2,3}, highlighting the vulnerability of fisheries to climate-driven losses.



Integrating sea-surface temperature and bleaching risk into fisheries management, through early-warning systems, adaptive seasonal closures, and coral-reef restoration, can protect fish stocks and sustain livelihoods. Embedding these measures in national fisheries and blue-economy policies, alongside community-led adaptation and marine conservation, would safeguard marine productivity, strengthen food security, and build long-term coastal resilience.

STRENGTHEN DENGUE RESILIENCE THROUGH CLIMATE-INFORMED SURVEILLANCE AND COMMUNITY ACTION

3

Strengthening dengue resilience under climate change requires embedding climate-informed surveillance and early warning systems, scaling up integrated vector management strategies, and enhancing community participation in prevention efforts. Strengthened coordination across health, urban planning, and water management sectors is also critical to reduce transmission risks and protect health.

Dengue remains one of Malaysia's most pressing climate-sensitive health threats. Rising temperatures, urbanisation, and shifting rainfall patterns have expanded habitats for *Aedes* mosquitoes that transmit the disease, leading to longer and more intense dengue transmission seasons. These changes are driving higher incidence and straining health services and communities already facing recurring outbreaks.

Malaysia has experienced a 44.7% increase in dengue transmission risk, measured by the climate-defined basic reproduction number ($R_0 = 3.86$) in 2015–2024 compared with 1951–1980 (**Indicator 1.3.1**). While Malaysia's dengue mortality is lower than the Southeast Asia average, incidence remains substantially higher, reflecting persistent transmission pressure and strain on health systems^{4,5}. Recent data show that in 2023, Malaysia recorded 123,133 dengue cases, an 86.3% rise from 66,102 cases in 2022⁶.

To strengthen dengue resilience under climate change, Malaysia should embed climate and meteorological data into surveillance and early warning systems to improve outbreak forecasting. Integrated vector management, including removing standing water, improving waste management, rotating insecticides, and using biological controls like introducing natural mosquito predators or environmentally safe larvicides, should be scaled up. Community participation through school-based programmes and neighbourhood clean-ups, alongside coordination with urban planning and water authorities, is critical to reduce mosquito breeding habitats and build long-term resilience.

Accelerating Action

Accelerating action on climate change, health, and economic resilience is vital for Malaysia's future. Priorities include phasing down fossil fuel subsidies, aligning carbon pricing with health and equity goals, protecting marine food security through climate-responsive fisheries, and strengthening resilience to climate-driven dengue. Together, these actions can save lives, secure livelihoods, and build a healthier, climate-resilient Malaysia.

References

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