2026 CLIMATE AND HEALTH POLICY PRIORITIES FOR

MALAYSIA

This document summarises key priority areas of focus for Malaysia, supported by evidence from indicators in the 2026 Report of the Lancet Countdown.

1 ACCELERATE RENEWABLE ENERGY TO REDUCE FOSSIL-FUEL-RELATED AIR POLLUTION

Strengthen the ambition and implementation of Malaysia's National Energy Transition Roadmap by accelerating renewable electricity and grid expansion and establishing a pathway to a fully renewable electricity system by 2050, phasing out fossil-fuel generation. This can lower $PM_{2.5}$ exposure and associated risks of respiratory and cardiovascular disease and premature mortality while supporting Malaysia's transition to a cleaner energy system.

Malaysia's continued reliance on fossil fuels is contributing to a substantial and preventable air-pollution-related health burden. In 2023, over 31,700 premature deaths in Malaysia were attributable to anthropogenic $PM_{2.5}$ pollution, with 65.2% linked to fossil fuel combustion (Indicator 3.2.1). Exposure to $PM_{2.5}$ also increases risks of respiratory and cardiovascular disease, cancer and other chronic health conditions.

Although the carbon intensity of Malaysia's energy system declined by 3.2% between 2016 and 2023 (Indicator 3.1.1), fossil fuels remain an important part of the energy supply. Coal and coke, the most heavily polluting fossil fuels, still accounted for approximately 22% of Malaysia's total energy supply in 2024, primarily for electricity generation and industrial activities.[1]

Malaysia's National Energy Transition Roadmap provides an existing pathway for reducing fossil-fuel dependence through rapid renewable-energy expansion, with solar expected to drive much of the increase. By July 2025, renewable energy accounted for 31% of Malaysia's electricity mix, against national targets of 40% by 2035 and 70% by 2050[2]. While these targets represent progress, they fall short of a complete transition away from fossil-fuelled electricity generation.

Increasing ambition towards a fully renewable electricity system by 2050, alongside faster renewable deployment and grid investment, would provide a pathway to phase out fossil fuels. Reducing fossil-fuel combustion would reduce $PM_{2.5}$ exposure and associated risks of respiratory and cardiovascular disease and premature mortality.

2 DEVELOP A NATIONAL HEAT–HEALTH ACTION PLAN AND STRENGTHEN PROTECTION FOR OUTDOOR WORKERS

Develop and implement a National Heat–Health Action Plan. Coordinate implementation through the Ministry of Health, establishing preparedness and response protocols that link METMalaysia heat warnings to public-health action, and that strengthen workplace heat protections for heat-exposed workers in coordination with the Department of Occupational Safety and Health.

Extreme heat is increasing risks of heat-related illness and death in Malaysia. Heat exposure can cause heat exhaustion and heatstroke, and can exacerbate existing health conditions, with infants and older adults among those at greatest risk. Between 2021 and 2025, infants experienced an average of 6.9 heatwave days per year, and adults aged over 65 experienced 6.6 days. This was more than triple the average in 1986-2005, increasing by 228% for infants and 217% for older adults (Indicator 1.1.1). With heat exposure growing, so is heat-related morbidity and mortality. Between 2020 and 2024, the monetized value of heat-related mortality among adults aged over 65, estimated using a willingness-to-pay approach, averaged US$600 million annually, equivalent to over 34,900 average Malaysian incomes, representing a 425% increase compared with 2000–2004 (Indicator 4.1.2).

Outdoor and heat-exposed workers face an additional occupational risk, and heat exposure reduces their labour capacity and productivity. The potential income lost from reduced labour capacity due to extreme heat reached US$11 billion in 2025, with the construction sector accounting for 33% of total losses (Indicator 4.1.3).

Ministry of Health Malaysia's 2024 *Climate Change and Health in Malaysia: Implications and Challenges* report identifies the need for a national heatwave action plan and an effective warning system linking heat alerts with timely public-health responses.[3] The Department of Occupational Safety and Health (DOSH)'s existing workplace heat-stress guidance provides a complementary basis for protecting workers through heat-risk assessment, acclimatisation, work-rest arrangements, hydration and emergency response.[4] A national Heat–Health Action Plan can bring these existing measures together and strengthen their delivery and impact by establishing preparedness and response protocols in advance of extreme heat. Coordinating implementation through the Ministry of Health and DOSH can link METMalaysia warnings to defined public-health and workplace actions, enabling earlier, more effective, and more coordinated responses as heat risks increase.

3 INTEGRATE CLIMATE-INFORMED FORECASTING INTO DENGUE SURVEILLANCE AND EARLY ACTION

Integrate climate-informed forecasting into Ministry of Health Malaysia dengue surveillance and response systems, linking epidemiological and vector surveillance with meteorological data to identify periods and locations of elevated transmission risk and enable earlier vector control, risk communication and preventive action as climatic suitability for transmission increases.

Climatic conditions are becoming increasingly suitable for dengue transmission in Malaysia. Between 2016 and 2025, the transmission potential (R_0) of dengue increased by 21% for *Aedes aegypti* and 42% for *Aedes albopictus* compared with the 1951–1960 baseline (Indicator 1.3.1). Dengue already causes substantial illness and preventable deaths in Malaysia: 122,423 cases and 117 deaths were reported in 2024.[5]

Malaysia's existing dengue surveillance already combines epidemiological and entomological information, while meteorological information is used in monitoring dengue risk.[6] eDengueV2 supports real-time case and outbreak surveillance, and iDengue provides spatial information on cases, outbreaks and hotspots.[7] Integrating climate information more systematically into these systems can strengthen their capacity to identify periods and locations of elevated transmission risk, to inform preventative action and prevent increases in cases. Malaysia has tested dengue forecasting tools that combine epidemiological and environmental information,[8] and recent research evaluated routinely collected Aedes surveillance indicators as early-warning signals to inform timely vector-control interventions.[9]

Linking these sources of information with existing surveillance and response systems can support earlier, risk-informed vector control, public communication and other preventive action.

Call to Action

Protecting health from climate change in Malaysia requires faster action to reduce harmful exposures and strengthen preparedness for growing climate-related health risks. Accelerating the transition away from fossil fuels towards a fully renewable energy system, strengthening protection from extreme heat, and using climate information to anticipate dengue risks can reduce preventable illness and deaths while building a healthier, more climate-resilient future.

Contributors

The concept for this brief was developed by the Lancet Countdown, the Universiti Malaysia Terengganu and the Commonwealth Medical Association.

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For more of the latest data on health and climate change, you can find country data sheets by scanning the QR code.

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