



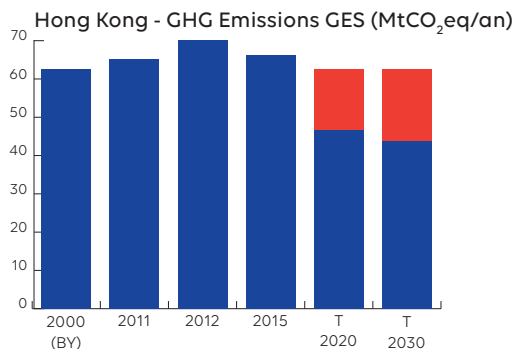
Gasification of the electric mix



Hong Kong has declared its ambition to reduce its carbon intensity by 50% in 2020 and by 65 to 70% by 2030, compared to 2005. This equates to an absolute reduction in emissions of 20% by 2020 and between 26% and 36% by 2030 ([Climate Plan 2030+](#)). The 7.5% fall in GHG emissions in 2015 (from 45 to 41.7MtCO₂eq) came after almost constant increases since 1990. The fall was even more pronounced per capita (-8.4%, the lowest since 2004 with 5.7 tCO₂eq/ capita) and per point of GDP (-9.7%: the lowest since 1990 with 0.017 kg CO₂eq/ HK Dollar GDP). An equivalent drop each year would be necessary, however, for HK to reach its 2020 target.

• ELECTRICITY GENERATION: THE MAIN LEVER FOR REDUCING EMISSIONS

90% of electricity generation is used to supply buildings which is by far the main source of emissions with 66% in 2016, ahead of transport (18%) and waste (5.9%). The decrease in 2015 was entirely attributable to the replacement of several coal-fired generating plants with natural gas, leading to a 10% drop in emissions from electricity generation ([Gov HK 2016](#)). By 2020, HK intends to double the share of electricity from natural gas (27% in 2015) to meet growing demand, and, conversely, to halve the share of coal (50% in 2015).



Its 2030 action plan also includes 25% non-fossil electricity, but the limited structures in the region using renewable energy account for less than 1% of the Hong Kong mix (e.g. the 25% solar-powered water treatment plant in Siu Ho Wan Bay). The new contract established in 2018 with the two power companies (CLP Power and HK Electric) for the next 15 years introduces a purchase price funded in part by the sale of "renewable energy certificates" (RECs) to companies that would volunteer

to reduce their emissions. This system is expected to achieve 3 to 4% of renewables in the electricity mix by 2030. This non-fossil share therefore mainly involves nuclear electricity imported from China, with which HK signed an agreement in 1994, providing 25% of its needs, which was recently renewed until 2034.

• CONTROL OF DEMAND AND ELECTRIFICATION OF PUBLIC TRANSPORT

In addition to the code imposing energy efficiency standards for new buildings and renovation projects, the HK region introduced a mandatory "MEELS" labelling system in 2008, progressively extended to all household appliances, air conditioning systems, etc. available on the market (phase 2 in 2015 and phase 3 in 2018). Its 2015 upgrade should enable an annual saving of 300 million kWh. Furthermore, the region is asking companies within its borders to produce and publish their carbon footprint on the [Carbon Footprint Repository platform](#), on which 83 companies are already present ([Gov HK 2018](#)). With 90% of journeys already made by public transport in 2015, the challenge for the Hong Kong government is to improve the energy efficiency of its trains and public buses ([Gov HK 2017](#)). In 2011, it provided the HK \$ 300 million (EUR 33 million) Pilot Green Transport Fund, open to public transport and freight vehicles operators for the acquisition of more efficient vehicles (electric, hybrid, innovations for trains and boats). [The 22nd project selection session](#) in May 2018 brought the number of funded projects to 124 for a total funding of HK \$ 134 million, almost half of the funds made available.

*Special administrative region of Hong Kong

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[CLIMATE READY HK](#)
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