

POPULATION 13,839,323 (2018) SCOPE 1, 2 AND 3 (WASTE) GHG TARGETS -25% IN 2020; -30% IN 2030 (BASELINE: 2000)

The Impact of the Emissions Trading Scheme

In 2012, Tokyo's emissions rose sharply after the shutdown of nuclear power stations and the recourse of coal. Despite a decrease of 1.6% between 2014 and 2015, the 66.3 MtCO₂eq emitted in 2015 represented a 6.6% increase since 2000, and seems to put the 25% reduction in GHGs by 2020, formulated in the <u>Tokyo Climate Change Strategy</u> by the Tokyo Metropolitan Government (TMG), out of reach. Nevertheless, to consolidate this fall over the long term, special attention is being paid to commercial buildings, accounting for 43% of emissions, ahead of residential buildings (27%), transportation (18%) and industry (7.9%).

• THE RESULTS OF PHASE I OF THE TOKYO-CAP-

AND-TRADE PROGRAMME • The Tokyo-Cap-and-Trade Programme, established in 2010, covers about 1,300 commercial and industrial establishments with energy consumption exceeding 1,500 hectolitres toe/ year. They account for 20% of Tokyo's emissions and 40% of emissions from the commercial and industrial sector (IETA 2018). The results of Phase I (2010-2014) were particularly encouraging, showing a decrease of 12.7% over this period, i.e. a total cumulative reduction of 12.27 MtCO₂eq. The evaluation report shows a reduction of 26% since the baseline year (2002-2007) from 16.50 MtCO₂eq/ year to 12.13 MtCO₂eq/ year in 2016 (TMG ETS 2018). Phase II is aiming for a reduction of 15 to 17% between 2015 and 2019, but for the moment, has only achieved a 1% decrease between 2015 and 2016.



The Tokyo strategy also includes a component involving 660,000 small and medium-sized enterprises representing the 60% of emissions from the industrial and commercial sector not included in the trading scheme: a dedicated Carbon Reduction Reporting (CRR) programme. The 23,786 institutions that reported their emissions in 2015 recorded a 13% decrease in their emissions between 2010 and 2014 (CDP 2017). The impact of these programmes can be seen in the evolution of Tokyo's final energy consumption which is decreasing rapidly, by 2.4% between 2014 and 2015 and by 21.1% since 2000, mainly in the industry and transport sectors, which recorded decreases of 40.8% and 41.7%, respectively, during the 2000-2015 period. At the same time, renewables account for more than 11% of final electricity consumption, notably due to the 8.5-fold increase in solar energy production capacity between 2008 and 2015.

• TRANSPORT SPEARHEADS THE REDUCTION IN EMISSIONS AND ENERGY CONSUMPTION • It is in

transport that Tokyo is making the most progress with a decrease of 36.1%, or more than $6 MtCO_2/$ year, between 2000 and 2015. In this area Tokyo has managed to follow its strategy in 2007: public transport, low-carbon vehicles and eco-driving. In 2018, its metro, connected to the largest metropolitan conurbation in the world, was the busiest in the world, with nearly 3.5 billion journeys (UITP 2018). For freight transport, Tokyo has put in place an energy efficiency indicator for 264 road transport companies and more than 10,000 vehicles. The publication and rating of their efforts is information valued by their customers and encourages them to promote eco-driving that has already reduced their emissions by 20%, and could reduce Tokyo's transport emissions by 8% (CDP 2017). Tokyo, however, has been seeking to stimulate more substantial investments, by progressively imposing CO₂ and particle emission standards since 2003, particularly for diesel vehicles, energy efficiency standards for vehicles in circulation, and low-carbon vehicle quotas, on companies based on the size of their fleet (Retrofit program).