FRANCE

NANTES METROPOLIS

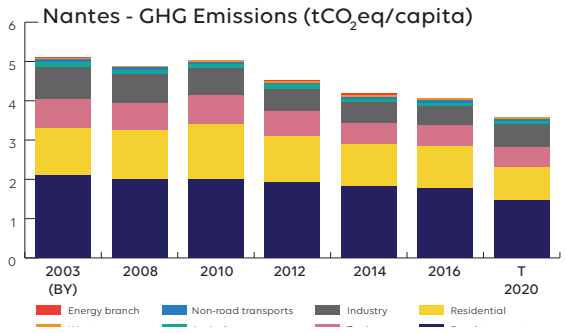
POPULATION
630,370 (2015)
SCOPE
1 AND 2

GHG TARGETS
-30% BY 2020;
- 50% BY 2030
(BASELINE: 2003)

The renewable heat network enables a drop-in carbon intensity

The Nantes targets correspond to the lines of the European Union's energy-climate package with targets that go beyond: -30% of GHG emissions and per capita energy consumption by 2020, and -50% by 2030, compared to 2003. The BASEMIS® 2008/2016 data show that the GHG emissions trajectory should make it possible to attain these targets (already -20% since 2003) on the condition of pursuing and reinforcing the actions already undertaken. For energy consumption, the 2008/2016 trajectory is less favourable, with an overall reduction of 13% since 2003.

• THE CHALLENGE OF RENEWABLES AND RECOVERED HEATING • In 2007, more than 50% of the territory's renewable production came from wood-energy (533GWh), then to a lesser extent from waste recycling (226GWh), geo-aerothermal systems (169GWh) and solar energy (27GWh). **Local renewable and recovered energies represented 12.4% of the energy consumption of the services and residential sectors for the Metropolis in 2017; i.e. a 73% increase compared to 2008.** The territory's share of local renewable energy must reach 50% of the consumption in 2050, with a 2030 target of 20%.



A key element in the mitigation strategy is the development of renewable heat networks; a central investment within the framework of the climate plan, voted in 2006.**In 2017, more than 30,000 housing units (i.e. 8%) were thus connected to one of the six heat networks, supplied to 67% (84% for that of Centre Loire, the most important one) by renewable or recovered energies (wood and waste incineration) and producing 324GWh.** In 2016, 52% of the heat distributed concerned housing, and the other 48% public facilities.

With the commissioning, scheduled for 2019, of the Nord Chézine network, which is set to be 33km long and connected to the waste treatment plant in Couëron, 9500 additional homes will benefit from an eco-responsible heating mode. For households, this mode represents financial savings of 5 to 15% compared to gas heating. It should be noted that 46% of the social housing units in the City of Nantes were served by the heat network in 2016 (for a target of 50% in 2020). Thanks to this 110km network, 44,309tCO_2eq were avoided.

• THE E-BUSWAY PROJECT • Nantes shows a significant decrease of its GHG emissions related to road transport. A pioneer in the relaunch of the tramway in the 1980s, it followed with the Chronobus and the Busway. The Busway (line 4) is one of the structuring axes of public transport in the Metropolis, with nearly 9.5 million journeys made in 2017, i.e. 40,000/day. At present, approximately 20 vehicles use these 7km-long reserved lanes. In the autumn of 2019, it will be renovated to become the E-busway, with electric motorisation. Victims of their own success, the Busways are indeed congested during peak periods and must increase their capacity, their comfort, and their operation. **With 22 bi-articulated E-Busways of 24m and 150 seats each, 55,000 travellers will be able to be transported per day (35% more than today).** The E-busway, which is 100% electric, offers a low energy cost, the absence of direct GHG missions (1330tCO_2 avoided) and a decrease in noise disturbance. A charging system will enable a continuous service. This project has financial support from the French State within the framework of the Future Investments Programme and from the EU under the Horizon 2020 programme. It is also part of a coherent mobility policy, which also includes the development of soft modes of transport such as bicycles.

MAIN SOURCES:
LOCAL CLIMATE AIR AND ENERGY PLAN (PLAN CLIMAT AIR ÉNERGIE TERRITORIAL - PLAN CLIMAT AIR ÉNERGIE TERRITORIAL (PCAET) AIR PAYS DE LA LOIRE – BASEMIS®