

Cities standing up to Climate Change

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November 15th , 2017

ready for the resource revolution



Paris Agreement Objectives, a Challenge for the Cities

2°C

Hold the increase in the global average temperature below 2°C by 2100

CHALLENGES

2%

Cities represent only 2% of the earth surface

70%

of people will be living in cities in 2040 (up from 60% today)

80%

of global Greenhouse Gases emissions are generated by cities

75%

Of global energy is consumed by cities

Empowerment of cities to take actions on climate



SUEZ, a front-runner in the transition to low carbon future



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Climate commitments made in 2015 out of SUEZ 15 Sustainable objectives



Mitigate the consequences of climate change: -30% by 2030 in GHG



Promote the circular economy model, enabling the structural reduction in greenhouse gas emissions and the protection of natural resources: SUEZ is a GHG Net Avoider since 2014



Adapt to the consequences of global warming on water: Network losses reduction equal to a city of 2m inhabitants by 2021

SUEZ committed to provide concrete solutions to *Ressourceful* cities to reduce GHG footprint



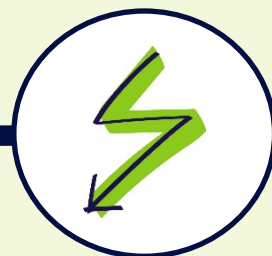
WATER

Drinking Water
Desalination
Wastewater
Re-Use



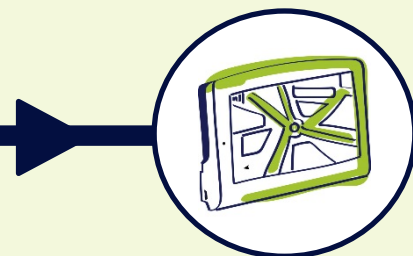
WASTE

Prevention
Recycling
Recovery
SRM supply



ENERGY

Waste to Energy



SMART

Digital to provide holistic
environmental solutions

Optimize water management & recover sludge into energy



From industrial & municipal wastewater to energy

France - Alsace



3,4 GWh of energy generated annually,
the equivalent amount of energy consumed by
2,400 people

Use of the heat from wastewater networks

France – Levallois aquatic centre



90% of the energy needed to keep the pools
at a consistent temperature

Savings of **€48,000** in the 1st year

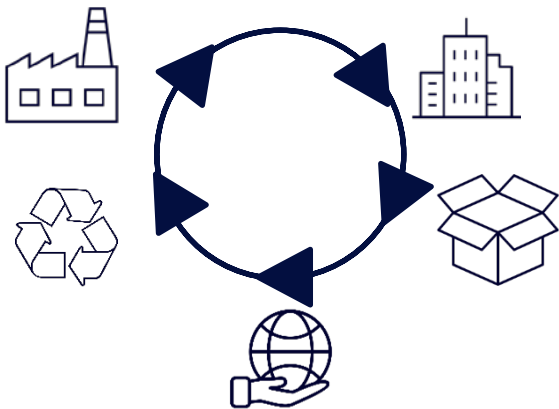
66% reduction of emissions of greenhouse gases

Develop source segregated waste streams collection in cities to boost recycling – the plastic value chain example



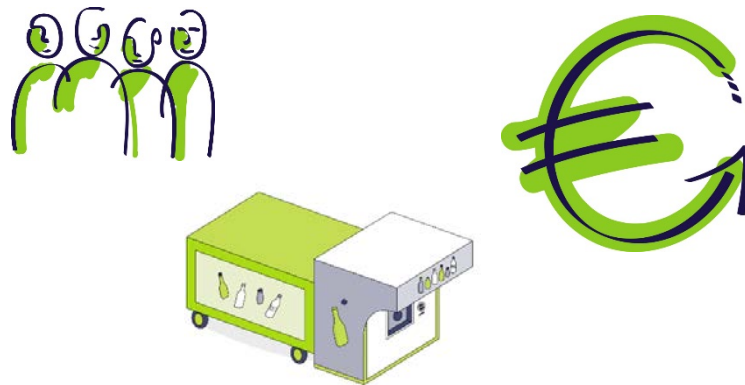
1 ton of recycled plastics
= 1,6 tons of avoided CO₂ per ton of recycled plastics + 90% of energy and 5 barrels of oil saved

Cooperation is key...



... to encourage eco-design, ban non-recyclable & improve sorting

Encouraging citizen...



... to improve source segregation of waste



Waste landfilling, still to be properly addressed

In emerging countries...

80%

of collected waste end in non-compliant landfills

70%

of global waste will be produced by 2025 in these countries, representing 8 to 10% of global GHG emissions

Meknès, Morocco: an exemple of landfill rehabilitation by SUEZ

- **185,000 tons of waste** produced by 650,000 inhabitants
- Biological recovery unit to **produce compost**
- **Biogas** production



Supply green energy to develop low carbon territories



Provide heat to district heating networks and industrials



Provide biogas from Anaerobic Digestion



Produce Hydrogen from gasification



Smart solutions & digital monitoring for cities

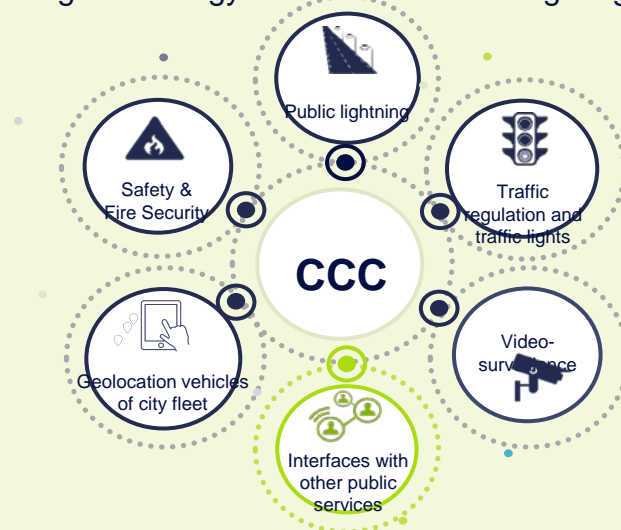


France – Dijon Exemple

Upgrade and better management of equipment

Better coordination of services

65% of savings on energy bill related to street lighting



Carbon well, an example of innovative experiment

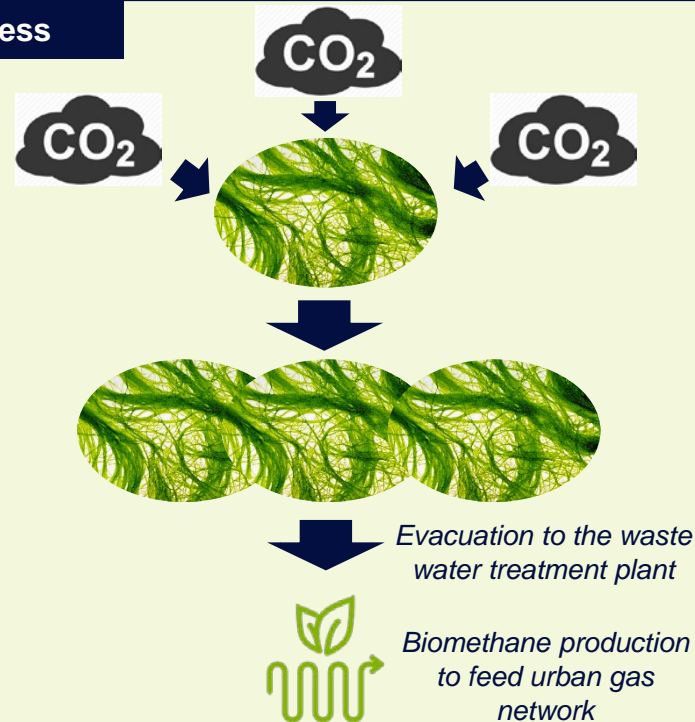
A partnership to boost low carbon innovation



&



Process



THANK YOU FOR YOUR ATTENTION

