



مؤتمر عجمان
الدولي السادس للبيئة
Ajman 6th International
Environment Conference



AIEC2022

Ajman 6th International Environment Conference on
TOWARDS 2071 SHAPING THE FUTURE FOR ENVIRONMENTAL SUSTAINABILITY

Roadmap Towards Zero Emissions Public Transportation in Dubai by 2050



RTA's Green Economy Framework (GEF)



Vision

The world leader in seamless & **sustainable** mobility

Mission

Develop & manage integrated and **sustainable roads & transportation systems** at a world-class level and provide pioneered services to all stakeholders for their happiness, and support Dubai's vision through shaping the future, developing policies and legislations, adopting technologies, innovations & world-class practices and standards.

Alignment with GE related Directions & Strategies

RTA's Strategic Goals & Objectives

RTA's GE Strategic Pillars





Roadmap Towards Zero Emission Public Transportation in Dubai by 2050



Benchmarking

Philadelphia
A zero-waste city by 2035

New York
All new buildings to be zero-emissions by 2030, existing buildings by year 2050

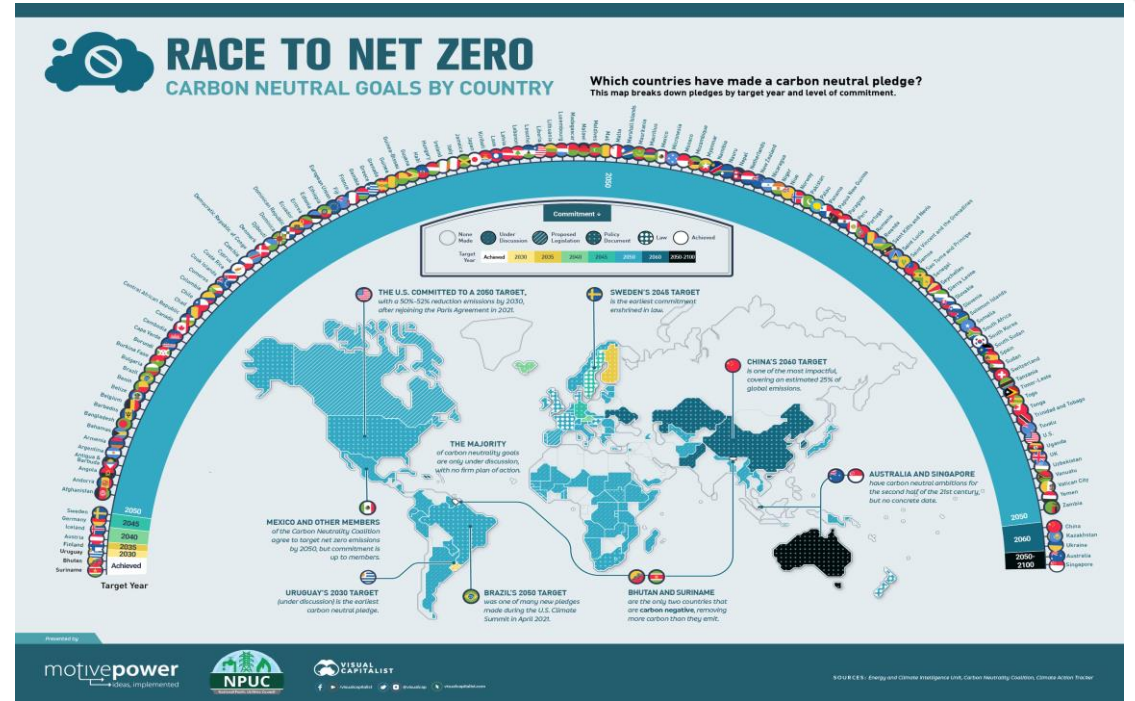
Britain & France
Legislation has been adopted to commit to zero emissions by 2050 (transportation, waste, aviation, agriculture, electricity, heating).

UAE
The National Agenda and Dubai Plan (reduce waste by 75% by 2021).

Japan & China
Japan's commitment to move towards zero carbon emissions by 2050 and China by 2060. Implementation of a roadmap for zero-emission buildings as soon as possible.



International Move



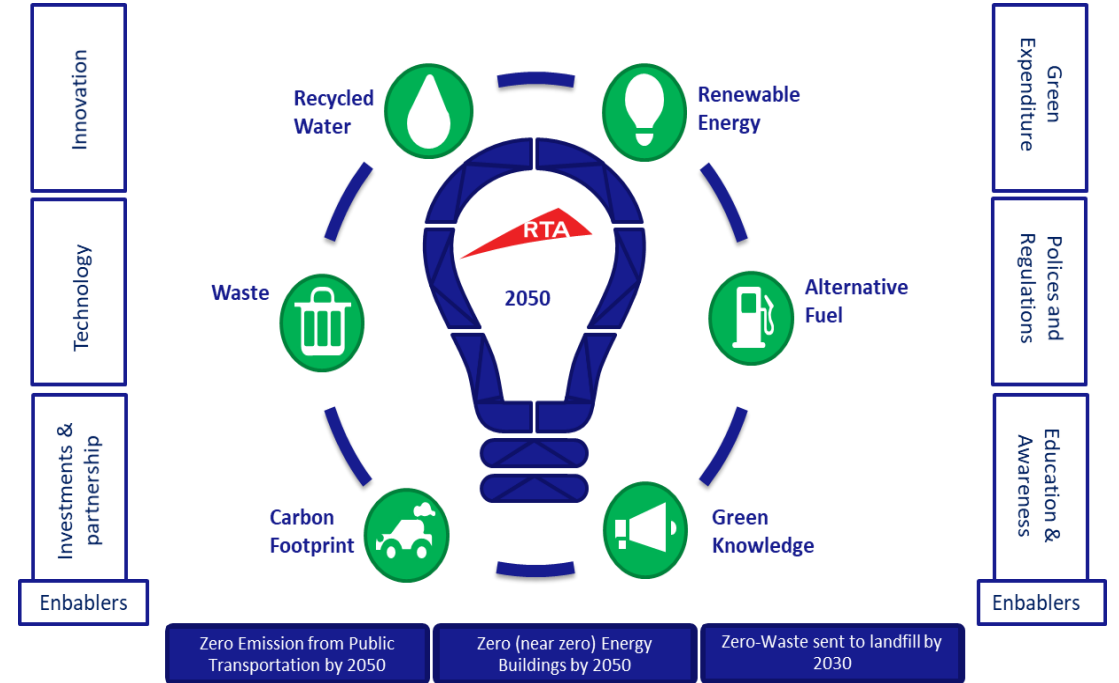
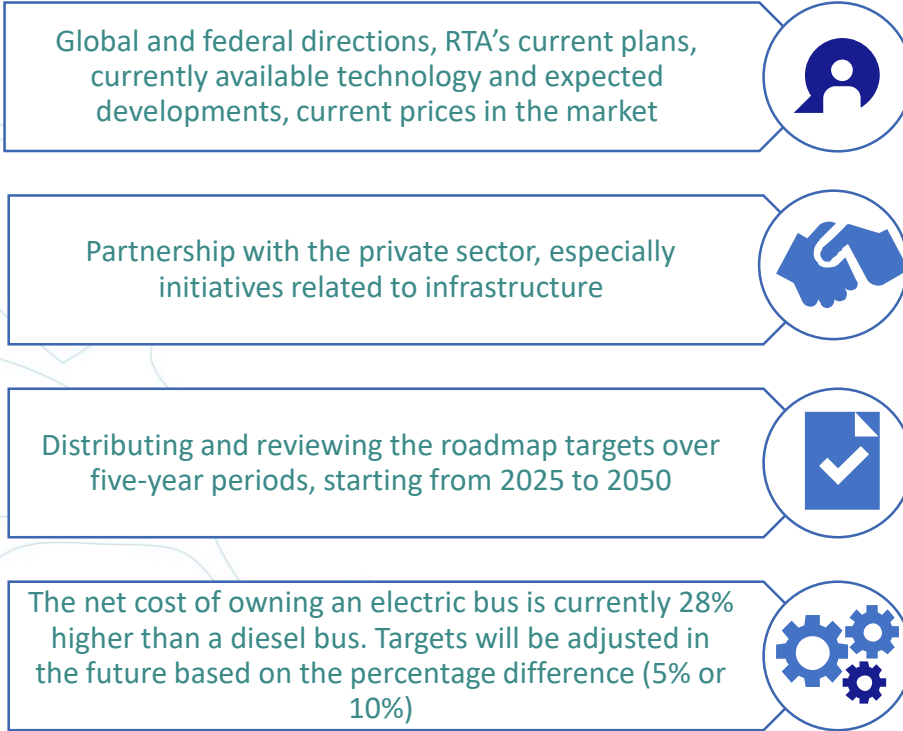
<p>C40 Cities Climate Leadership Group (C40 Network)</p>	<ul style="list-style-type: none"> • 24 cities have committed to generating electricity from 100% renewable energy by 2030. • 63 cities have announced their commitment to achieving carbon-neutral buildings. • 28 cities have announced their commitment to go zero waste. • Mayors in 25 cities have pledged to deliver net-zero climate-resilient cities by 2050: London, Los Angeles, Melbourne, Mexico City, Milan, New York City, Oslo, Paris, Philadelphia, Portland, Quito, Rio De Janeiro, Santiago, Stockholm, Vancouver, Austin, Accra, Barcelona, Buenos Aires, Cape Town, Caracas, Copenhagen, Durban.
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Roadmap Towards Zero Emission Public Transportation in Dubai by 2050



General Considerations Taken to in the Development of the Roadmap



*The roadmap and its targets shall be reviewed and evaluated every **five years**, according to technological developments and changes in strategic directions.



Key Outcomes of the 2050 Zero-Emission Roadmap



First in the world to target public transportation and its infrastructure



First in the MENA region to develop an integrated net-zero emissions roadmap



Strengthening the position of Dubai and UAE within the global indicators for excellence and pioneership

Environmental Impact



Reduce GHG Emissions by 8 Million tCO₂e

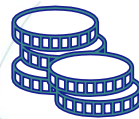


Equivalent to emissions of 1.7 billion vehicles/year



Estimated to equivalent of AED 600 Million indirect savings

Financial Impact



Reduce Operational Costs by AED 3 Billion



One billion dirhams is the direct additional cost of implementing the plan but there are significant environmental returns, investment opportunities and regional leadership



Roadmap Towards Zero Emission Public Transportation in Dubai by 2050



The Roadmap

3 Pillars → 10 Initiatives



Ambitions

1- Green Mobility



- a) Electric & Hydrogen Public Buses
- b) Expansion of Electric & Hydrogen Taxis and Limousine – Taxi Dubai
- c) Expansion of Electric & Hydrogen Taxis and Limousine – Other Taxi companies
- d) Electric & Hydrogen School Buses

Zero Emission
from Public
Transportation by
2050

2- Infrastructure



- a) Renewable Energy (Solar PV) in buildings and facilities – 24 Buildings
- b) Retrofitting existing buildings – 115 buildings
- c) Near Zero Energy buildings – all new buildings
- d) Energy efficient street lighting

Zero (Near Zero)
Energy Buildings
by 2045

3- Circular Economy



- a) Recycling of Municipal waste
- b) Recycling and reuse of water

Zero-Waste Sent
to Landfill by
2030



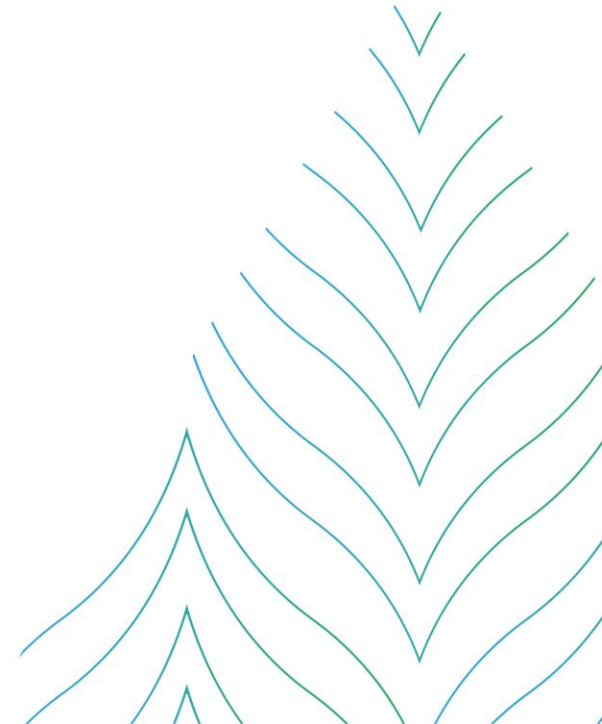
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Considerations to Develop the Roadmap





Zero Emission from Public Transportation by 2050 Public Buses - consideration

<ul style="list-style-type: none">• Electric/Hydrogen Limousine taxi plan 2026• 200 Tesla Taxi plan• Hybrid Taxi plan 2021	<ul style="list-style-type: none">• Available Technology and Global Trends for Public Buses and light vehicles	<ul style="list-style-type: none">• RTA's approved Roadmap for alternative fuel Public Buses 2026
<p>Dubai's pledge and commitment to C40:</p> <ul style="list-style-type: none">• Procure Zero emission buses from 2025• Support transition of city centre to zero emission by 2030	<ul style="list-style-type: none">• Buses and Taxis Decommissioning and Procurement Plans	<ul style="list-style-type: none">• Current Prices of Electric and Hydrogen Buses and light vehicles



Journey to Zero Emission Public Transportation by 2050



Zero (near zero) Energy Buildings by 2050 Buildings and Facilities - consideration

<ul style="list-style-type: none">• Partnership with Private Sector (Zero capital investment)	<ul style="list-style-type: none">• Solar Roadmap 22 buildings• Smart Project for RTA HQ Building	<ul style="list-style-type: none">• DEWA's Targets for clean energy - 25% by 2030 and 75% by 2050
<ul style="list-style-type: none">• New RTA Buildings to be LEED certified	<ul style="list-style-type: none">• Advancement of Solar technology & utilization of empty spaces in depots and right of way for Solar Installation	<ul style="list-style-type: none">• Increase site water collection and recycling (i.e. All bus depots)



Journey to Zero Emission Public Transportation by 2050



Zero-Waste sent to landfill by 2030 Wate - consideration

<ul style="list-style-type: none">• Current practices - about 70% of waste is recycled/reused	<ul style="list-style-type: none">• Dubai Municipality support to recycle the Construction Waste
<ul style="list-style-type: none">• Opportunity to reduce costs and generate revenue	<ul style="list-style-type: none">• Partnership with waste Management Company to handle all type of generated waste



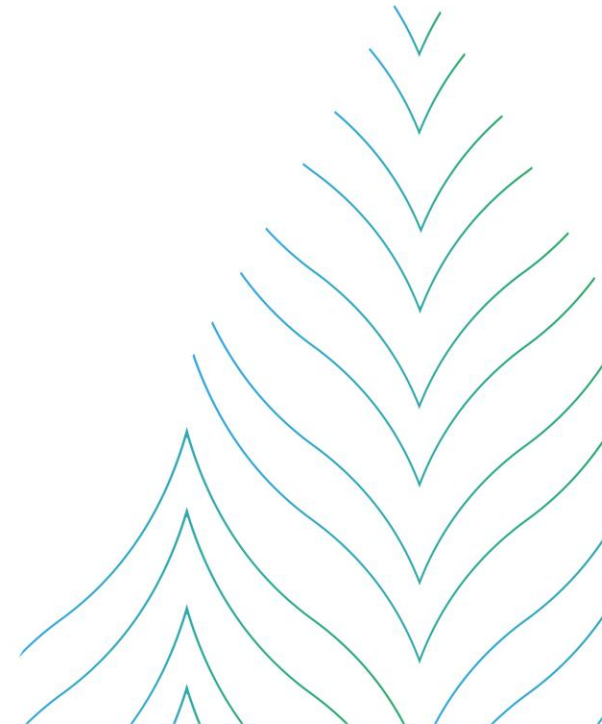
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Towards Zero Emission Public Transportation in Dubai - 2050





Roadmap Towards Zero Emission Public Transportation in Dubai by 2050



Roadmap & Targets until Year 2050



#	Pillar	Initiatives	2020	2025	2030	2035	2040	2045	2050	
1	Green Mobility	Electric & Hydrogen Public Buses	0%	0%	10%	20%	40%	80%	%100	
2		Expansion of Electric & Hydrogen Taxis and Limousine – Taxi Dubai	3.5%	10%	20%	40%	60%	80%	%100	
3		Expansion of Electric & Hydrogen Taxis and Limousine – Other Taxi companies	0%	10%	20%	40%	60%	80%	%100	
4		Electric & Hydrogen School Buses	0%	0%	10%	30%	50%	80%	%100	
5	Infrastructure	Renewable Energy (Solar PV) in buildings and facilities – 24 Buildings		%100	Expanding the scope of application to the rest of RTA's buildings, facilities and infrastructure					
6		Retrofitting existing buildings – 115 buildings	9%	35%	74%	83%	91%	%100		
7		Near Zero Energy buildings – all new buildings	0%	%100	Continuous implementation on all new projects					
8		Energy efficient street lighting	17%	35%	70%	%100	Continuous implementation on all new projects			
9	Circular Economy	Recycling of Municipal waste	65%	75%	%100	Continuous implementation				
10		Recycling and reuse of water	12%	15%	20%	26%	30%	36%	40%	

THANK YOU

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