

ELECTRIFICATION OF NORWEGIAN TRANSPORT SECTOR

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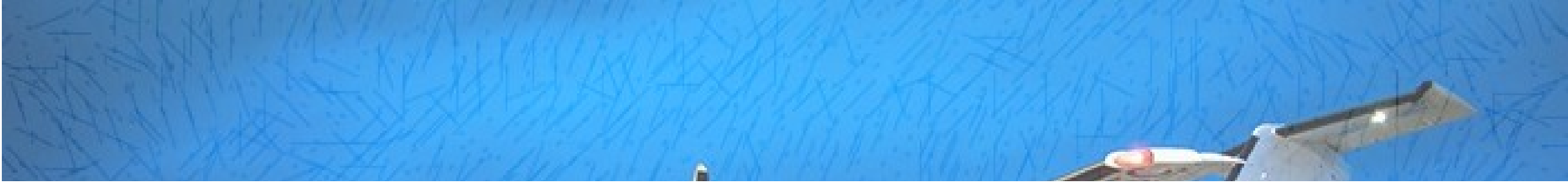


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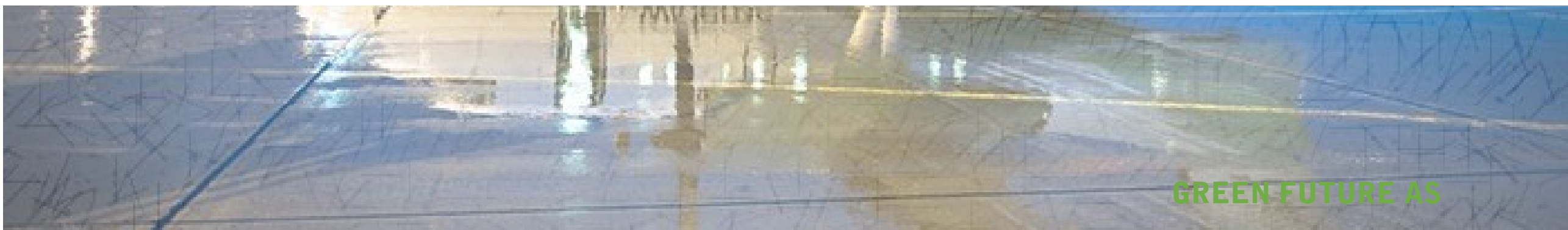
“In Norway, 98 percent of the electricity production come from renewable energy sources. Hydropower is the source of most of the production.

Source	Amount (TWh)
Hydropower	129 TWh
Wind power	1,9 TWh
Thermal power	3,3 TWh
Total	134 TWh

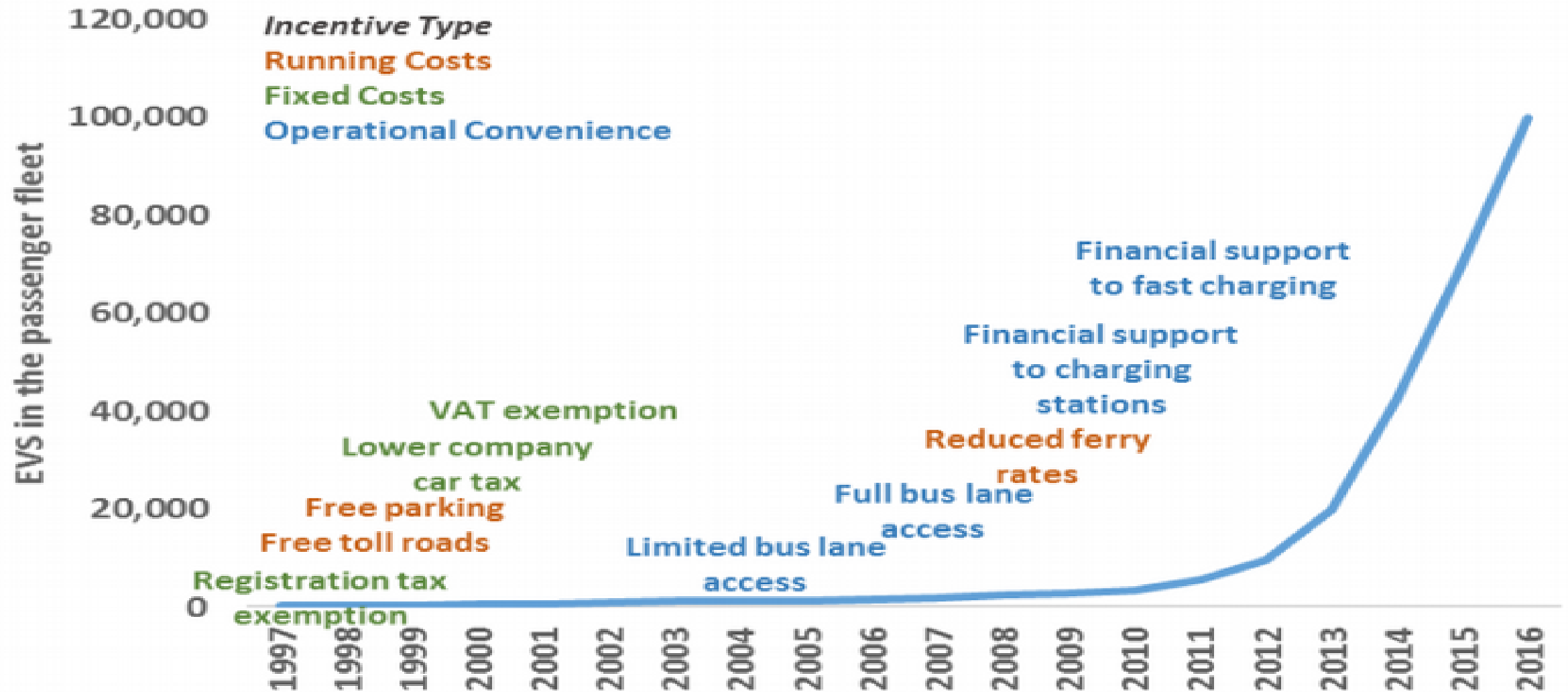




“ Norway has the highest per capita number of all-electric [battery only] cars in the world: more than 150,000 in a country of 5.2 million people. Last 12 months, EVs constituted nearly 40% of the nation’s newly registered passenger cars.”



Norway has one of the most generous and long-running incentive structures for battery electric vehicles (BEVs) in the world.



Full electric car ferries with capacity of 120 cars is already trafficking Norwegian fjords.



ZeroCat™ 120



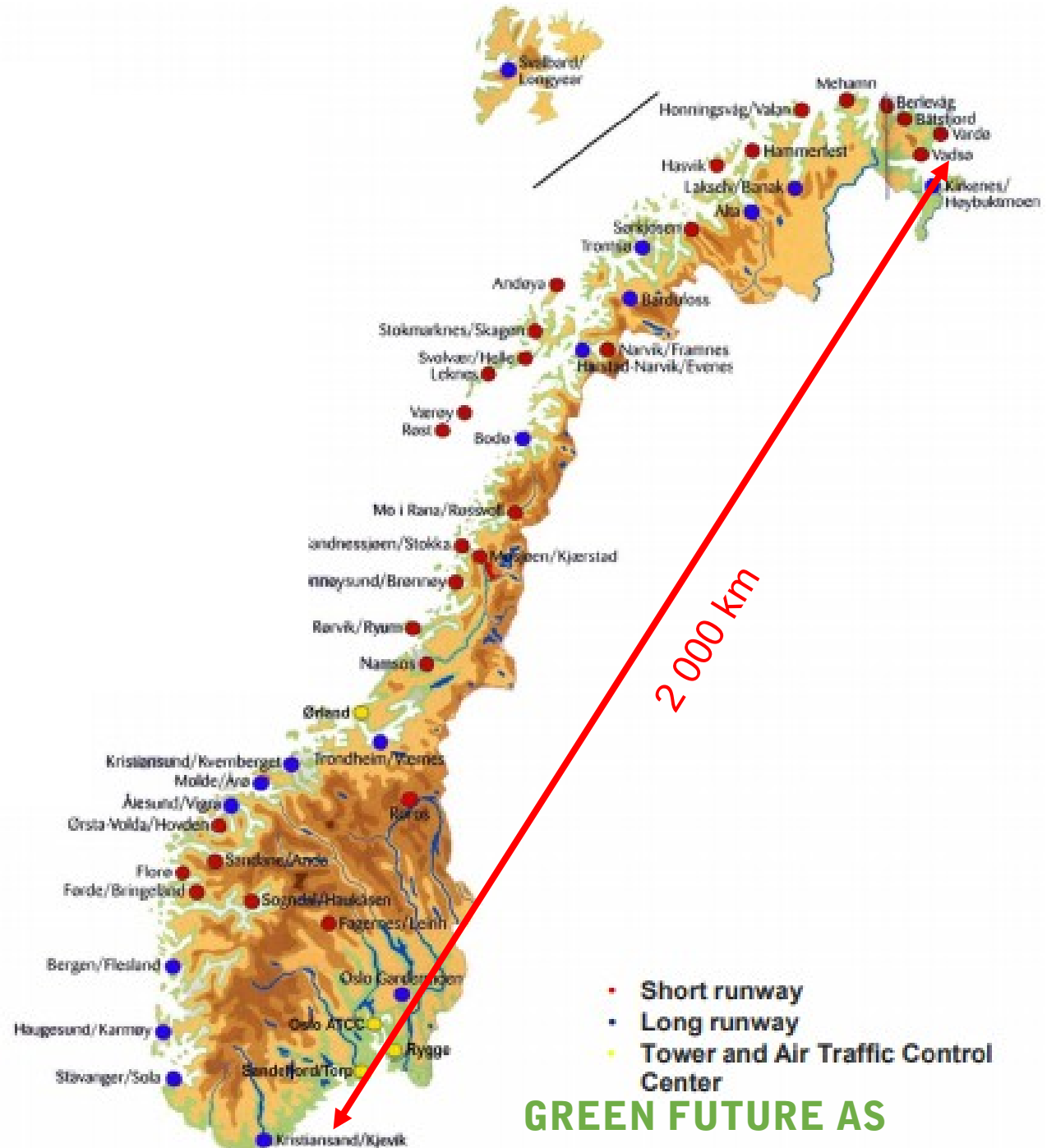
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Electrification of air transport as soon as technology is ready.

“ Norwegian government / AVINOR will actively work with developer of electric airplanes and infrastructure technology in order to adapt to the new generation of electric air transport as early as possible.”

The Norwegian network operated by state owned AVINOR

46 airports,
3 air traffic control centers
51 million passengers per year



AVINOR remote tower centre, Bodø

Centralized tower control of 18 airports



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MAJOR NORWEGIAN AIRLINERS

Norwegian: 145 Boeing 737 / 787

SAS: 160 Airbus/Boeing/ATR/Bombardier

Widerøe: 41 Dash 8, 3 Embraer



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Norwegian activity 2018 - 2019

Dialogue with aircraft and technology developers

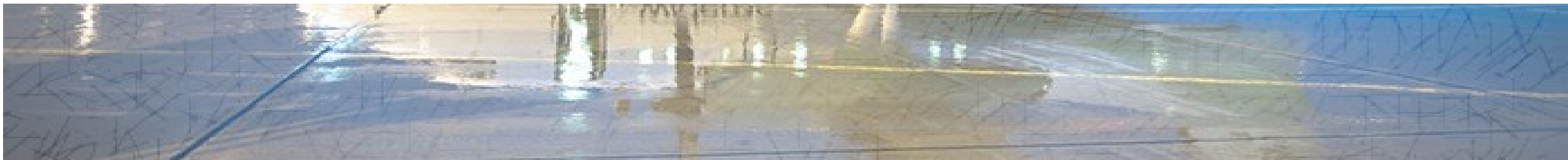
Investigate required infrastructure changes, battery charging, etc


Investigate improvement of air traffic efficiency

Investigate possibility for use of short runways (2 500 ft)

Investigate possibility for noise reduction

Evaluate possibility for establish test center for electric flight



A 3D architectural rendering of a modern, white, two-story building with large glass windows and a flat roof. A sign on the building reads "NORWEGIAN E TEST CENTRE". In the foreground, two futuristic aircraft are parked on a concrete tarmac. The aircraft on the left is white with green accents and the registration "F-CDCC". The aircraft on the right is white with green accents and the registration "F-WATT". The sky is blue with some clouds.

NORWEGIAN E TEST CENTRE

THANK YOU !

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