FAST FORWARDING ROAD LOGISTICS WITH GREEN BUSINESS

PRESENTATION FOR CLECAT

Nov | 2020

CONSIDERATIONS FOR SME + GREEN BUSINESS

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1

FINANCIALS

2

TECH + TIMING

3

MINDSET

4

POLICY

FINANCIAL INCENTIVES ARE THE DRIVERS

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BERLIN – PARIS ROUTE EXAMPLE

26t payload

1054 km

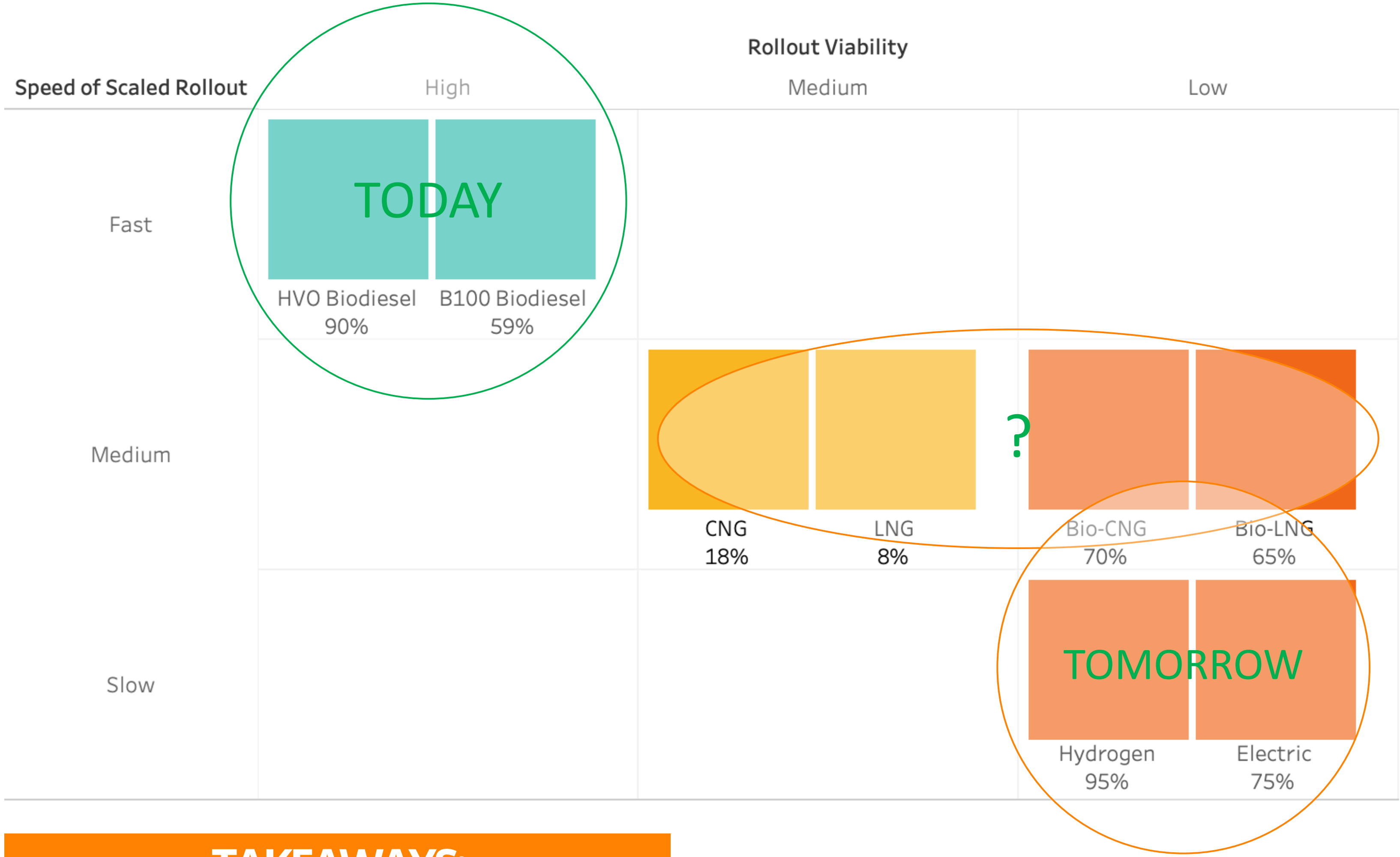
Fuel Type	Transport Price	Greenhouse Gas Emissions One Way (t CO2e)	Carbon Tax per Tonne (EUR)	Carbon Tax per Transport	Transport Price with Carbon Tax	% Increase with Carbon Tax
Fossil Diesel	€ 1.000,00	**1,18**	€ 130	€ 153,40	€ 1.153,40	15%
Fossil Diesel	€ 1.000,00	**1,18**	€ 60	€ 70,80	€ 1.070,80	7%
B100	€ 1.000,00	**0,49**	€ 130	€ 63,70	€ 1.063,70	6%
B100	€ 1.000,00	**0,49**	€ 60	€ 29,40	€ 1.029,40	3%
HVO	€ 1.000,00	**0,12**	€ 130	€ 15,60	€ 1.015,60	2%
HVO	€ 1.000,00	**0,12**	€ 60	€ 7,20	€ 1.007,20	1%

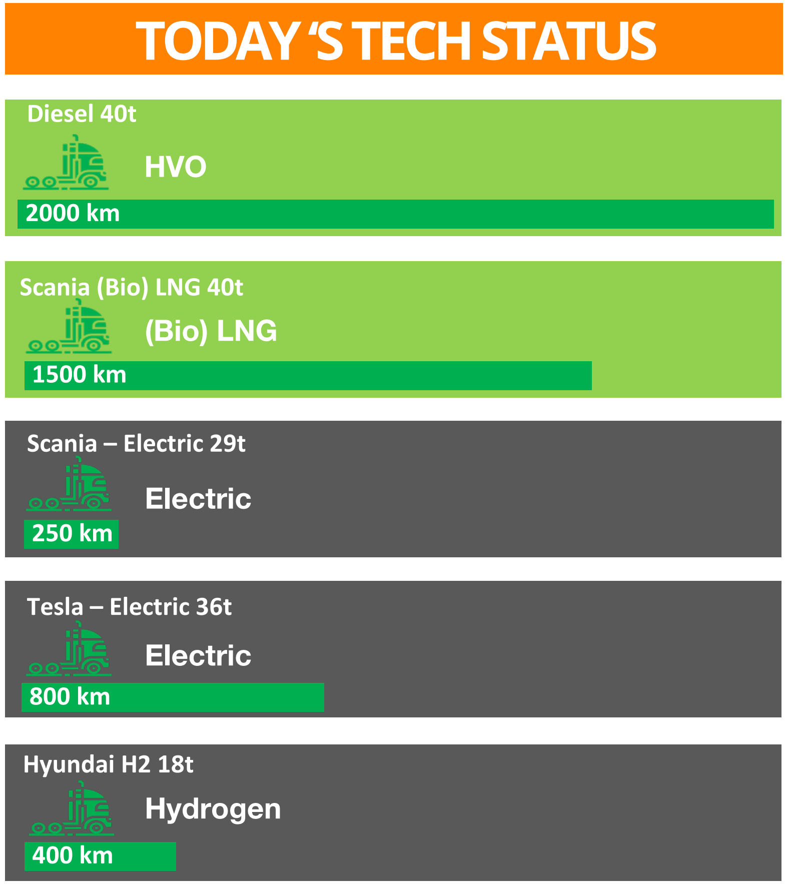
WHAT TO DO WITH THIS INFO?

NOT: 1990s way of thinking "STOP THE CARBON TAX!"
...it has nothing to do with carbon tax and everything to do with changing business demands!

1. Embrace the fact that **fundamental changes are here**, driven by the **real needs of climate change** and the changing **business demands of companies**.
2. Understand the financial incentives across the transport industry – **where does Green Business slot into your segment** and provide a **strategic advantage**?
3. **Make clever investments in company capabilities** that empower leadership in the new landscape (by the way, it is already here in 2020)

REALISTIC TECH EXPECTATIONS + TIMEFRAME





TAKEAWAYS:

Expectations for SMEs need to be realistically grounded in current tech and the view towards building future tech integration.

ADVANCED FUEL OVERVIEW

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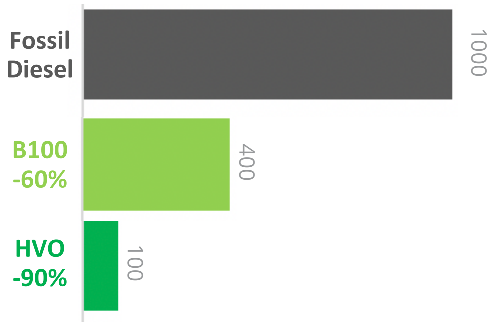
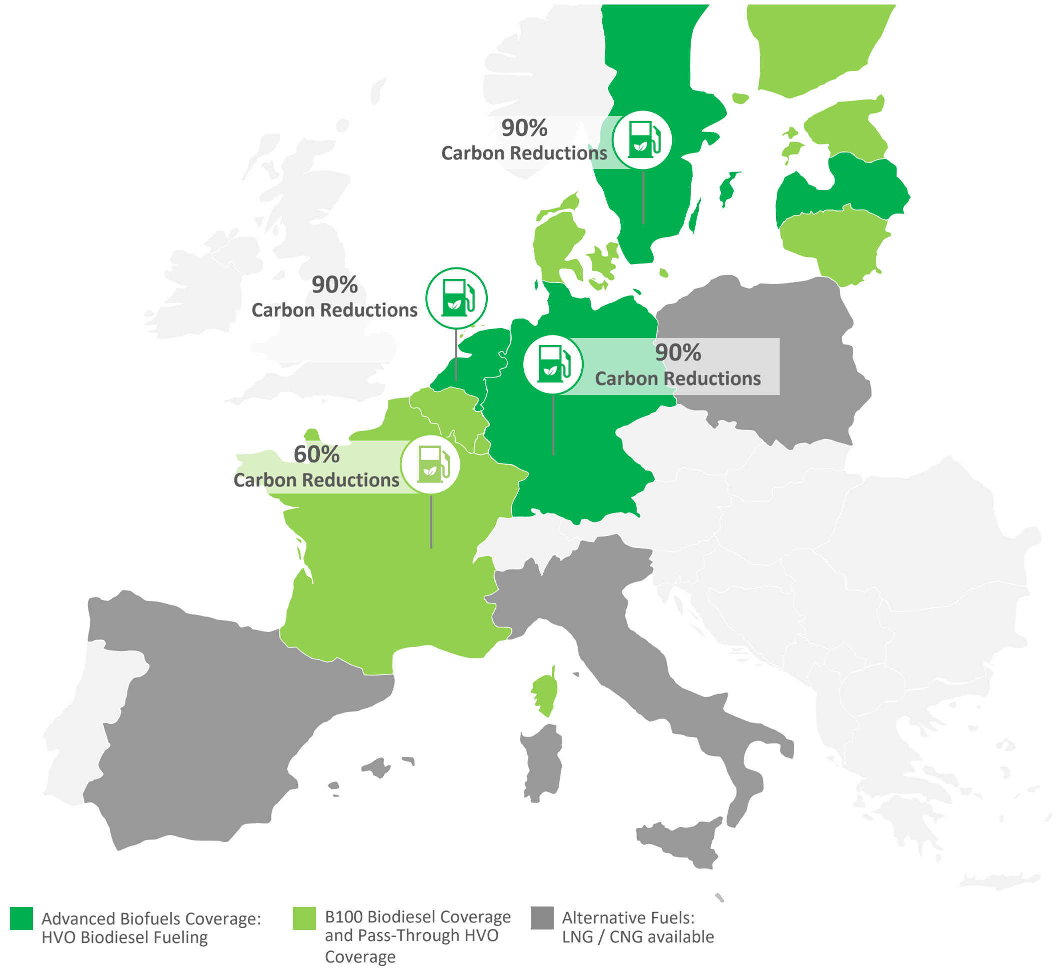
DEEP GREENHOUSE GAS REDUCTIONS UP TO 90% WITH ADVANCED BIOFUEL

Fuels over 50% emissions reduction hurdle

	Fuel	Carbon Reduction
	Hydrogen	95% Carbon Reduction≈
Available	HVO	90% Carbon Reduction≈
	Electric	75% Carbon Reduction≈
	Bio-CNG	70% Carbon Reduction≈
	Bio-LNG	65% Carbon Reduction≈
Available	B100 FAME	60% Carbon Reduction

Greenhouse Gas Emissions per 1000km (CO2e kg)





ADVANCED BIOFUEL OFFERINGS:

- **60-90% Greenhouse Gas Reductions** through Advanced Biofuels
- **Full or Regional Access in Main EU Markets** including Netherlands, France, Germany and Sweden
- **Carbon Emissions Calculations** provided to shippers by sennder
- **Validated Alternative Fuels Use** throughout shipment process confirms emissions reductions
- **Proprietary Fuel Agreements** provide industry-leading economics on advanced biofuels

Sources: sennder, EN 16258, Neste, OLEO 100, GLEC

EUROPEAN VIEW ON NEXT STEPS

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Flip Everything

Best practices in carbon reduction are **strategic advantages**.

Lower costs, higher efficiency, better data visibility, future proof, more attractive services.

Flip from cost mentality to mentality of strategic advantage.

1 Decisive 10 Year **Policy**

Given IPCC recommendations, we have approximately 8 years remaining to implement deep reductions.

Tech + **Financials**

It is absolutely doable.

2 Carbon Standards

Continued development of them and further roll out and automation will make sure we are **speaking the same language**.

Measure Greenhouse Gasses (CO_2e), not CO_2

GLEC, EN 16258 etc. are fundamental tools.

3 Player Integration

Shippers, carriers nor forwarders can accomplish changes on their own – it must be an integrated effort.

Access to great educational resources.

Coalition of the leaders.

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YOUR THOUGHTS QUESTIONS & COOPERATION ARE WARMLY WELCOME

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