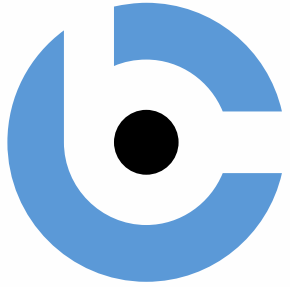




Continental Bitumen

Paving Through Uncertainty: The Bitumen Market in Troubled Times

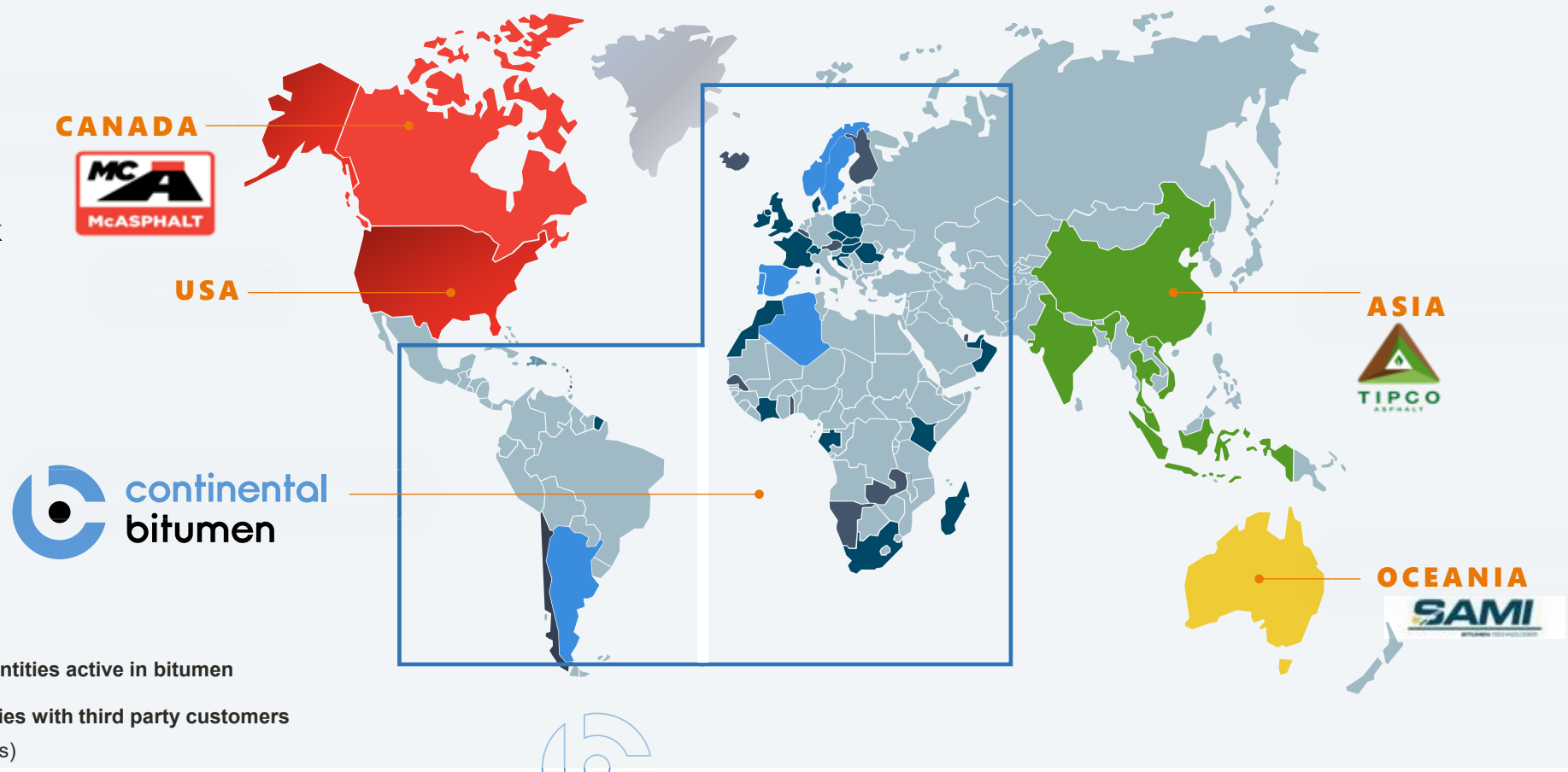
NAbin Conference - Oslo - 14/10/2026

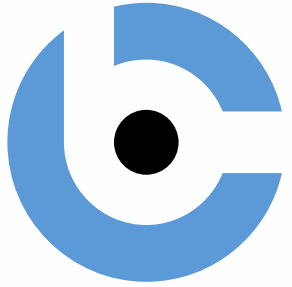


CONTINENTAL BITUMEN, PART OF COLAS, BIGGEST BITUMEN BUYER WORLDWIDE

Priorities 5 years

- Secure supply for customer network
- Develop storage network and partnerships to optimize logistic assets
- Reduce carbon footprint of bitumen binders





NORWAY, YOU ARE NOT ALONE !

Most FAQ in Europe, Africa, Middle East and Latin America on bitumen supply troubles :



**Where will
cost increase
ends up ?**



**Will we have
enough in the
future ?**

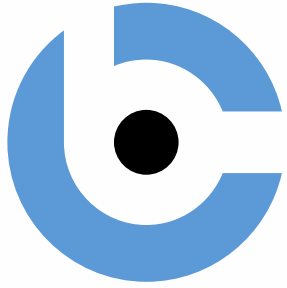


**What is going on
with Bitumen
quality ?**



**What about
sustainability of
bitumen ?**



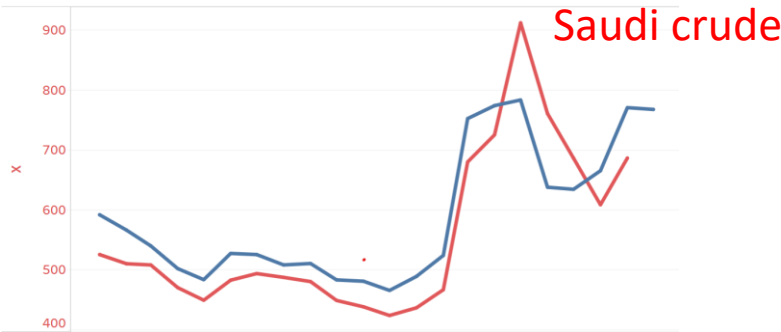


COST OF BITUMEN, SORRY BUT THERE IS LITTLE WE CAN DO ABOUT IT...

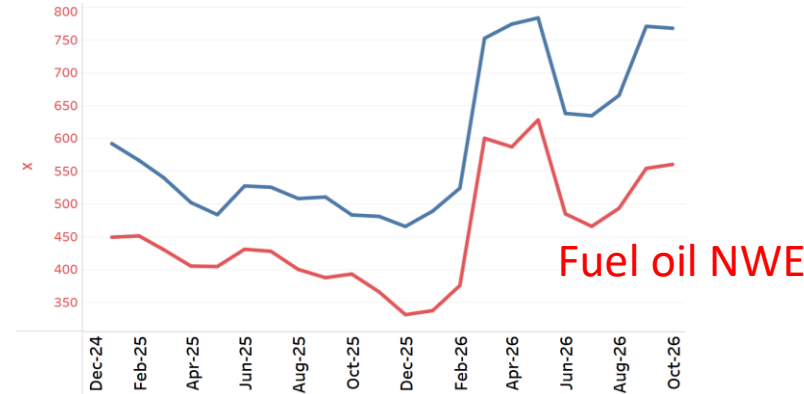
Crude Evolution in \$/T



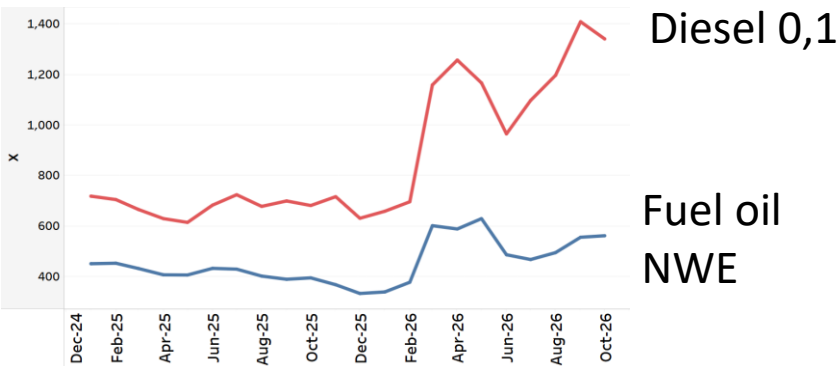
Crude Evolution vs heavy crude in \$/T (Saudi)



Crude vs Fuel Oil

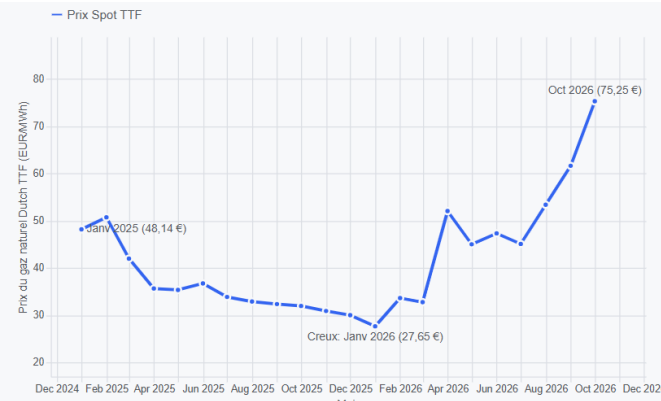


Diesel vs Fuel oil

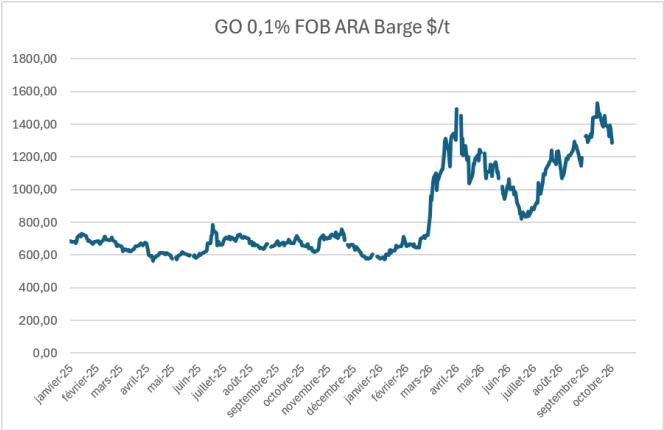


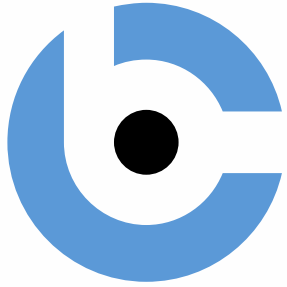
Bitumen logistic

Gas (storage)



Bunker (transport)





NOT ALL BITUMEN REFINERIES ARE EQUAL WHEN IT COMES TO BITUMEN PRODUCTION COST

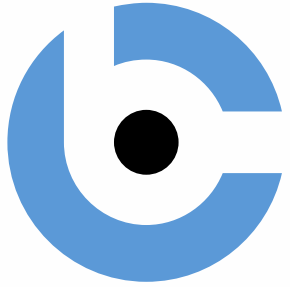
Oil Market conditions

Which refinery when ?	Key features	High refinery Margin	High value of diesel vs crude	Low availability of heavy crude / feedstock	Low value of Fuel oil vs crude
 Bitumen tolling Unit	Bitumen Yield >50% Process only very heavy feedstock (e.g. Ven Crude)	---	--	---	---
 Typical standard (diesel) refinery	Bitumen yield typically @10%	+++	+++	-	-
 Highly complex refinery (e.g. coker equipped)	Bitumen Yield from 10% to 0% Can process almost any crude	--	--	--	---

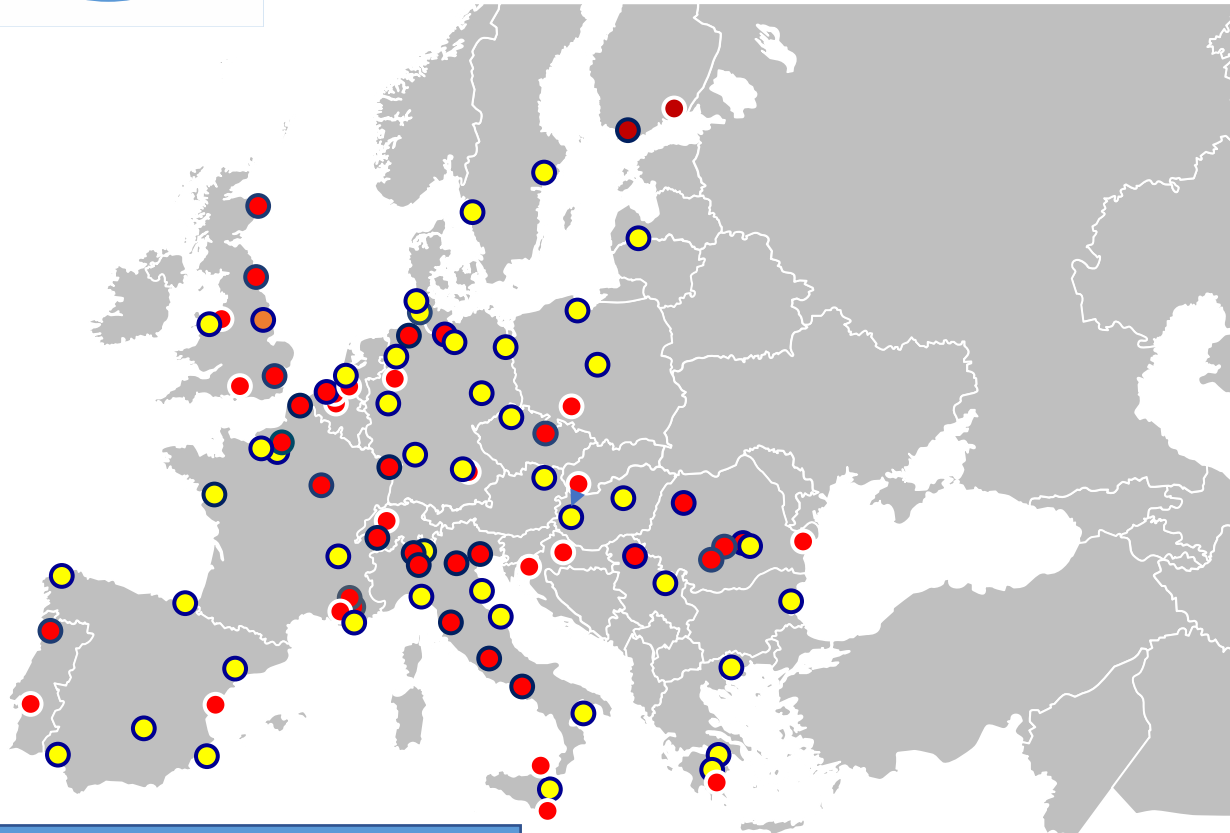
+++ : oil market **very favourable** to competitive bitumen production

--- : oil market **very unfavourable** to competitive bitumen production

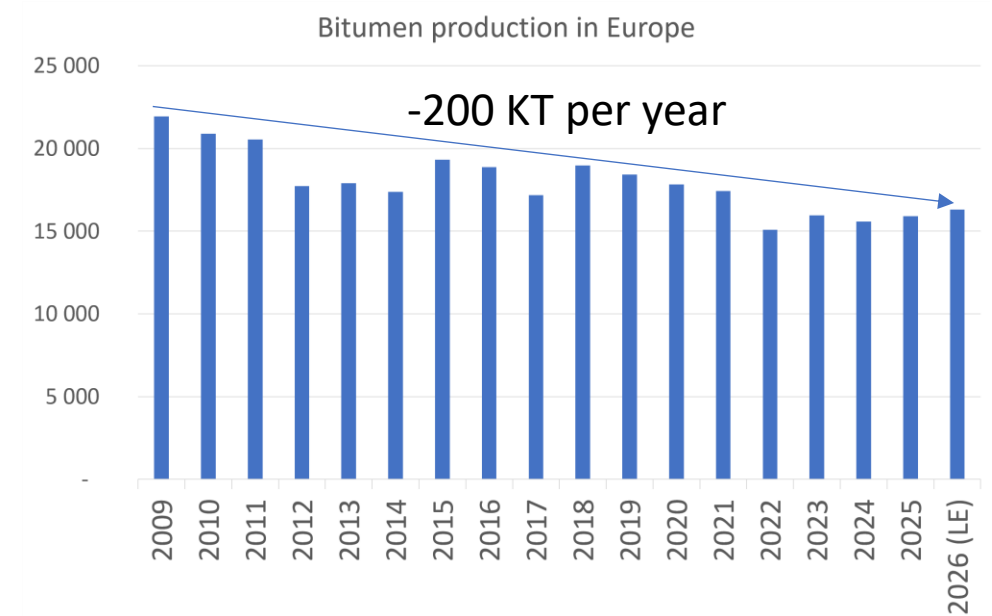


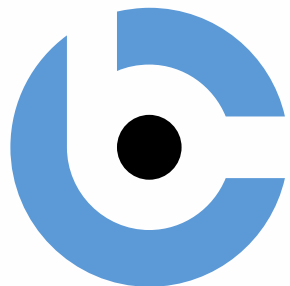


BITUMEN SUPPLY : WILL WE HAVE ENOUGH ?



- Refinery producing bitumen in 2026
- Closed production of bitumen since 2009
- Closed refinery since 2009



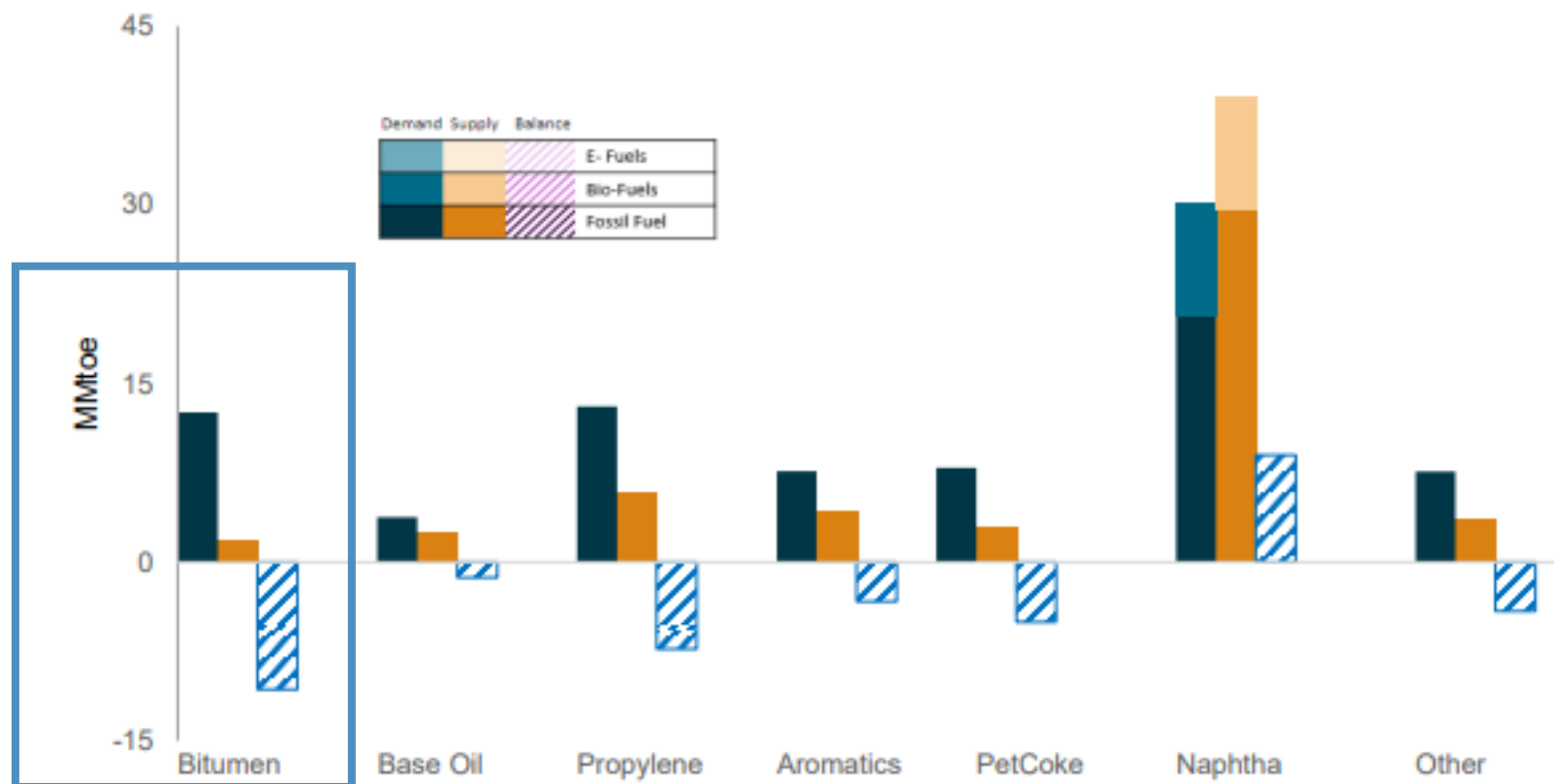


OUTLOOK IS NOT LOOKING GOOD FOR EUROPEAN BITUMEN PRODUCTION

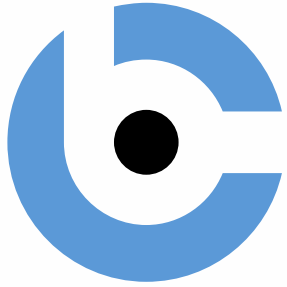


2040 outlook
by Concawe

Figure 7.22 – 2040 EU+ fossil, bio and e- non-fuels balance, Max Electron (MMtoe)



Source: S&P Global Commodity Insights
© 2024 S&P Global



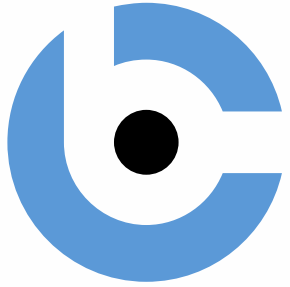
OUTLOOK IS NOT LOOKING GOOD FOR EUROPEAN PRODUCTION



**EU Methane Emission
Regulation impact
(EU 2024/1787)**

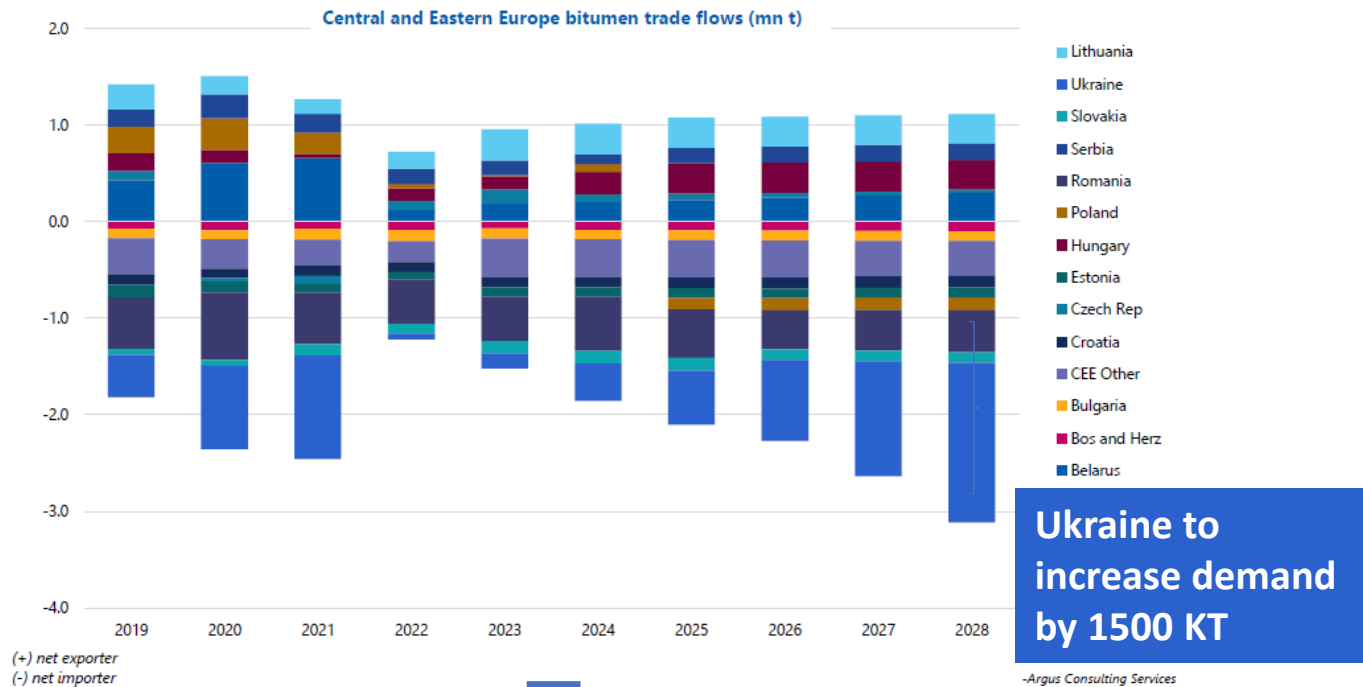
“ In the most severe case, few crudes meet the EU requirements so it would effectively lead to the closure of half of the European refining industry. Most heavy crudes would be excluded from Europe. There is no regulation on the import of finished goods, supporting imports rather than domestic processing.”

Alan Gelder, Wood Mc Kenzie, March 2026



DEMAND INCREASE IN THE REGION WILL CREATE ADDITIONAL PRESSURE ON LOCAL BITUMEN AVAILABILITY IN THE NORDICS

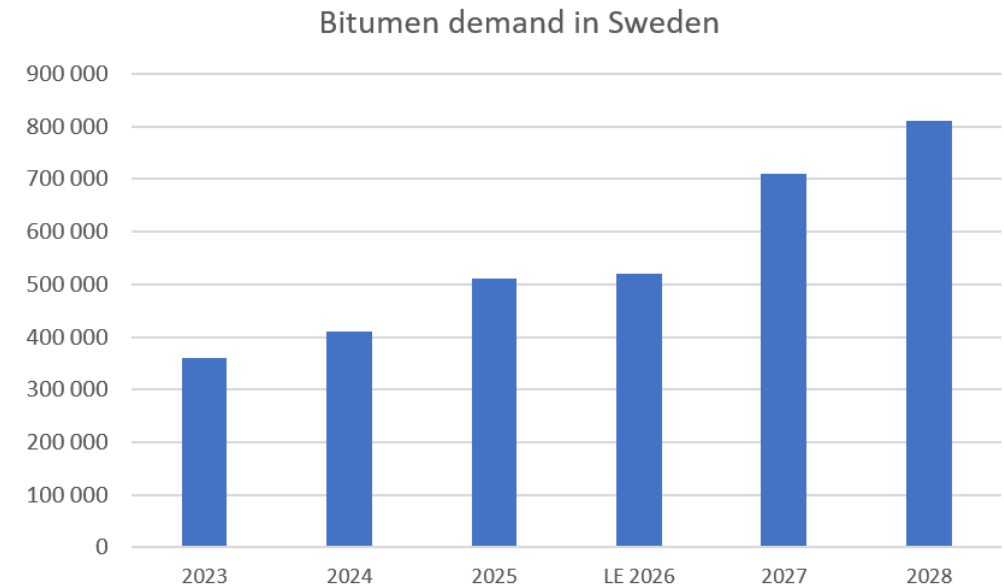
Ukraine to recover with an increased demand > 1MT



Ukraine expected to weight on Baltic & Central Europe supply

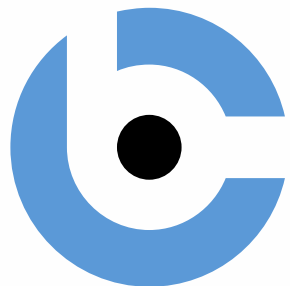


Sweden has approved an ambitious asphalt investment plan

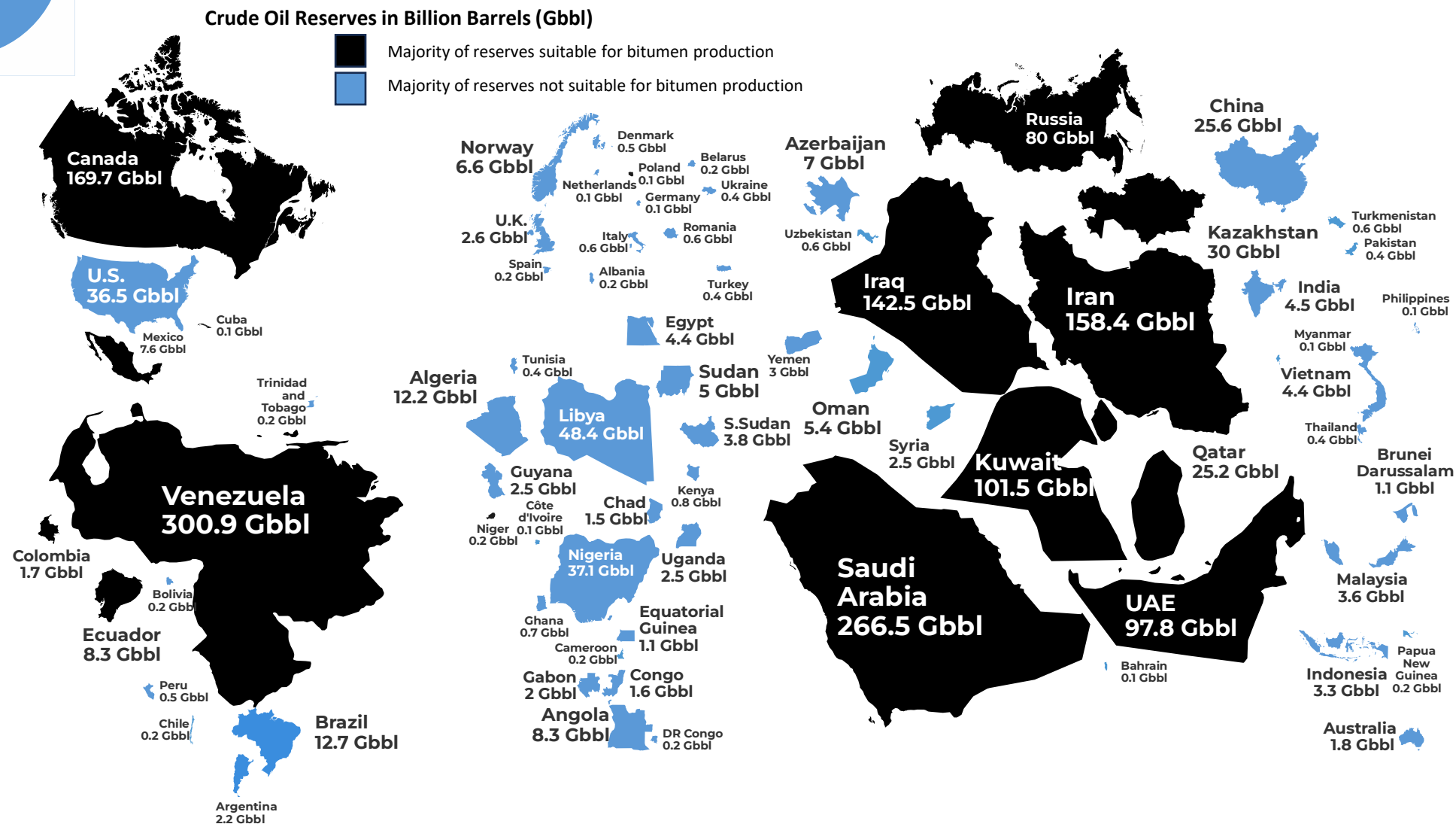


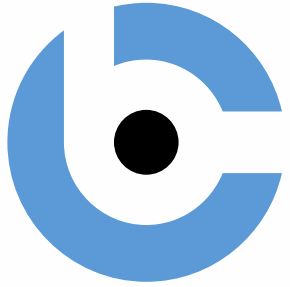
Sweden to increase demand by 400 KT

Sweden expected to weight on Nordic supply

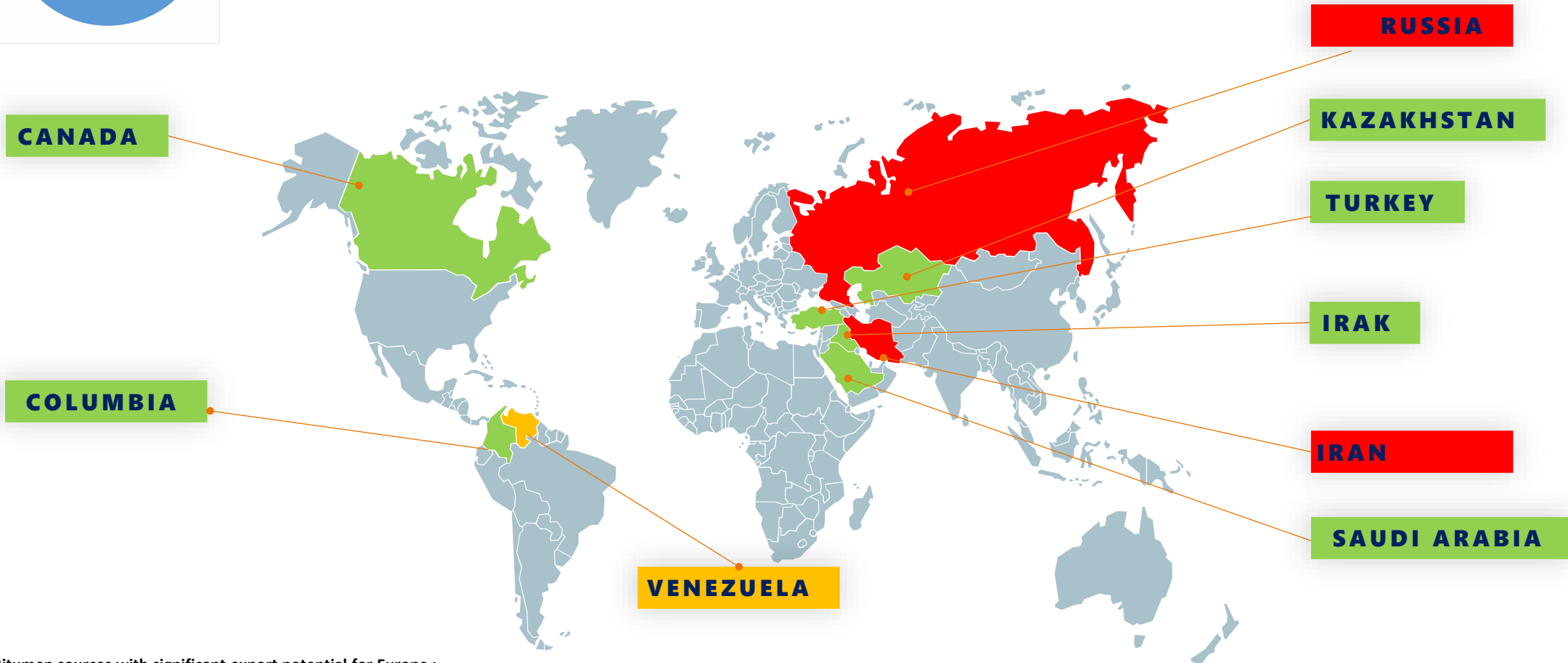


BIGGEST CRUDE RESERVES ARE BITUMEN CRUDE : BITUMEN WILL BE THE LAST SURVIVOR !





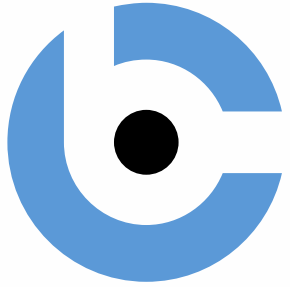
EXCEPT RUSSIA, FUTURE SOURCES OF COMPETITIVE SUPPLY FOR NORDICS ARE ALL LONG DISTANCE RANGE TO REACH NORWAY



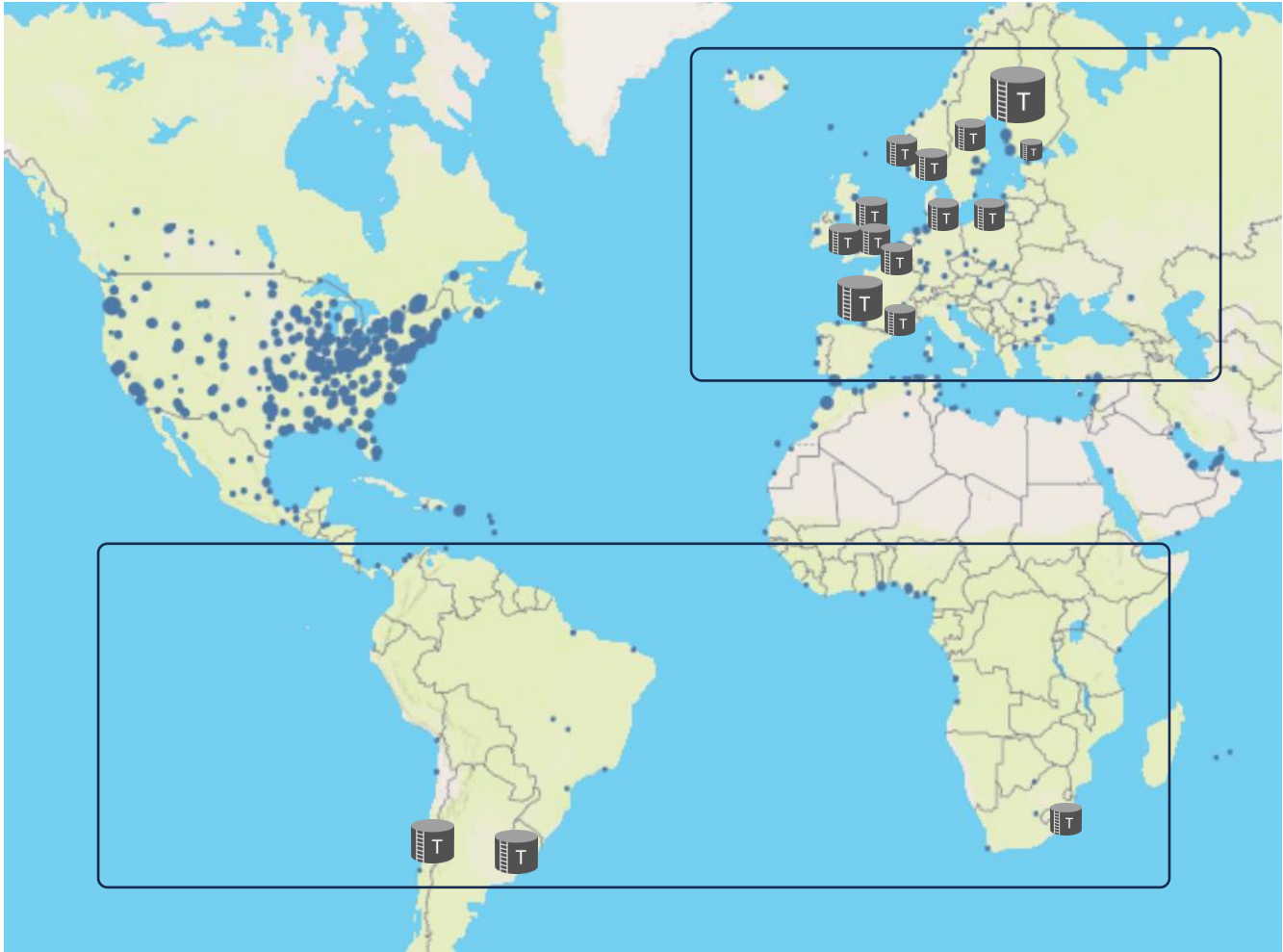
Bitumen sources with significant export potential for Europe :

-  Open
-  Open, sanctions lifted recently
-  Under sanction





NEW BITUMEN TERMINALS ARE DESIGNED TO RECEIVE LONG RANGE VESSELS

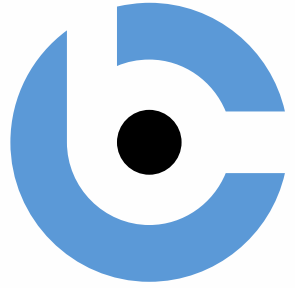


New Terminals capacity and Projects (since 2022)

	CAPACITY	OWNER PROFILE	20KT+ VESSELS	CONTINENTAL BITUMEN	NOTES
Finland	57 KT	C			
	8 KT	C			
Sweden	13 KT	C			
Norway	13 KT	C			Project
	10 KT	C			
Denmark	15 KT	R			Project
Poland	28 KT				Project
France	15 KT	C			
	28 KT	C			Building
	15 KT	C			
UK	22 KT	Oil			
	25 KT	C			
	15 KT	C			
Argentina	16 KT	Oil			
Chile	12 KT	C			
South Africa	7,5 KT	C			

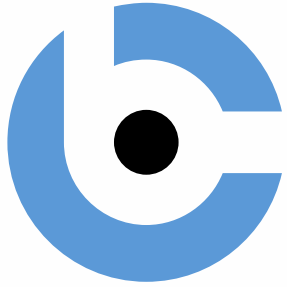
C = Construction | R = Reseller | Oil = Oil company

Terminal able to receive 20KT + vessels



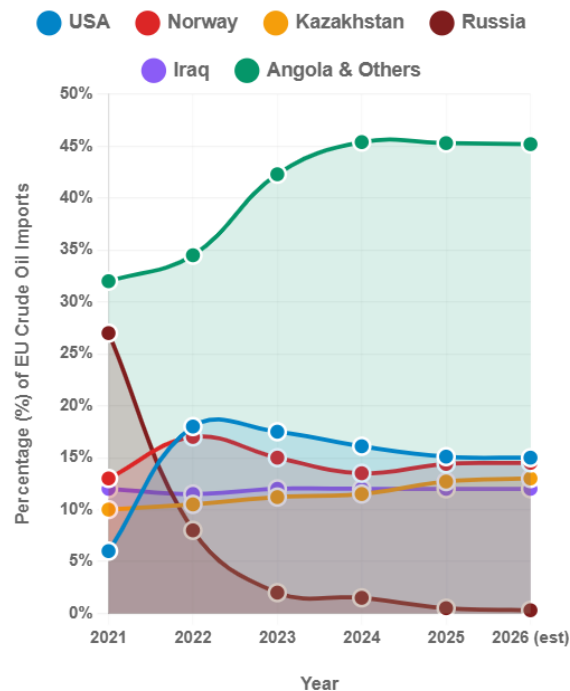
WHAT IS GOING ON WITH BITUMEN QUALITY ?



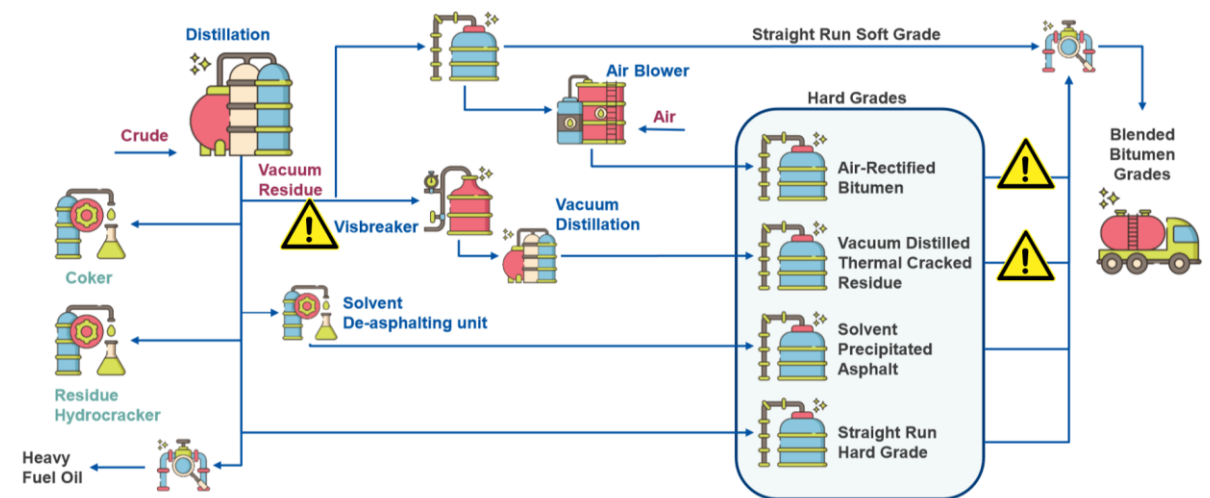


CRITICAL PERFORMANCE ISSUES LIKELY NOT TO COME FROM CHANGE OF CRUDE OR REFINERY PROCESSES !

EU Crude Oil Imports by Country of Origin (2021-2026)



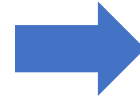
Bitumen production process in refinery



13



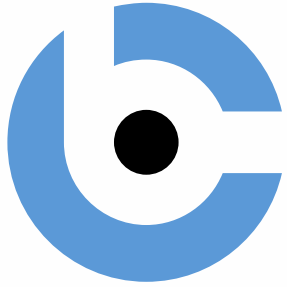
We have not seen dramatic performance impact linked to change of crudes across our selection of suppliers that are known to produce pure “bitumen”



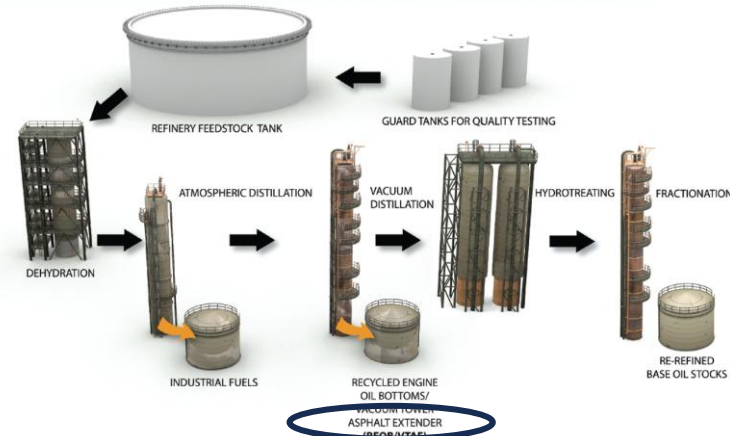
Tricky refinery components are well known in the Industry, our selection of suppliers knows where the limits are for blending



14



PERFORMANCE INVESTIGATION LEADS MAINLY TO FINDING NON “BITUMEN” CONTAMINANTS (OR EXCESS OF BIO COMPONENTS) IN THE BINDER



REOB “bitumen flux”

- Smelly (different smell than bitumen)
- Can create fumes
- Usually inconsistent qualities

Home > Product > Waste Oil Recycling to Diesel Plant >



Waste Oil Recycling to Diesel Plant

Waste oil recycling to diesel plant can convert tire oil, plastic oil, and waste engine oil to diesel. In some country, waste oil recycling to diesel plant also named waste oil distillation machine, distillation equipment, it just name different, but have same functions.

- ✓ Processing Capacity: 5T/10T/15T/20T, custom
- ✓ End Products: Diesel, asphalt
- ✓ Core Components: Distillation reactor, condenser
- ✓ Certificates: CE, ISO, SGS

✉ Email: market@doingmachinery.com

☎ Phone/WhatsApp/WeChat: +86-135-2669-2320

Chat Online

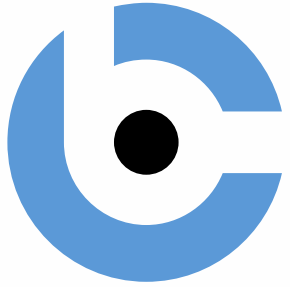
Leave Message

View More →

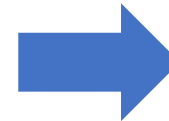
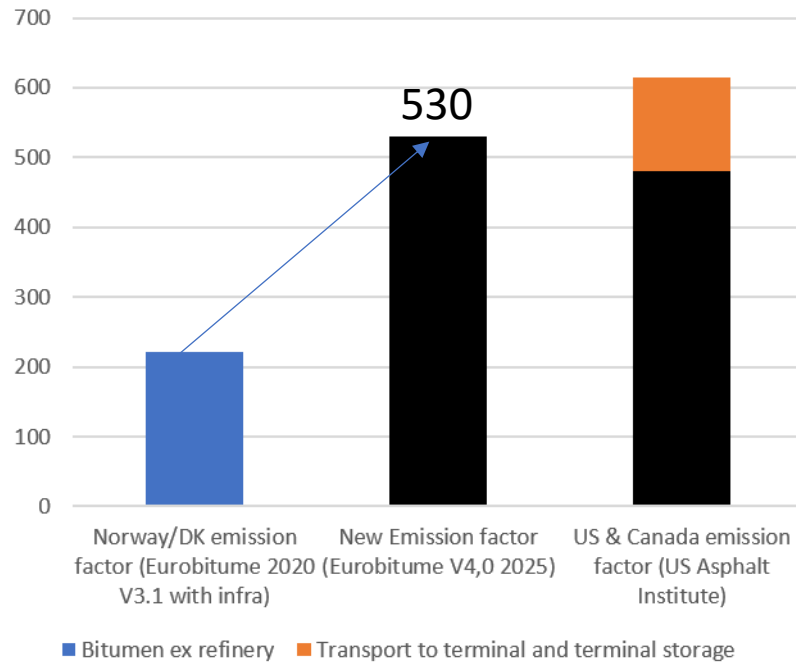
Residue from waste oil product distillation

- Very smelly (typical Kerosene smell)
- Can create fumes (very volatile)
- Potentially Carcinogenic depending on feedstock





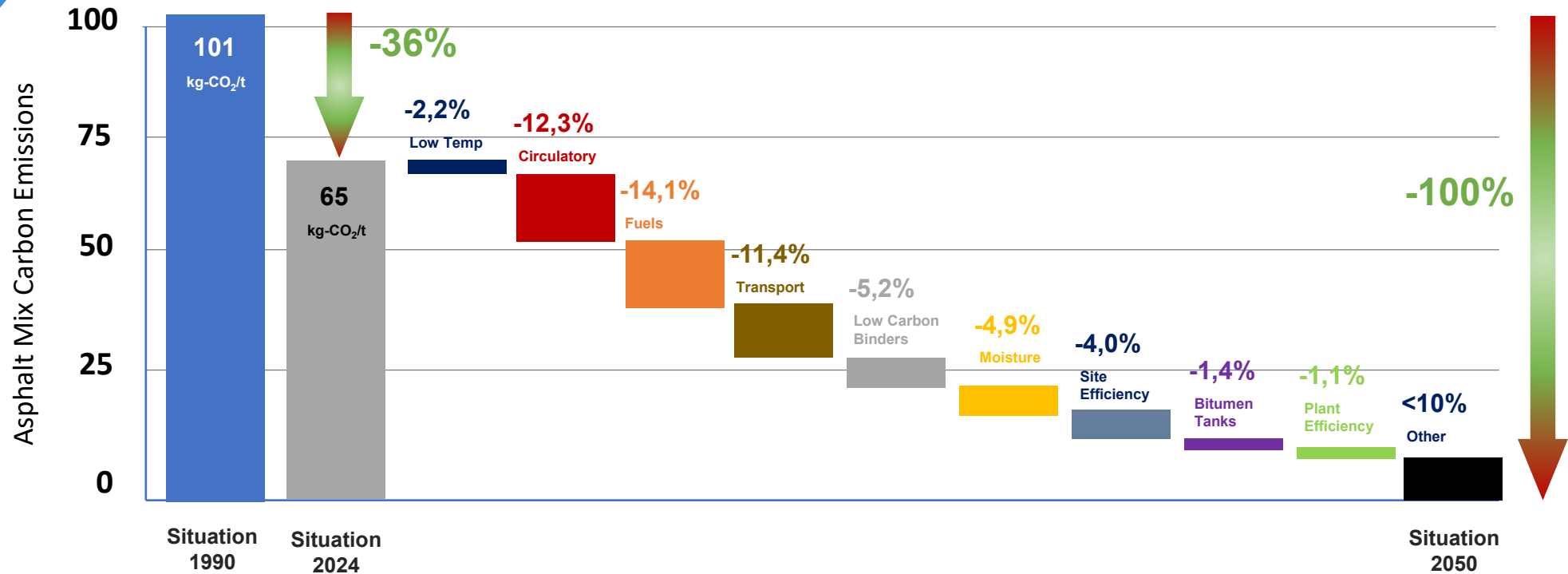
WHAT ABOUT SUSTAINABILITY OF BITUMEN ?



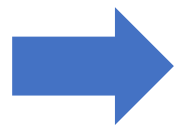
The new emission factor at 530 does not mean bitumen emissions got worse, it means they are measured in a much more rigorous way



NET ZERO FOR ASPHALT IS NOT WISHFUL THINKING



CO₂ emissions / T of asphalt, Source EAPA, based on previous Eurobitume Emission factor at 221 kg eq CO₂/T

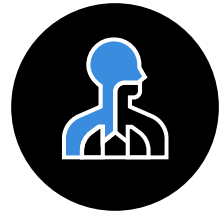
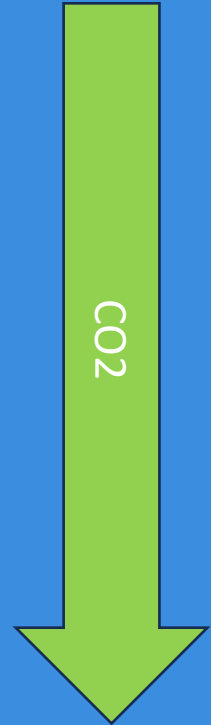


Asphalt Industry has a clear and reasonable path to reach Net Zero

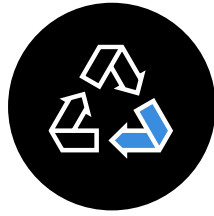


Low carbon binders : the most powerful lever to reduce CO2 emissions of bituminous binder supply chain

NEW BITUMINOUS BINDERS HAVE TO COMPLY WITH A COMPLEX SET OF REQUIREMENTS



No increased
impact on HSSE



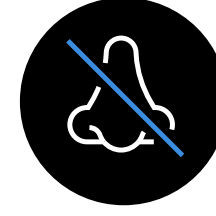
Recyclable



Similar life
duration



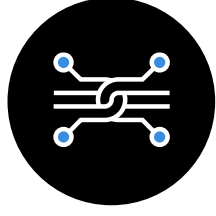
Compatibility with PMB



No odour
issues



Adhesivity



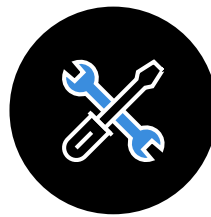
Consistent quality of
component



Compatibility with
emulsion



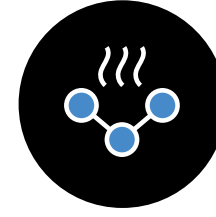
No Fumes



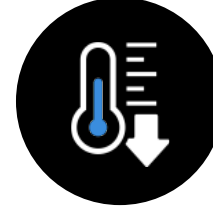
Good workability



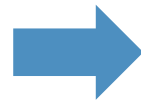
Ability to perform
with high
amount of RAP or
new road
construction
materials



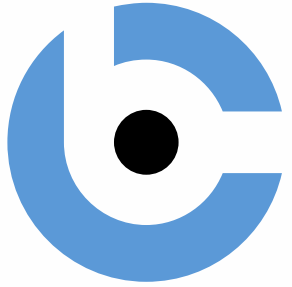
Lower emission
Level (VOC)



Warm Mix
techniques
compatible



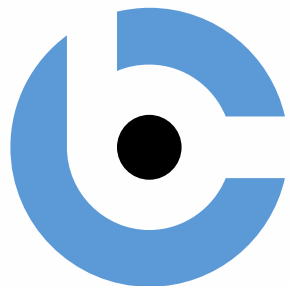
EN12591 specification says very little about performance vs above requirements



TIPS OF THE BIGGEST BUYER OF BITUMEN WORLDWIDE FOR SUCCESSFUL BITUMEN PROCUREMENT STRATEGY

- ✔ Review your supplier profile every year !
Refinery economical environment change so quickly
and cannot be predicted
- ✔ Prepare your logistic for the future
- ✔ Focus on Asphalt Performance and recyclability
- ✔ Keep up your efforts to meet 2030 CO2 reduction target





JOIN CONTINENTAL BITUMEN
NETWORK TO ENJOY SUPPLY
SECURITY AND BENEFIT FROM
OUR INNOVATIONS



CONTINENTAL BITUMEN FLEET



20 KT
LNG Ice class



20 KT
LNG Ice class



8 KT NEW

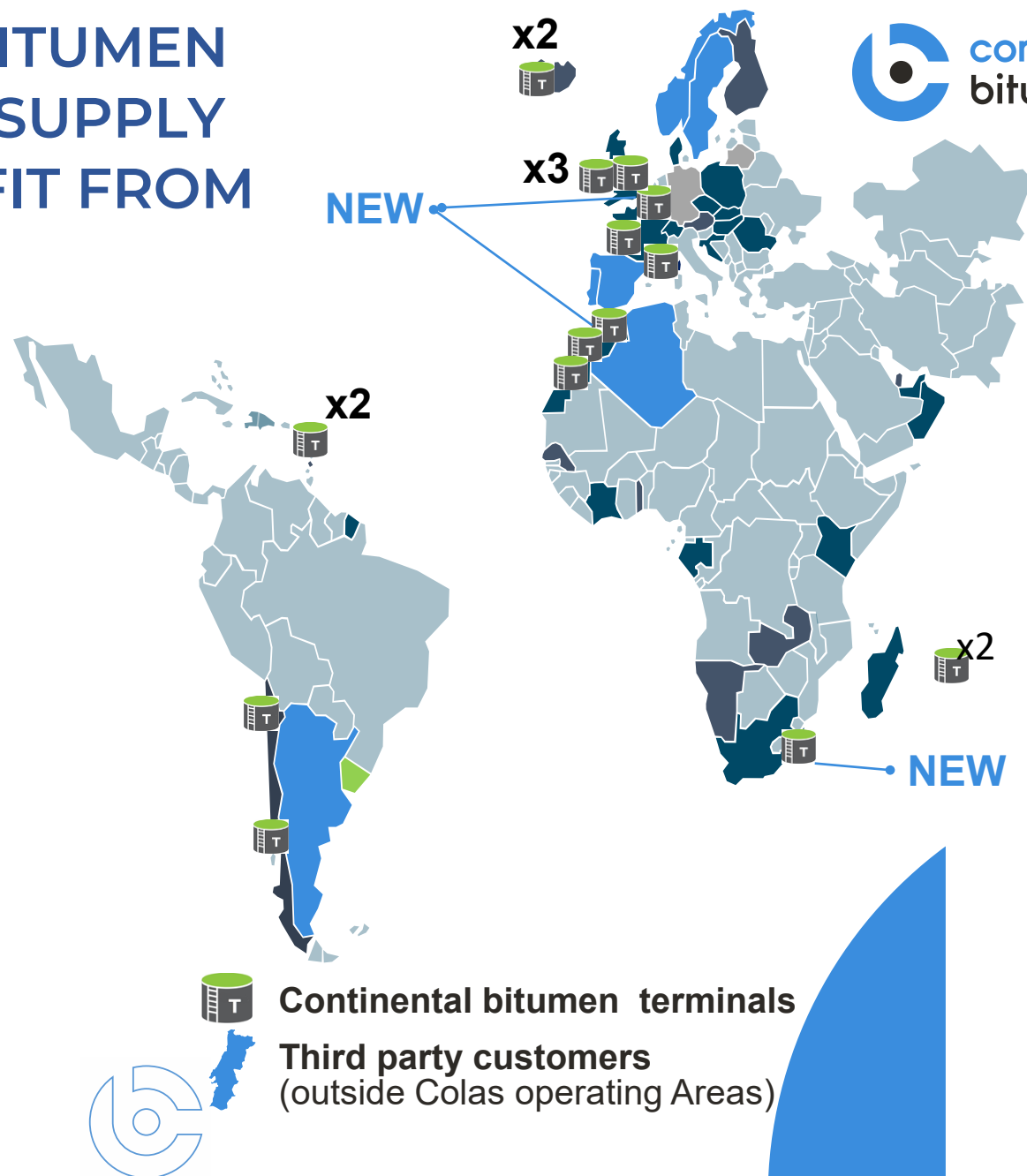


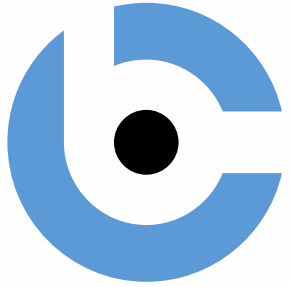
8 KT NEW



5 KT COA

Continental Bitumen fleet for 2026 (excluding TIPCO/Mc Asphalt vessels)





Arnaud Waché

Business Development Manager

Continental Bitumen

Tel : +353 87 776 1407

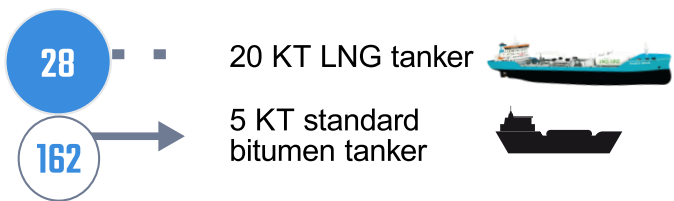
E-mail : arnaud.wache@colas.com



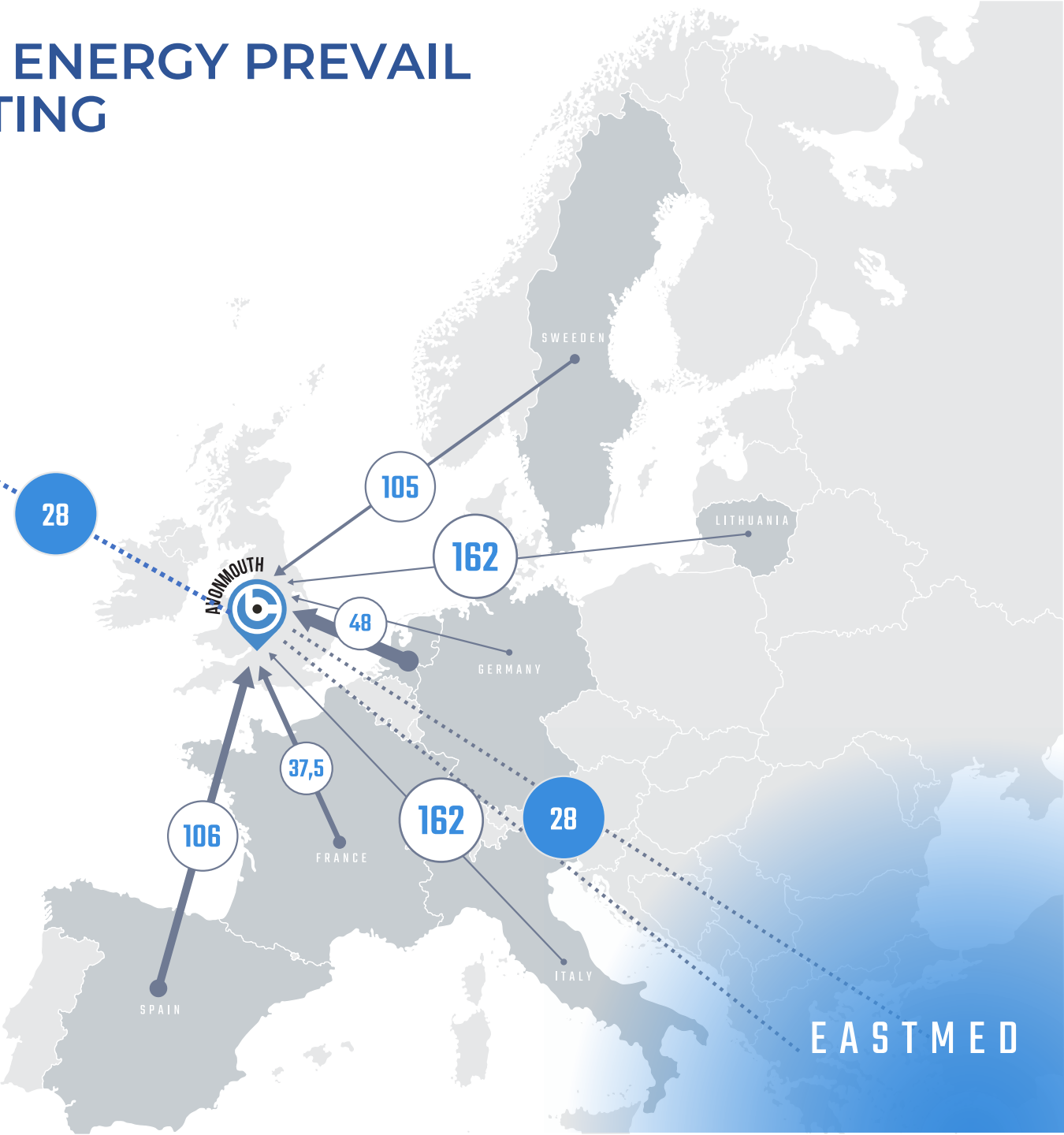
Appendix

MASSIFICATION AND SOURCE OF ENERGY PREVAIL ON DISTANCE WHEN TRANSPORTING BITUMEN BY SHIPS

KG EQ CO2 EMISSIONS / T OF BITUMEN SHIPPED INTO WEST UK

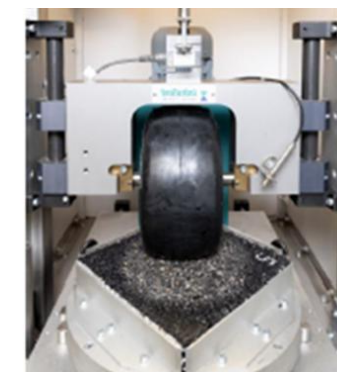


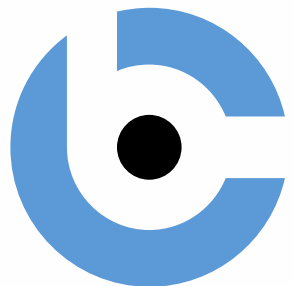
AMERICA



Continental Bitumen approach to bitumen quality

European Norm (EN 12591) 7 Basic characteristic values	CONTINENTAL BITUMEN NEW SOURCE ASSESSMENT PROCESS 91 Extra parameters analysed leading to performance assessment
No focus on performance	Recyclable Similar life duration Consistent quality Adhesivity Emulsion Compatibility PMB Compatibility No increased HSE impact No Fumes
	Rheology : G*(15°C, 10 Hz), Phase angle – Dynamic Viscosity
	RTFOT, RTFOT + PAV – aged, MSCR, Delta TC
	Metal and Salt content
	Wax content by DSC
	Peptisation of asphaltenes
	Acid and base index
	FTIR
	Simulated distillation / determination of IBP, Volatile loss by halogen thermobalance PAH content
For Emulsion : None For PMB : None	For Emulsion : viscosity, breaking index, adhesivity, storage stability, ... For PMB : elastic recovery, softening points, MSCR, Storage stability
Basic Laboratory test	4 days of Technical expert / 15 days of Laboratory staff to analyse results





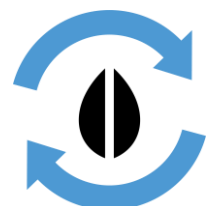
WHY CHOOSING CONTINENTAL BITUMEN AS BITUMINOUS BINDER PARTNER ?



Security of supply & flexibility: Continental Bitumen has the scale and logistical capability to guarantee supply and the operational flexibility to meet changing volumes and delivery windows.

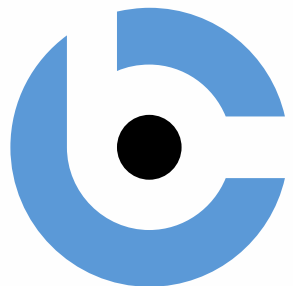


Quality : We sell the binders we use ourselves. Our procurement power secures bespoke specifications for demanding applications — including emulsions, PMBs and bio-modified binders.



Sustainability : We supply low-carbon components and use low CO2 logistic (including the first two LNG-powered bitumen vessels). Third-party sales would lower CO2 per tonne for your bitumen.

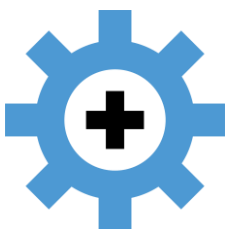




WHY CHOOSING CONTINENTAL BITUMEN AS BITUMINOUS BINDER PARTNER ?



Risk Management : We neutralise exposure to HSFO volatility and provide opportunities to build stock when market conditions are favourable.



Technical added value : We share practical know-how to help you develop higher-value offers for your customers: bio binders, cold-mix solutions, clear binders and other innovations.



Long term relationship : We are investing in logistics for the next 20 years and invite long-term partners to build a robust, future-proof distribution network.

