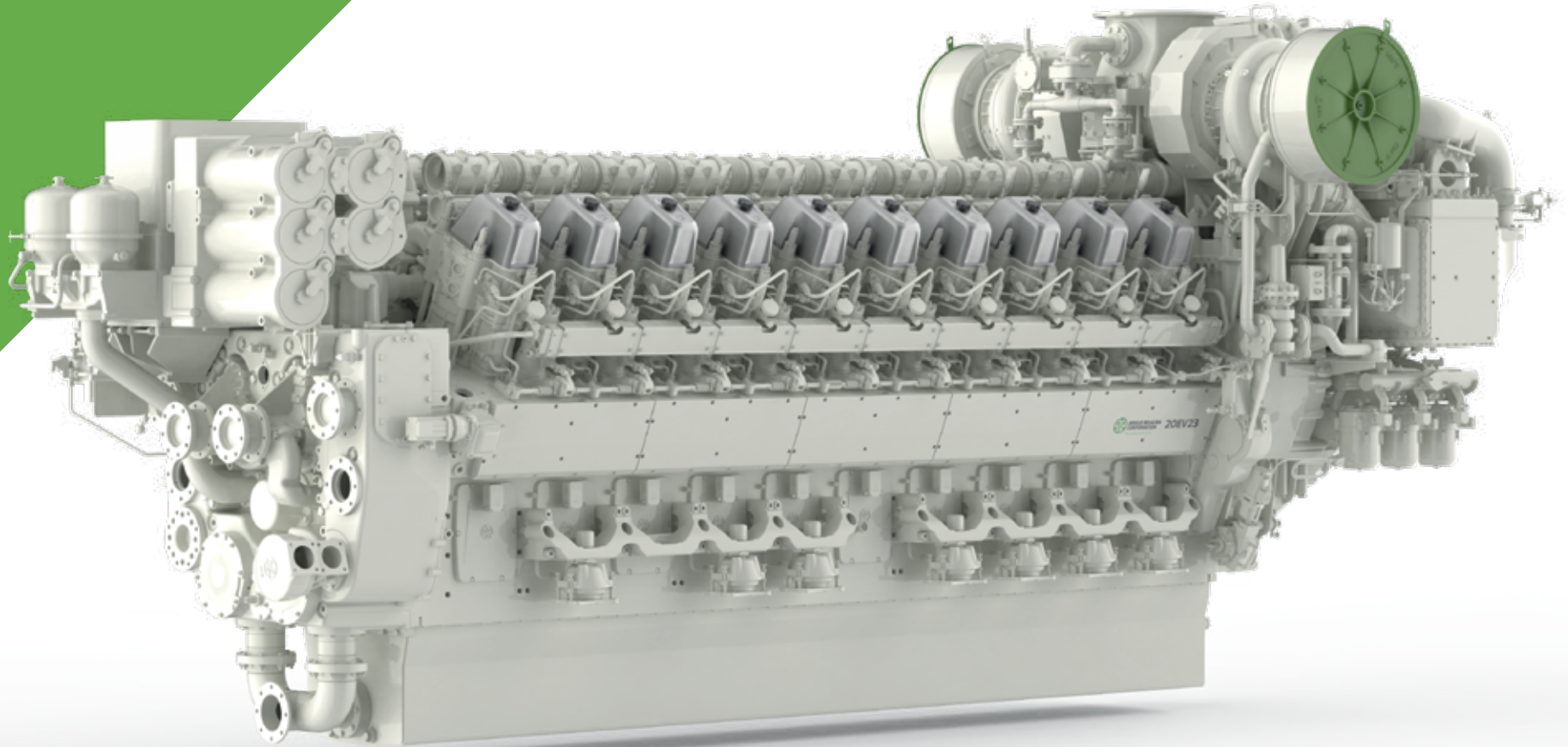


MADE | IN EUROPE
WITH PASSION



**ANGLO BELGIAN
CORPORATION**

We power your future



EVOLVE
20EV23

**“A history of building
the future, a future built
on history”**



**ANGLO BELGIAN
CORPORATION**

We power your future

For over 100 years, ABC has been putting medium speed marine engines on the market that last and keep lasting. Endurance and reliability are the forces with which we power your future.

A century is a long time. A lot of knowledge, experience and passion have accumulated at ABC, creating **a strong culture of innovation**. This enabled us time and again to position our clients ahead of market developments, whilst keeping all future options open.

Our EVOLVE engine platform is the latest witness to our mission of future-proofing your fleet. Last year we launched the first engine of the EVOLVE Series, the 4EL23, which set a new benchmark for a greener, more performant and fuel-flexible marine future.

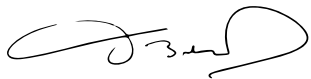
Today we are proud to introduce you to his big brother: **the 20EV23, developed to help your vessel conquer every challenge it encounters**. This agile power engine displays impressive response times at heavy load pick up, combining extreme reliability and distinctive speed. All of this with the best power-to-weight ratio.

But just as his little brother, **the 20EV23 has more than one card to play**. With cylinder heads adaptive to multifuel solutions, you are always sure to make the most cost-efficient, ready to bunker everywhere, autonomy-enhancing and future-proof choice. An emission compliant choice.

What will the future bring? What we do know is that you will always need a performant engine. An affordable engine. A clean engine. A profitable engine. An engine that does what has to be done, 24/7, no matter what it is fueled by.

This is exactly the promise on which the EVOLVE platform delivers.

This is how we innovate, this is how we change the game.



Tim Berckmoes

CEO

Anglo Belgian Corporation



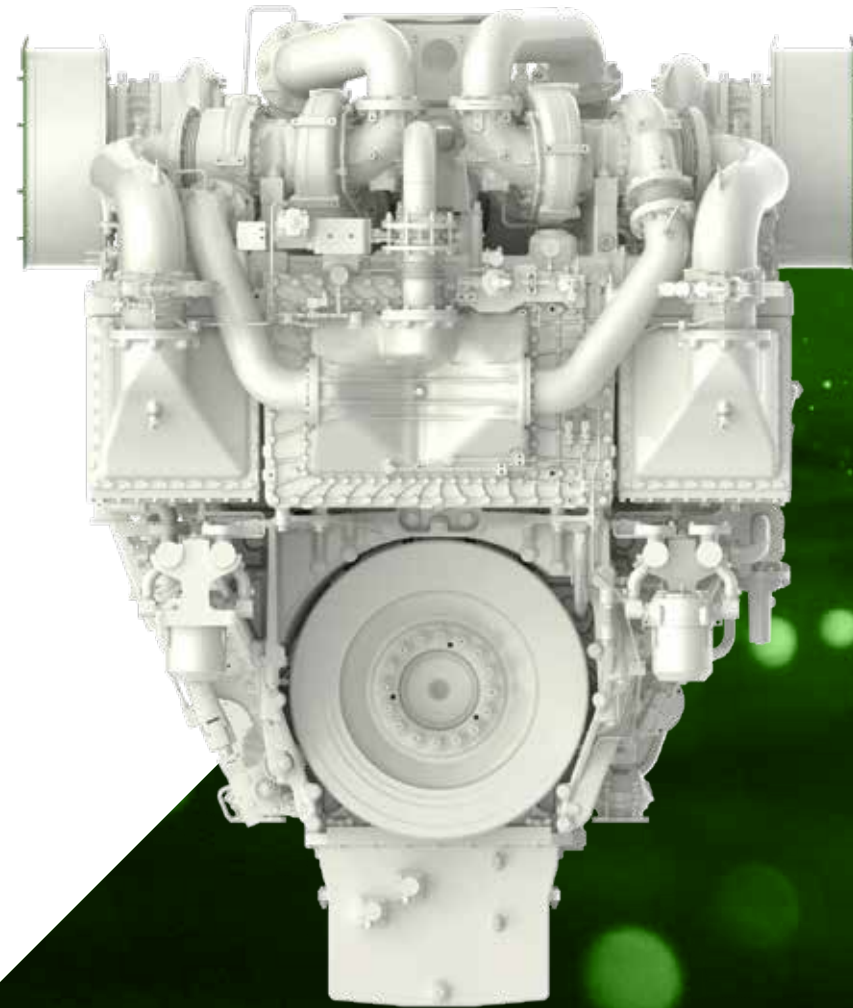
EVOLVE

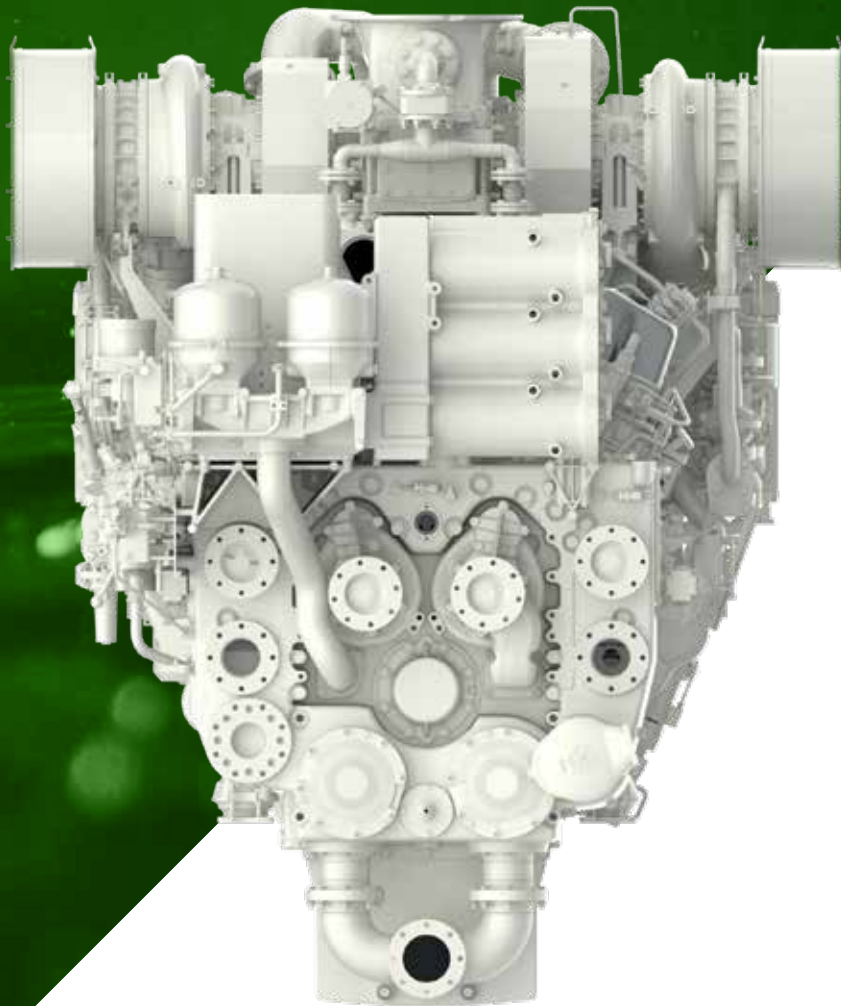
OUR ENGINES ARE FLEXIBLE, YOUR FUTURE IS SAFE

Building an engine with awesome power output isn't rocket science. Building a compact, economical engine combining power with unseen efficiency and emission compliance: that's the real challenge!

In today's world, you must be prepared for unforeseen circumstances at sea. You also want to have multiple answers ready for open-ended questions related to fuel evolution & prices. And whatever happens, you need the equipment to go long, very long.

Our mission at ABC is to free you from trade-offs between these requirements. To offer you the best investment, period. So we've yet again built the most versatile engine possible.





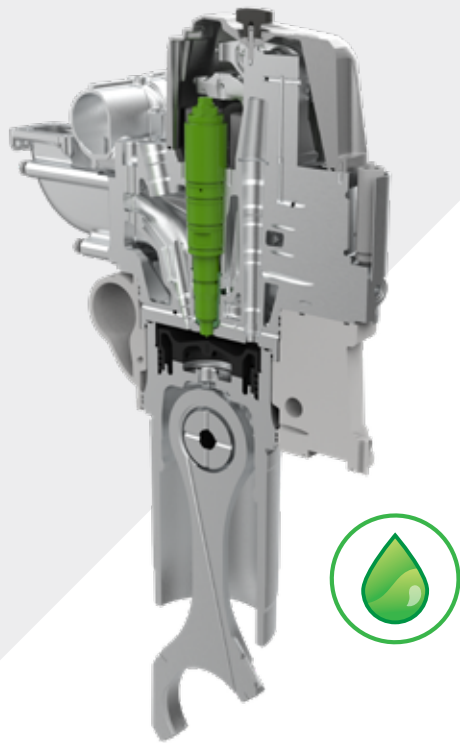
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Set your own course for the future

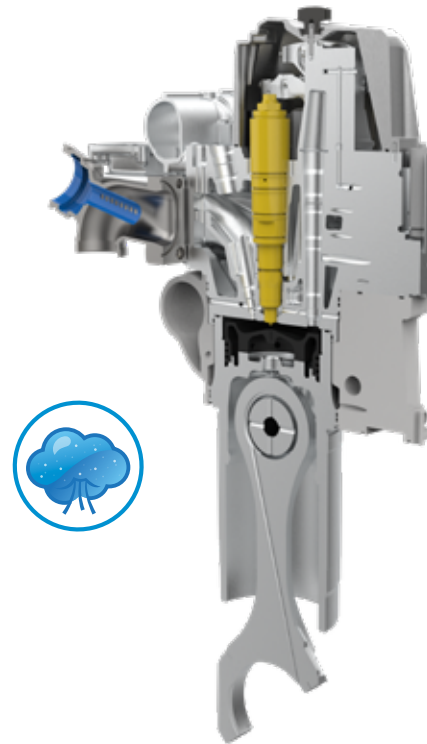
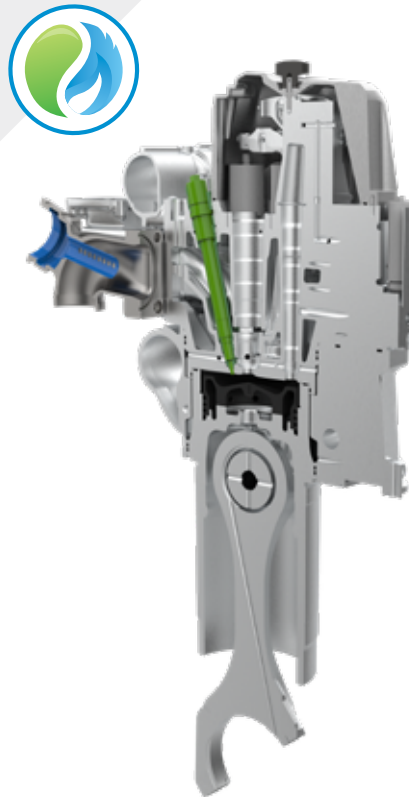
Dual fuel

Micro pilot liquid fuel injection
combined with gas injection system.



Liquid fuel

Highly efficient Common Rail or PLN
fuel injection system for liquid fuels.



Spark ignited

100 % gas using a spark plug.

EVOLVE

OUR ENGINES ARE FLEXIBLE, YOUR FUTURE IS SAFE

- Future proof & Compact Engine Platform
- Predesigned to integrate the most recent future technologies (liquid fuel, dual fuel, spark-ignited)
- Facilitating financially viable conversion/retrofit to new fuel types using the same engine
- Diesel, biodiesel, MDO, HFO, hydrogen, methanol, LNG, CNG, ...
- Best efficiency for every fuel type
- IMO TIER II and IMO TIER III certified and EU stage V compliant

EVOLVE

OUR ENGINES ARE FLEXIBLE, YOUR FUTURE IS SAFE

Facts & figures

4-stroke diesel engine

Length	7600 mm
Width	2790 mm
Width without air filters	2360 mm
Height	3300 mm
Nominal power range	3960 - 7200 kW 3385 - 9790 HP
Cylinders	20 in V
Engine speed	400 rpm (idling) 1200 rpm
Bore	230 mm
Stroke	310 mm
Swept volum per cylinder (dm ³)	12,9 L

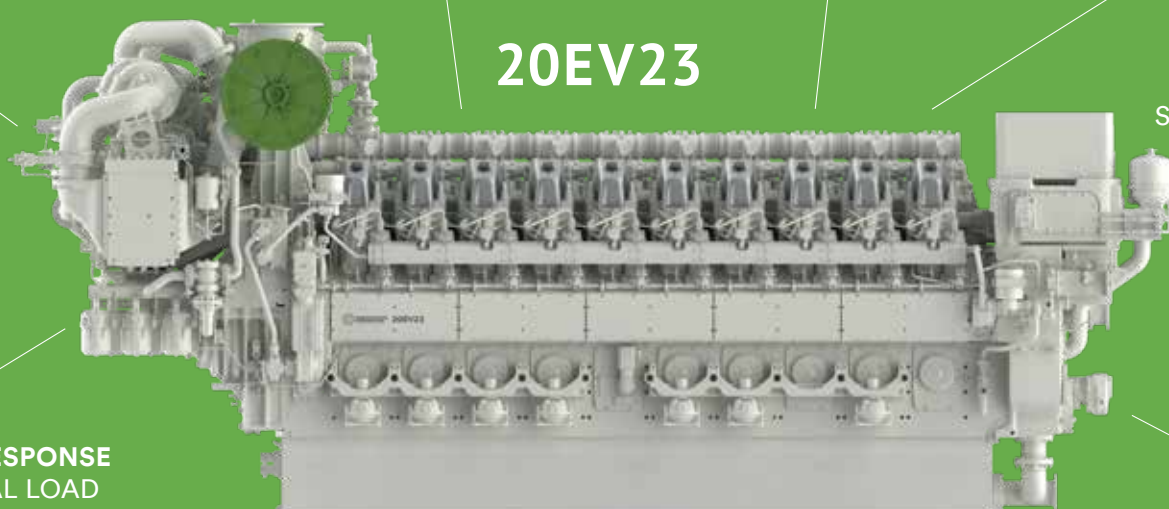
Emission compliance

IMO TIER II
IMO TIER III
EU Stage V / ULEV
EPA TIER II
EPA TIER III
EPA TIER IV

Specifications 20EV23	@ 720 rpm	@ 750 rpm	@ 900 rpm	@ 1000 rpm	@ 1200 rpm
Power (ISO 3046-1) with Single Stage Turbocharger	3960 kW	4125 kW	4950 kW	5500 kW	6600 kW
Nominal torque	52,5 kNm				
Power (ISO 3046-1) with 2-Stage Turbocharger	-	-	-	6000 kW	7200 kW*
Nominal torque	-	-	-	57,3 kNm	

* For special applications contact ABC sales department.

The versatile engine for a solid future



20EV23

ENVIRONMENTALLY FRIENDLY
IMO TIER II AND IMO TIER III
COMPLIANT

RELIABLE AND BRUTE POWER

MAXIMIZED UPTIME
EXCHANGEABLE POWER UNIT

EASY CONVERSION
TO LEADING FUEL TYPE

EU-MADE
SUPPLY CHAIN ASSURANCE

SUPERIOR ENGINE RESPONSE
AT FULL AND PARTIAL LOAD

BEST IN CLASS
FUEL CONSUMPTION

FUTURE PROOF
ENGINE PLATFORM

FUEL FLEXIBILITY
LIQUID FUEL - DUAL FUEL - GASEOUS FUEL

BEST EFFICIENCY
FOR EVERY FUEL TYPE

For navy vessels Your trustworthy ally in an uncertain world

National security is high up on the public agenda, as the geopolitical future is uncertain and tensions rise. This creates high expectations for new investments in equipment for Defense Departments. Ever more requirements need to be taken into account.

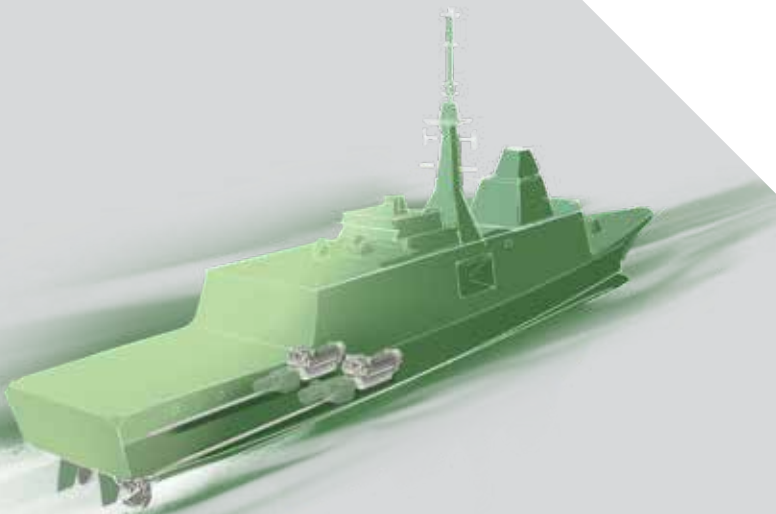
The most important requirement remains real-time performance. In pursuit of a vessel or confronting the enemy: you want to (re)act swiftly. The 20EV23 gives you the upperhand, with 20 x 360 kW of sheer acceleration and speed - 7,2 MW (contact us for special applications).

Reliable power in motion, with great response times in the most demanding circumstances: that's the advantage the 20EV23 gives you, thanks to double stage turbocharging, increasing load pick-up and improving shock load acceptance

Keep the peace with stakeholders back home

The 20EV23 boasts many features that create sustainable return on investment:

- **A reliable choice:** have trust in the EU-anchored supply chain behind your acquisition. Furthermore, the 20EV23 is 100% manufactured in Belgium.
- **A responsible choice:** acquire an engine that helps you cut emissions and build a more sustainable navy fleet.
- **A budget-friendly choice:** give the citizen and taxpayer value on each dime, invest in an engine that is very cost-efficient, from performance to maintenance.
- **Never taken by surprise:** wherever your mission takes you, the 20EV23 is your 24/7 heavy-duty partner in calm and rough seas.



For Passenger Ships and Ferries

Your growth and future-proof investment

ABC's 20EV23 gives you a competitive edge for years to come. It develops 7,2 MW (or more in special projects) of power at impressive response times. A reliable and cost-effective medium speed engine that helps you optimize transfer punctuality and passenger volumes.

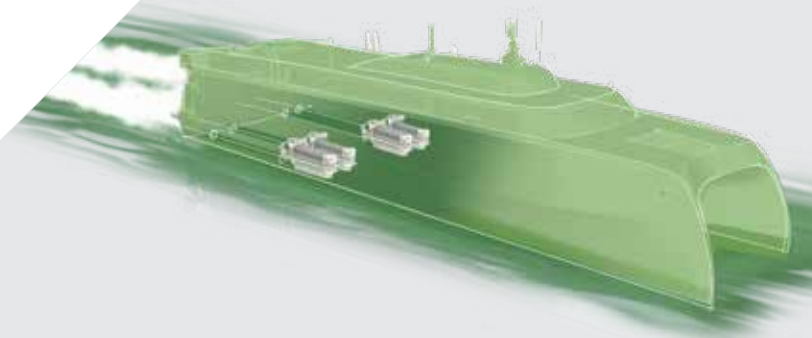
The 20EV23 does its job very cost-efficient: minimize down- and overhaul times and maximize uptime; extend vessel autonomy with impressive fuel efficiency - whatever the fuel you choose. Strong performance and a low lifecycle cost (LCC) enhance profitability.

These increasing returns will last well into the future, thanks to the open-ended fuel technology. How will environmental regulations evolve? Which are the fuels of tomorrow - and at what cost? How will geopolitics influence supply chains? Get all that covered.

Hedge yourself against uncertainties

Difficult and unpredictable questions require future-proof answers. The 20EV23 is a smart and safe investment in a volatile context. It helps you to get ahead of the market with every year that goes by, because:

- **EVOLVE offers you a flexible multi-fuel platform:** keep your future options open. You don't have to commit to one fuel technology. You can always adapt to the market and the regions where you operate with EVOLVE.
- **Become and stay emission compliant:** the 20EV23 and exhaust aftertreatment system (EATS) are designed to work together in harmony. We've developed and tested the EATS in-house. A clean future is well within your reach, regardless of the fuel you opt for.
- **Trust on a reliable, independent and EU-anchored supply chain:** the 20EV23 is 100% manufactured in Belgium, using local and European components, by an enterprise with over 100 years of history, knowledge accumulation and family-based ownership.



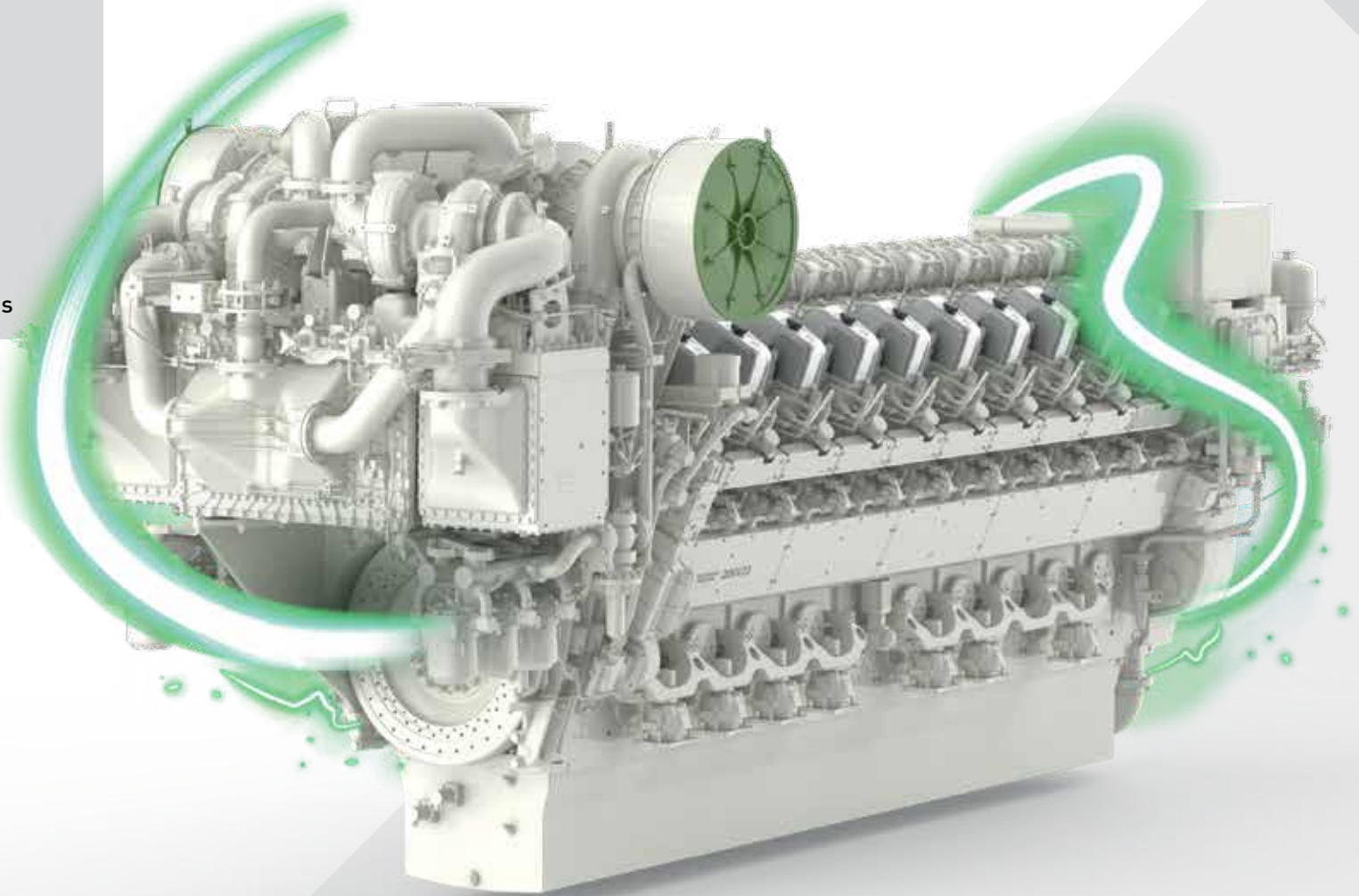
EXCELLENCE & ACCELERATION

The 20EV23 generates abundant power when you need it. High responsiveness wrapped up in a compact design, to meet the most demanding circumstances at sea. Because they always arise when you least expect it.

This ability to deliver power when needed also increases the ship's options when safety is at stake. It allows for fast and decisive maneuvering in heavy wind or weather circumstances, steady close-to-quay approaches and standstill or reverse commands.

Navigate the future, full force

- Medium speed from 720 rpm up to 1200 rpm
- Best power-to-weight ratio (39.7 T)
- 360 kW/cylinder power output
- Higher power in special applications
- Compact design
- Double stage turbocharging:
- Fast load pick-up & response times, absorption of sudden load fluctuations

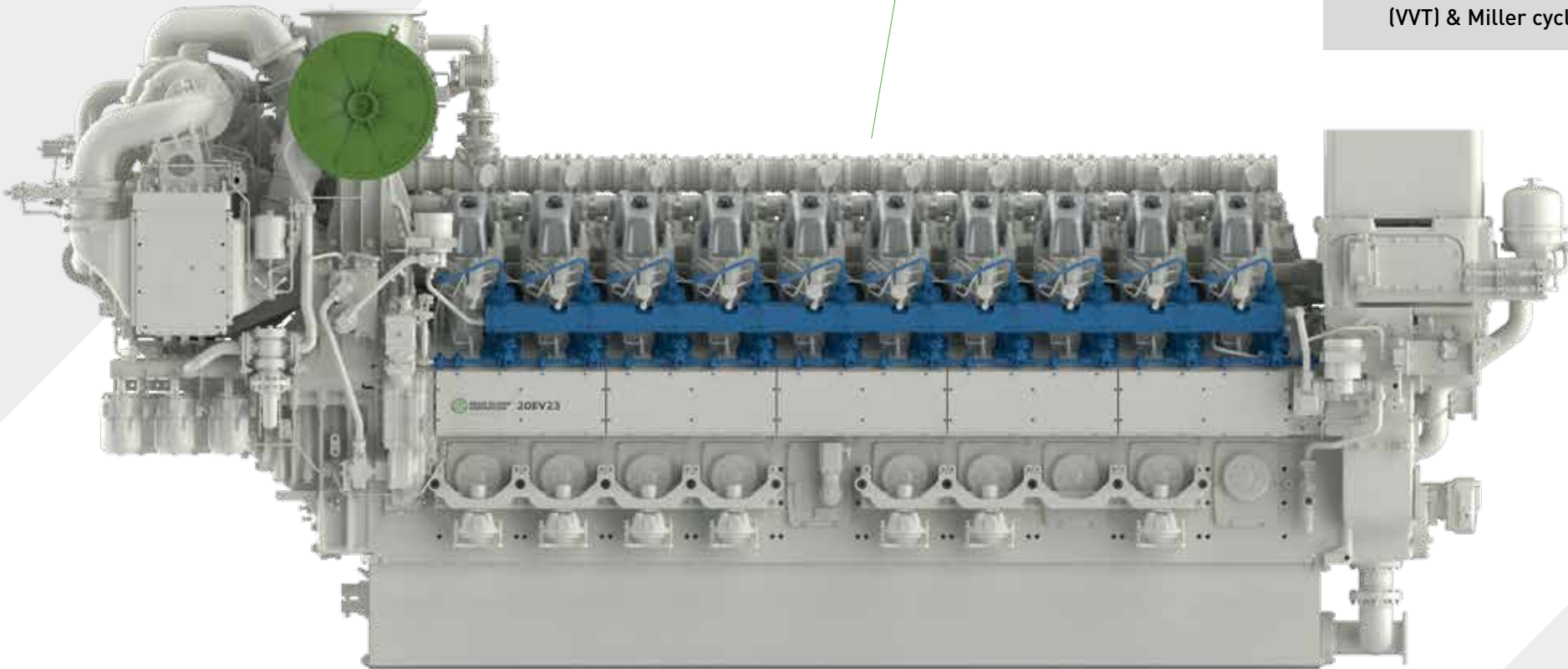


EFFICIENCY

More power for less fuel. A budgetary push in the back for extra speed or longer-lasting fuel autonomy, while you get the job done. This improves your vessel's performance in military, commercial or civilian operations and relieves the burden of fuel prices.

ABC has an impressive track-record of best-in-class fuel & lube oil consumption, thanks to e.g. state-of-the-art injection technology (optimizing the throttle air and fuel volumes) and 2-Stage Turbocharging.

20EV23
with Pump-Line-Nozzle (PLN)

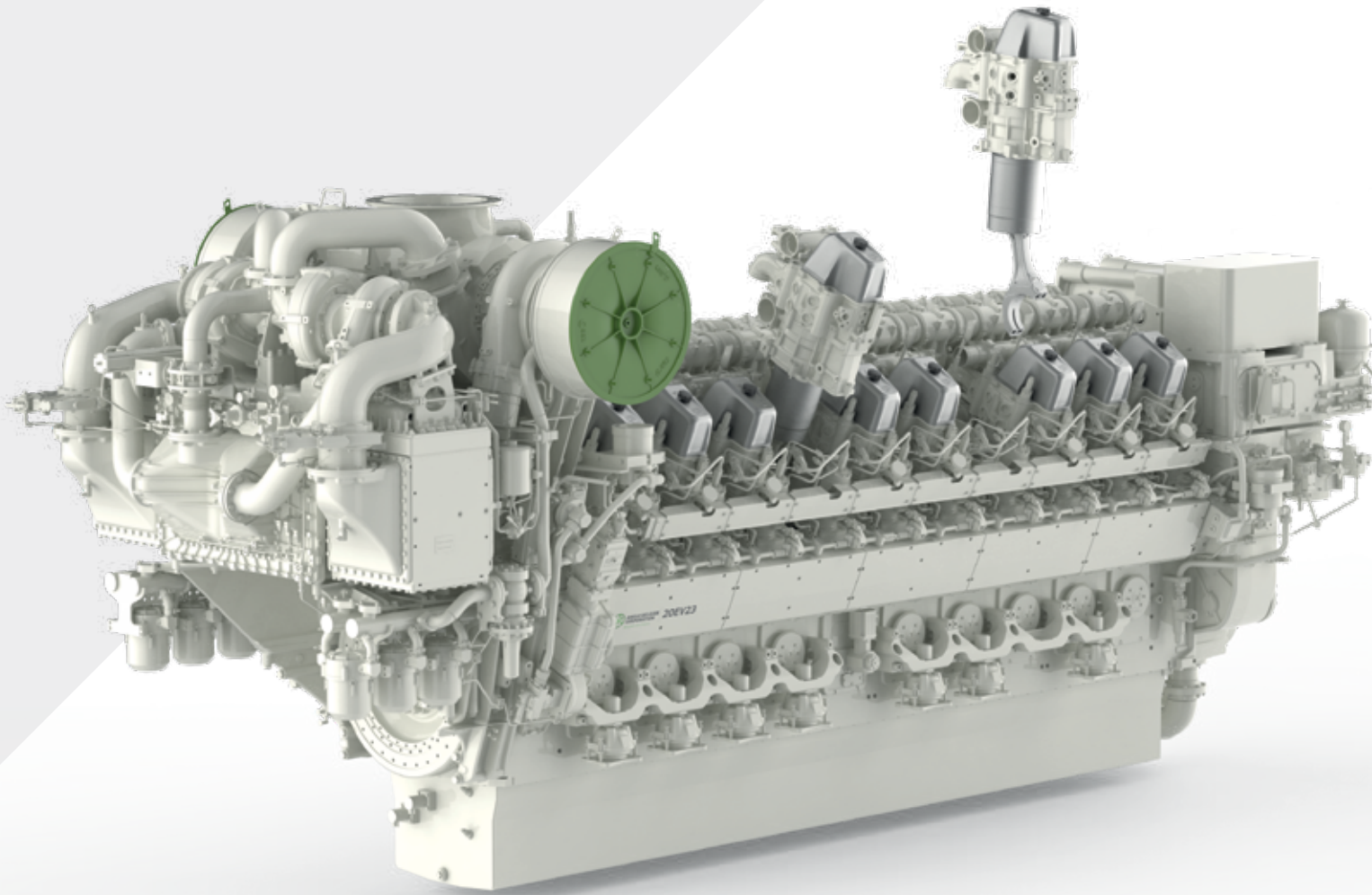


- Best-in-class fuel & lube oil consumption
- Best efficiency for every type of fuel
- PLN or Common Rail with micro pilot fuel injection
- Micro pilot fuel injection for future dual fuel
- Variable Valve Timing (VVT) & Miller cycle

ENDURANCE

Medium speed engines are the workhorses that keep going, 24/7 if needed. They are the most reliable and robust choice for heavy duty ends, uniting an unbeatable lifespan with low LifeCycle Cost and low plus easy maintenance.

ABC has over 100 years of experience in building medium speed engines with great longevity. This includes maximum uptime, as overhaul times are kept in check with smart solutions for one-stop shop maintenance. Cylinder head, liner, piston and connecting rod are changed in one fluent operation with our power unit concept.



Maximized uptime with exchangeable power unit

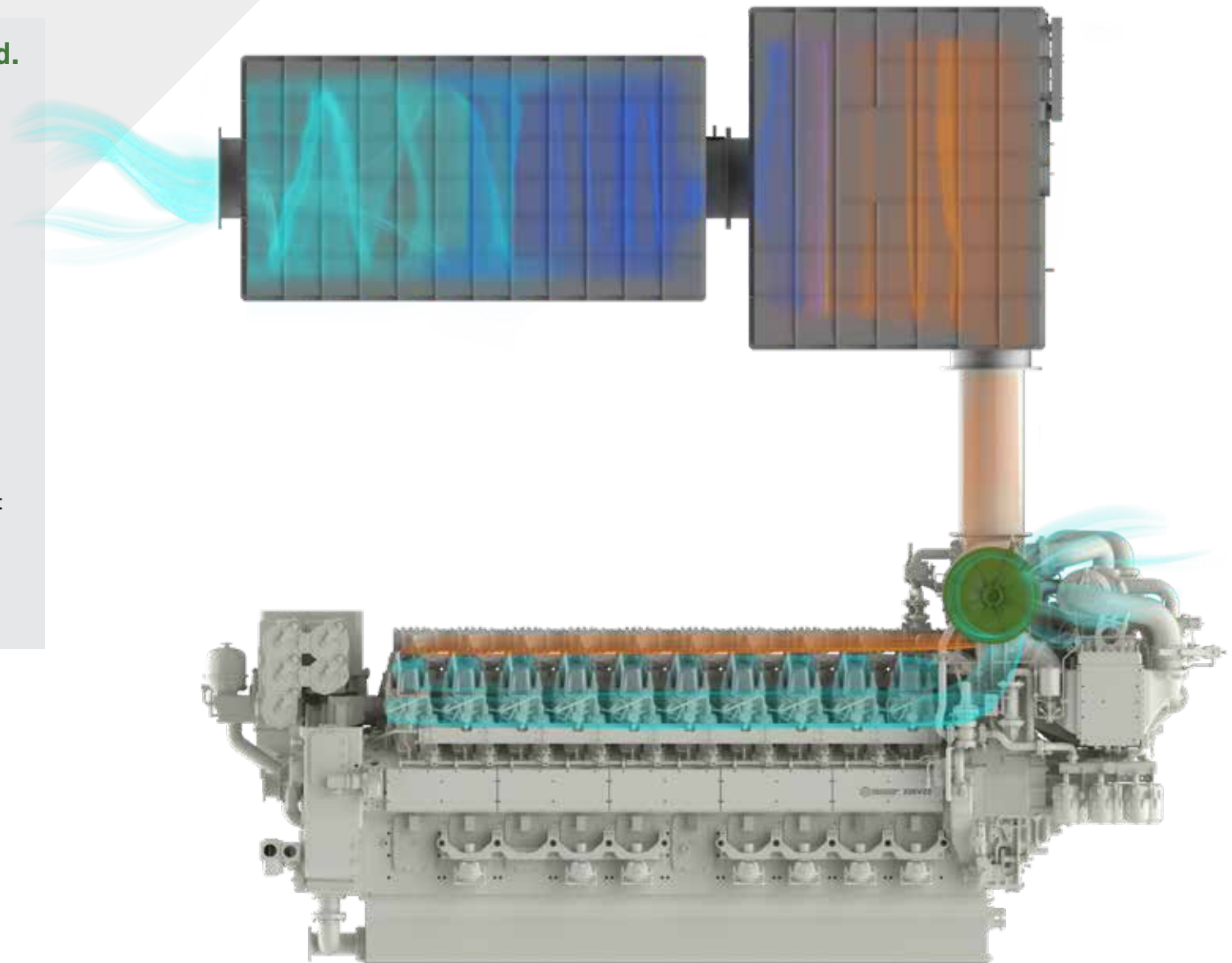
- Versatile cylinder head for easy conversion from liquified fuel to other fuel types.
- Easy: maintenance, replacement and conversion.

ENVIRONMENT

Financing a green future for marine operations can be a worrisome task. Each engine of the EVOLVE range is equipped with a future-proof multifuel design. It provides you with a choice between liquid, dual and gaseous fuel combustion, also creating a range of clean and cleaner performances with it.

Clean. Compliant. Certified.

- Fuel flexibility offers many ways to reduce emissions
- Exhaust Aftertreatment System (EATS) creates IMO TIER III compliance
- SCR-DPF filters remove all relevant matter well below new, strict thresholds
- Prepare your ship for the regulations of tomorrow
- The EATS is easy to maintain, just like our engines
- Swap filters with great ease and speed, saving precious uptime



EU-MADE

Global supply chains are becoming more fragile in a post-pandemic world with new conflict zones and rising geopolitical and trade tensions. The 20EV23 is 100% manufactured in our production facility in Ghent. All components are produced within the EU. No conflict or rare materials are used during the manufacturing process.

ABC is a family-run business founded 100 years ago. Stability is in our nature, because of the strong ownership roots of the company, anchored in Belgium at the crossroads of many logistic routes. This gives you, our customer, the two biggest advantages in a volatile, uncertain, complex and ambiguous globalized economy: reliability and agility.

Worldwide agents



Get closer and contact
one of our agents
worldwide



A history of building your future

- 100 years of knowledge compiles into each new engine
- Continuous investment in R&D and innovation
- Extremely passionate, experienced and skilled workforce
- Seamless network of production units for a vertically integrated value chain
- Steady and reliable supply chain
- No conflict or rare materials

Uncertainty about policy reforms, competing fuel technologies, volatile prices, regional instability and accompanying supply chain disruptions... How to mitigate risk and unpleasant surprises as you prepare for the future of your fleet?

EVOLVE is developed to tackle that challenge -for you. Stay fuel independent and superefficient. Go harder, longer, faster and cleaner, year after year. With the 20EV23 medium speed engine your future is safe as of today.

Make the safe and smart investment in your maritime activities, as you outperform others and win a cost competitive edge with every mile you cleave through the water.



**ANGLO BELGIAN
CORPORATION**

We power your future

SCAN ME



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ABC-ENGINES.COM



#ABCEngines

#WePowerYourFuture

EVOLVE

OUR ENGINES ARE FLEXIBLE, YOUR FUTURE IS SAFE

EVOLVE is the missing link to your project!
Get in touch, tell us about your plans.
We'll be proud to power your future.

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info@abc-engines.com

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9000 Gent
Belgium

**Our engines are flexible,
your future is safe.**



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We power your future