

Fuel type	Product	Benefits	ISO viscosity grades	Specifications and approvals <small>(Full details of approvals for all products can be obtained from your Shell representative. Approvals and claims will vary by viscosity grade.)</small>
Natural gas or mild sour gas	Shell <b>Myselfa 55 N</b>	<ul style="list-style-type: none"> <li>Extended oil life</li> <li>Extra protection against deposits and corrosion</li> </ul>	40, 15W-40	Meets the requirements of Caterpillar stationary gas engines Approved by Cummins (QSV 81G/91G, OSK 60G); GEJenbacher (Series 2, 3, 4 Fuel Class A and CAT, Series 6 (Version E&F) Fuel Class A and CAT); Guascor (FGLD, SFGLD); MAN (3271-2); MTU (MLT 5074, A001061/29E (Category 1), Onsite Energy Series 400 and 4000); MWM-Deutz (TR 0199-99-2105); MDE Dezentrale Energiesysteme (naturally aspirated 28xx, 30xx (D/M), turbocharged 28xx 30xx (T/L/Z)); MAK (GCM 34); Rolls-Royce (KG-1, KG-2, KG-3, BVG); Tedom (natural gas engines); Wärtsilä (34SG, 32DF, 50DF, 25SG, 28SG, 175SG, 220SG); and Waukesha (cogen and 220 GL (pipeline quality natural gas))
Natural or sour gas, including biogas, sewage gas and landfill gas	Shell <b>Myselfa 55 S</b>	<ul style="list-style-type: none"> <li>Extended oil life</li> <li>Extra protection against sour gas</li> </ul>	40	Meets the requirements of Caterpillar Approval process is ongoing for the following engine types: GEJenbacher (Series 2, 3 fuel class B and C and CAT); MAN B&W Diesel (natural gas, landfill gas/digester gas/biogas gas engines, and dual fuel (pilot diesel)); MAN: 3271-4; MDE Dezentrale Energiesysteme (naturally aspirated 28xx, 30xx (D/M), turbocharged 28xx 30xx (T/L/Z)); Mitsubishi Heavy Industries; Rolls-Royce (KG-1, KG-2, KG-3 (biogas operation)); Wärtsilä (CR26); and Waukesha (cogen application (pipeline quality natural gas)).
Natural gas or mild sour gas	Shell <b>Myselfa 53 N</b>	<ul style="list-style-type: none"> <li>Reliable protection</li> <li>Low ash content for four-stroke engines</li> </ul>	40, 30	Meets the requirements of Caterpillar stationary gas engines and Waukesha Approved by GEJenbacher (Series 2, 3, 4 fuel class A and CAT, Series 6 (Version E&F) fuel class A and CAT); MAN (natural gas, landfill gas/digester gas/biogas gas engines, dual fuel (pilot diesel)); MTU (MLT 5074, A001061/29E (Category 1), Onsite Energy Series 400 and 4000); MWM-Deutz (TR 0199-99-2105); MDE Dezentrale Energiesysteme (28xx, 30xx); MAK (GCM 34); Nuovo Pignone (reciprocating compressor service Class A); Perkins (4000 series); Rolls-Royce (KG-1, KG-2, KG-3); Wärtsilä (34SG, 32DF, 50DF, 25SG, 28SG, 175SG, 220SG, 180SG, QSW, UD 24 S4G, UD 30S4G); and Waukesha: 220 GL (pipeline quality natural gas)
Natural gas or sour gas	Shell <b>Myselfa 53 S</b>	<ul style="list-style-type: none"> <li>Extra protection</li> <li>Medium ash content for four-stroke engines</li> </ul>	40	Approved by GEJenbacher (Series 2, 3 fuel class B and C and CAT); MAN B&W Diesel (natural gas, landfill gas/digester gas/biogas gas engines, dual fuel (pilot diesel)); MAN (3271-4); MDE Dezentrale Energiesysteme (naturally aspirated 28xx, 30xx (D/M), turbocharged 28xx 30xx (T/L/Z)); Mitsubishi Heavy Industries; Rolls-Royce (KG-1, KG-2, KG-3 (biogas operation)); Waukesha (cogen application (pipeline quality natural gas)); and Wärtsilä (CR26)
Natural gas	Shell <b>Myselfa 53 Z</b>	<ul style="list-style-type: none"> <li>Reliable protection</li> <li>Very low ash content for two- and four-stroke engines</li> </ul>	40, 30	Meets the requirements of Ajax; Allis-Chalmers; Caterpillar (except 3400, 3500, 3600); Clark; Climax; Colt-Fairbanks Morse; Cooper-Bessemer (two-cycle); Dresser-Rand (categories I, II and III); Case IH; Minneapolis-Moline; Waukesha; White Superior (naturally aspirated); and Worthington
Natural gas	Shell <b>Myselfa 52 Z</b>	<ul style="list-style-type: none"> <li>Reliable protection</li> <li>Ash free content for two-stroke engines</li> </ul>	40, 30, 15W-40	Meets the requirements of Ajax; Allis-Chalmers; Caterpillar (except 3400, 3500, 3600); Clark; Climax; Colt-Fairbanks Morse; Cooper-Bessemer (two-cycle); Dresser-Rand (category I and III); Case IH; Minneapolis-Moline; Waukesha; White Superior (naturally aspirated); and Worthington



### COMPREHENSIVE PRODUCT AND SERVICE PROVISION

Shell Lubricants was named the number one lubricants supplier (Kline & Company, 2010) and has a 60-year history of innovation. We are constantly investing to develop better lubrication solutions, as demonstrated by

- Shell Turbo GT – a fully synthetic, top-tier industrial gas turbine oil
- Shell Diala S3 ZXI – a premium, inhibited electrical insulating oil.

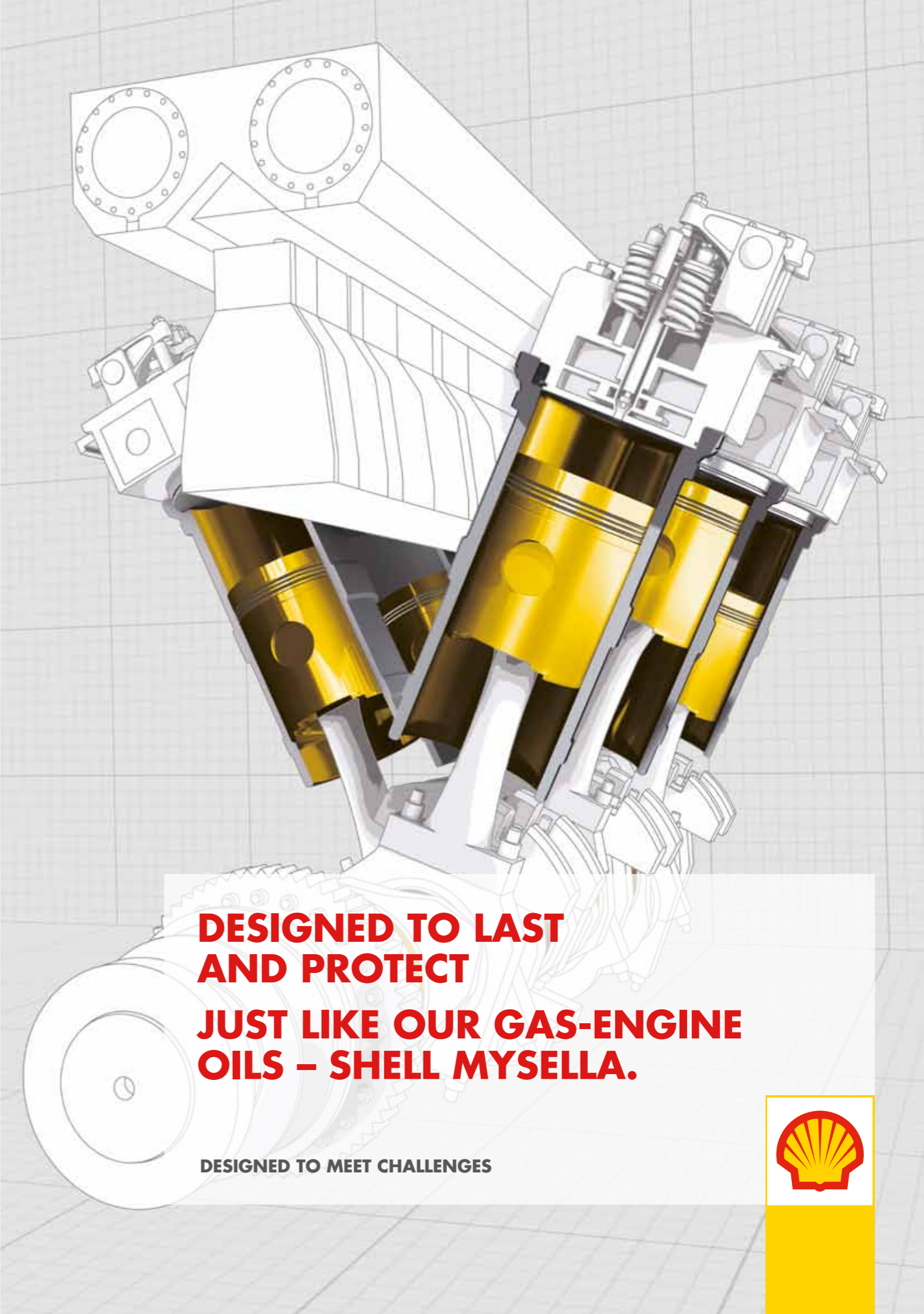
In addition, Shell provides the excellent Shell LubeAnalyst oil condition monitoring service, which has a specific package for stationary engine applications to help you improve your business performance.

Whatever your needs or application, Shell can provide a full range of oils and greases, including synthetic, high-performance products and additional services.

For more information, please contact

[shell.com/lubricants](http://shell.com/lubricants)

\*Shell Lubricants\* refers to the various Shell companies engaged in the lubricants business.



**DESIGNED TO LAST  
AND PROTECT**

**JUST LIKE OUR GAS-ENGINE  
OILS – SHELL MYSELLA.**

**DESIGNED TO MEET CHALLENGES**



**EVERY PART OF YOUR MACHINE OR PROCESS HAS BEEN METICULOUSLY ENGINEERED, SO YOU WANT TO BE SURE THAT YOU CHOOSE A LUBRICANT THAT HAS BEEN DESIGNED TO ENSURE THAT YOUR EQUIPMENT IS WELL PROTECTED AND WORKS EFFICIENTLY.**

The Shell Mysella range of gas-engine oils has been developed to enable equipment operators to select the oil that will deliver optimum value to their operations through enhanced wear protection, long oil life and high system efficiency.

**WEAR PROTECTION**

The Shell Mysella range of gas-engine oils is designed to minimise deposit build-up and to keep your engine clean. For instance, Shell Mysella S5 N provides superior deposit control, even in the latest generation of high-output engines that operate in very severe conditions with very high piston temperatures and pressures. This helps to maintain excellent ring belt cleanliness and cylinder liner protection.

**OIL LIFE**

Shell Mysella oils are designed to deliver long oil life to help you maintain your operations efficiently and costeffectively. For instance, Shell Mysella S5 S can provide extended oil-drain intervals in engines fuelled by sour gases such as biogas or sewage gas. These gas types may contain high levels of halogen compounds, which can rapidly reduce the oil life of more traditional gas-engine lubricants.

**SYSTEM EFFICIENCY**

The Shell Mysella range of gas-engine oils has been designed to provide high engine efficiency. For instance, Shell Mysella S5 N helps to provide excellent cleanliness for heat recovery boilers, turbochargers and intercoolers.



**THE SOUR-GAS CHALLENGE**

An increasing number of stationary gas engines are fuelled by sour gases. Sour gases derive from the decomposition of matter in, for example, landfill sites, biomass digesters and sewage. These gases offer a unique set of challenges to the engine operator: acids in the gas can cause corrosion and the rapid reduction of oil life. In addition, siloxanes, which are commonly found in landfill gases, can cause excessive deposit formation. Shell has worked to understand the mechanisms behind these problems and has developed Shell Mysella S5 S to offer a long-life solution for engines fuelled by sour gases without increasing the oil's ash content.

**A RANGE OF GAS-ENGINE OILS TO MEET YOUR NEEDS**

To meet the challenges of a wide range of gas-engines and applications, Shell has designed a portfolio of fluids that enable you to choose a product to match your technical and operational needs.

**PRODUCT-NAME SUFFIX KEY**

- N** = Natural gas
- S** = Sour gas
- Z** = Zero or very low ash

**APPLICATION ICON KEY**

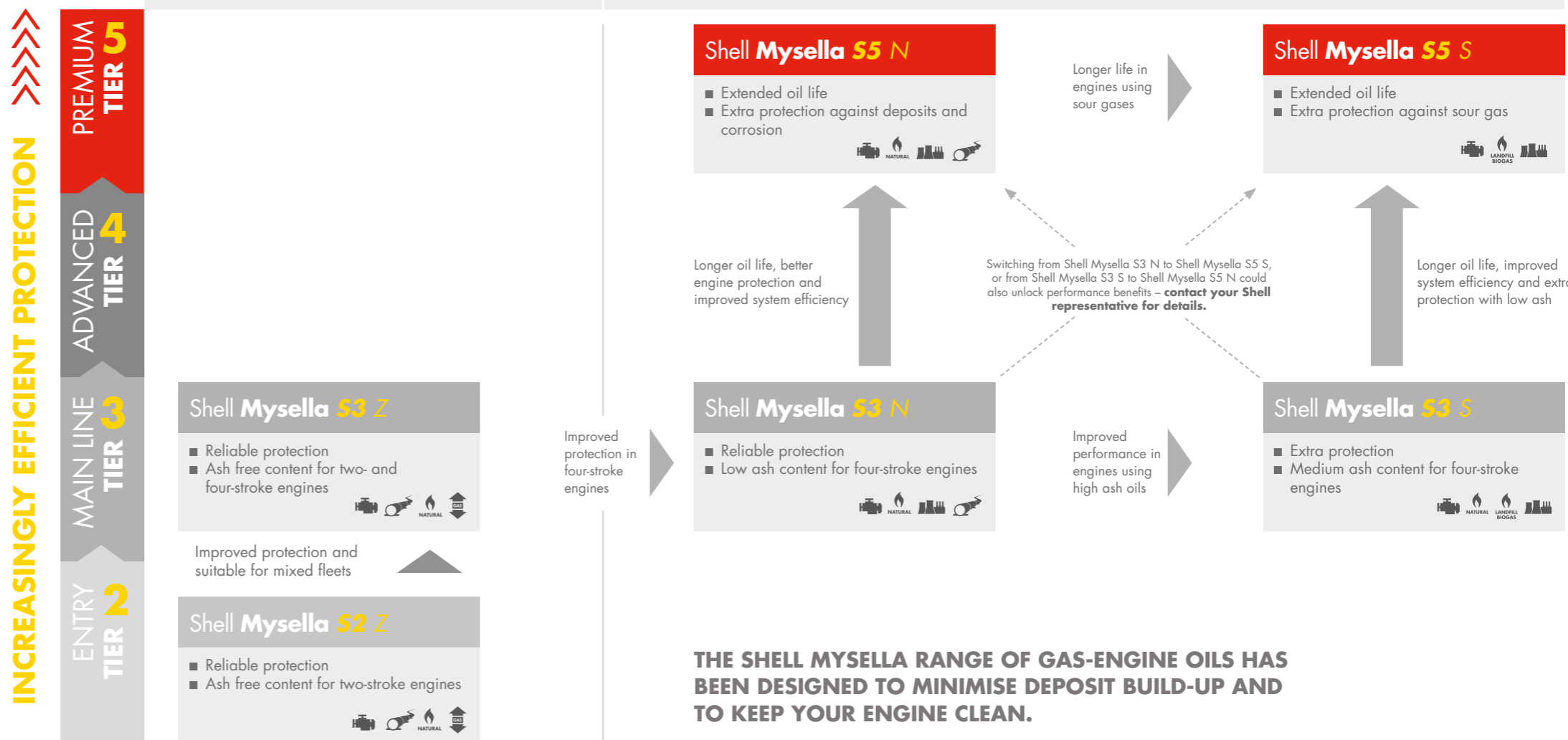
- Reciprocating gas compressor
- Natural gas
- Pipeline
- Power engine
- Power station
- Landfill/biogas

**THE SHELL MYSELLA RANGE OF NATURAL-GAS-ENGINE OILS**

For two-stroke engines and four-stroke engines that require a low ash or ashless oil

**THE SHELL MYSELLA RANGE OF NATURAL-GAS AND SOUR-GAS-ENGINE OILS**

For four-stroke engines



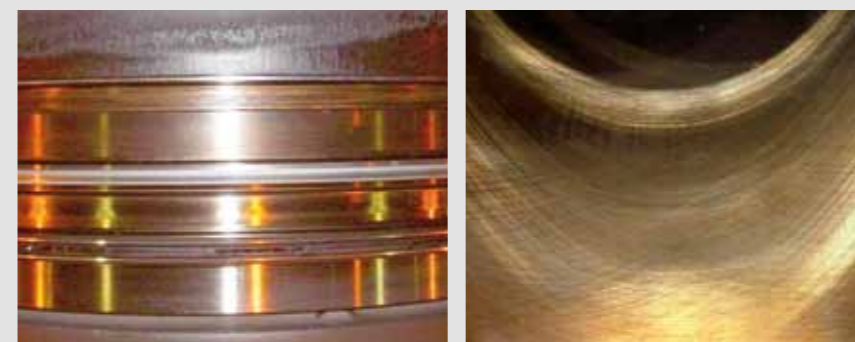
**REAL-WORLD VALUE DELIVERY**

The Shell Mysella range of gas-engine oils has been used successfully throughout the world. A compressed natural gas supplier, which uses more than 130 gas engines from manufacturers such as Caterpillar and Waukesha to drive the compressors at its compressed natural gas outlets across Delhi, India, was very impressed by Shell Mysella S5 N. By switching to this oil, the company

- increased the engines' oil-drain interval from 850 to 1,100 hours
- reduced oil consumption
- increased filter life
- enhanced equipment availability.

As a result, the compressed natural gas supplier cut its annual operating costs by over \$84,000<sup>1</sup>.

<sup>1</sup>Savings reported by one customer. Actual savings may vary, depending on the application, the current oil used, the maintenance procedures and the condition of the equipment.



**EXTRA PROTECTION:** Shell Mysella S3 N demonstrated excellent ring groove cleanliness (left) and left the cylinder liner in an excellent condition (right) in a Wärtsilä 20V34SG engine after 16,000 hours of operation without an oil change.

**SHELL MYSELLA S5 N – FOR EXTRA PROTECTION AGAINST DEPOSITS AND CORROSION**

Shell Mysella S5 N is a premium-tier product designed to meet the challenges posed by the latest high brake mean effective pressure (BMEP) engines. It offers an extremely long oil life to help extend maintenance intervals, and offers excellent engine protection. It is formulated to control deposits, maintain ring belt cleanliness and protect the cylinder liners, even under the high temperature and high pressure conditions seen in modern engines.