



Delivering a groundbreaking future for mining

How Shell Lubricant Solutions can help you thrive today and tomorrow



Your new reality



Evergreen Challenges

PRODUCTIVITY



Commercial focus drives decision making. Mines are facing pressure from internal and external stakeholders to increase profits while keeping costs down.



SUSTAINABILITY



Sustainability is consistently a top 10 challenge, and mines do not feel well equipped to deal with it, particularly when it comes to reducing CO2 emissions.

New disruptive forces

DIGITALISATION



Digitalisation and sustainability challenges correlate closely. Mines need to take advantage of digital tools that deliver a positive impact on both sustainability and costs.



LABOUR



Building on an existing skills shortage, digitalisation will have an impact on future skills – driving an increased need for partnerships to provide technical support.

UNCERTAINTY



- Cost volatility
- Pace and variety of technological advancements
- Rapidly changing standards and regulations
- Supply uncertainty
- Shifts in types of output

How to drive ground-breaking productivity and sustainability in this changing world?



Operational excellence. **Redefined**

To overcome their new challenges and deliver on their commercial targets, mines need to operate at peak performance. And in today's dynamic and uncertain world, this requires a broader, more integrated approach. That's why we work with sites to redefine operational excellence in mining.

DRAWING ON AN INDUSTRY-WIDE SOLUTION SET



An integrated programme that supports your short- and long-term needs, from cost reduction to sustainability to digitalisation.

BUILDING ON DEEP SECTOR EXPERIENCE



Our solutions have evolved through decades of experience supporting miners worldwide.

DELIVERING THROUGH COLLABORATION



Working closely with you, we carefully tailor our solutions to your specific operations and requirements.

UNLOCKING BUSINESS VALUE



Our solutions have delivered more than \$63 million of savings, based on demonstrated value records.¹

Based on savings delivered to Shell Lubricant Solutions customers from 2014 to 2019.¹



Our value to you: Shell's technology leadership and innovation



**SHELL'S TECHNOLOGY
LEADERSHIP**



**LONG-STANDING
EXPERIENCE
WITH THE SECTOR**



**GATEWAY FOR
DECARBONISATION
AND INTEGRATED SOLUTIONS**



**UNRIVALLED
TRACK RECORD OF
DELIVERING VALUE**



Delivering savings and innovation



	<p>OPERATIONAL EXCELLENCE. REDEFINED</p>	<p>HIGH-PERFORMANCE, ENERGY-EFFICIENT LUBRICANTS, INCLUDING ENGINE, AXLE, TRANSMISSION, HYDRAULIC AND GEAR OILS AND GREASES</p> <p> </p>	<p>ON-SITE SUPPORT</p> <p></p>	<p>VALUE IMPROVEMENT PROJECTS</p>	<p>TCO PROGRAMMES</p>
	<p>SUSTAINABILITY</p>	<p>BIODEGRADABLE LUBRICANTS</p> <p></p>	<p>ENERGY EFFICIENCY IMPROVEMENTS</p> <p>CARBON-COMPENSATED LUBRICANTS</p> <p>WASTE OIL MANAGEMENT</p>	<p>GAS-DERIVED FUELS</p> <p>BIOFUELS</p> <p></p>	
	<p>DIGITALISATION</p>	<p>DIGITAL EQUIPMENT MANAGEMENT</p> <p></p>	<p>OIL CONDITION MONITORING</p> <p></p>	<p>REAL-TIME CONDITION MONITORING</p> <p></p>	
	<p>PARTNERSHIPS FOR FUTURE GROWTH</p>	<p>DIGITAL TRANSFORMATION CONSULTANCY</p>	<p>SITE ELECTRIFICATION SOLUTIONS</p>	<p>SHELL RENEWABLES AND ENERGY SOLUTIONS</p> <ul style="list-style-type: none"> Renewable energy Biofuels Hydrogen Nature-based solutions 	



Our value to you



Our global technology-development network features major centres in the USA, the Netherlands, Germany, India and China.



We use the know-how of experts around the world to deliver products that help enhance equipment efficiency and utilisation.



We're building on 125 years of technological innovation.



Technical partnerships with OEMs optimise oils and greases for the latest equipment technology.



Our lubricants are recommended or approved by more than 3,000 OEMs.

Products and services that demonstrate our **technology leadership** include:

1

High-performance, energy-efficient lubricants for various applications:
Shell Rimula, Shell Spirax, Shell Omala, Shell Tellus and Shell Gadus

2

Biodegradable lubricants:
Shell Naturelle

3

Oil condition monitoring:
Shell LubeAnalyst

4

Real-time condition monitoring:
Shell Remote Sense

5

Digital equipment management:
MachineMax

6

Automatic single point lubricators:
Shell Tactic EMV



To see products by equipment type, [click here >](#)



Shell
RIMULA



To see products by equipment type,
[click here >](#)

Heavy-duty engine oils that energise equipment operations

Shell Rimula oils are formulated with adaptive technology to provide enhanced protection and reduced viscosity.

KEY BENEFITS¹

-  Acid control to protect against corrosion formed as the fuel burns
-  Deposit control to keep engines clean for optimum performance and long life
-  Wear control to keep the moving metal engine surfaces apart for long engine life



REAL-WORLD CUSTOMER EXAMPLE

 **Challenge**
A gold-mining company wanted to improve the durability of its vehicles' turbochargers. It had experienced 40 failures in six months.

 **Solution**
Shell recommended upgrading the oil to Shell Rimula R6 LM.

 **Outcome**
The vehicles' turbochargers remained undamaged, and oil-drain intervals were extended by 140%.



Value

- Less frequent replacement of failed turbochargers and filters
- Reduced labour costs through fewer oil changes and maintenance
- Increased vehicle availability

US\$30,382

Estimated annual savings¹

¹ Case study savings/benefits were reported by one customer. Actual savings/benefits will vary. More details available on request.



Transmission oils that extend oil drain intervals and improve fuel efficiency



Shell Spirax



To see products by equipment type, [click here](#) >

Shell Spirax oils are designed to provide exceptional protection, extending the life of vehicle components operating in harsh conditions.

KEY BENEFITS¹



Increased vehicle uptime



Reduced maintenance costs



Improved fuel efficiency

The Shell Spirax range of axle, gear and automatic transmission fluids has been developed to enable drivers, fleet owners and operators to select the oil that will deliver optimum value to their operations through enhanced wear protection, long oil life and efficiency.



REAL-WORLD CUSTOMER EXAMPLE

Annual benefits of Shell Spirax S5 CFD M 50

(ODI: 4,000 hours)

(Reference scenario: Shell Spirax S4 CX 50 – ODI: 2,000 hours)



>US\$163k

Estimated annual savings¹

¹ Case study savings/benefits were reported by one customer. Actual savings/benefits will vary. More details available on request.



Emissions reduction: >520t CO₂



Operational cost reduction: >USD 119k



Lubricant reduction: >176,000 L



Final drive life increase: From 5,000 to 20,000 h



Productivity increase: >USD 44k



Gear oils that keep operations running at peak performance



Shell Omala



To see products by equipment type, [click here >](#)

Shell Omala oils help gearboxes to work harder for longer, increasing productivity and reducing total cost of ownership (TCO).

KEY BENEFITS¹



Improve gearbox reliability



Reduce maintenance downtime²



Enhance system efficiency³



Increase load carrying capacity

REAL-WORLD CUSTOMER EXAMPLE



Challenge

A Nickel mine needed to improve operational performance.



Solution

The company switched to Shell Omala S4 GX and evaluated the results.



Outcome

Power consumption in the mine's two grinding mills fell by 2.1% and oil-drain intervals increased – reducing downtime and oil disposal costs.



Value



Waste disposal costs



Electricity costs

US\$74,473

Estimated annual savings, even after the cost of the oil¹

¹ Case study savings/benefits were reported by one customer. Actual savings/benefits will vary. More details available on request.

¹ All data shown is derived from tests in laboratories at Shell Lubricant Solutions or partners using accepted standard methods, taken from the Shell Omala product range brochure

² Data is taken from "From Extending Gearbox Life to Driving Industry" brochure
Data is taken from "From Extending Gearbox Life to Driving Industry" brochure

³ Designed for high efficiency, Shell Omala S4 WE is designed to increased productivity, taken from Shell Omala S4 WE brochure



Shell
GADUS



To see products by equipment type,
[click here >](#)



A comprehensive family of greases designed to meet varied needs

Shell Gadus greases are designed to protect open gear systems operating for long periods under extreme loads – especially those in high temperatures or dusty environments.

KEY BENEFITS¹



Protects against high and shock loads



Protects against wear under high pressure



Protects equipment against rust and corrosion



Pumps through long systems and to great heights



Delivers consistent spray from all systems



Performs at high temperatures

REAL-WORLD CUSTOMER EXAMPLE



Challenge

A mining company was experiencing high wear rate to pins and bushes on its fleet of load haul dumpers and roof bolters.

Over one year, the company had 10 pin and bush failures and three drill boom failures.



Solution

Investigations revealed that daily high-pressure washing was removing grease from vital components.

Shell Lubricants recommended changing to Shell Gadus S3 V460D 2 grease, which has excellent resistance to water washout² and outstanding shock load resistance.



Results

80%

reduction in pin and bush failures

67%

reduction in boom failures

US\$ 189,000

Estimated annual savings due to the reduction in parts and maintenance costs¹

¹ Case study savings/benefits were reported by one customer. Actual savings/benefits will vary. More details available on request.



Hydraulic oils that can lower costs and reduce equipment downtime



Shell
Tellus



To see products by equipment type, [click here >](#)



To watch the video, [click here >](#)

The Shell Tellus range of high-performance hydraulic fluids has set the standard in the field of hydraulic fluids for more than 60 years.

YOUR NEED



The hydraulic fluids you use in equipment such as excavators and bulldozers should protect, lubricate and help to transmit power in the most effective way.

KEY FEATURES OF SHELL TELLUS OILS



Designed for long oil life with excellent oxidation resistance



Designed to protect with excellent anti-wear properties and thermal stability



Designed for system efficiency with excellent filterability and air release properties

REAL-WORLD CUSTOMER EXAMPLE



Challenge

A leading mining contractor with more than 10 opencast coal mines, wanted to reduce maintenance costs while maintaining high levels of equipment protection.



Solution

The customer trialed Shell Tellus S3 M in nine Hitachi excavators.



Outcome

The trial revealed that it could extend the hydraulic-fluid-drain interval to 6,000 hours.



Value

US\$44,531

Annual savings reported by the customer¹

¹ Case study savings/benefits were reported by one customer. Actual savings/benefits will vary. More details available on request.





2

Biodegradable lubricants that balance sustainability and performance



Shell Naturelle

Shell Naturelle helps businesses to improve the environmental impact of their lubricant operations without having to compromise on performance.

KEY BENEFITS¹



Beyond “environmentally acceptable”

- EU Ecolabel certification.¹
- Well-balanced technically with a high biobase², high biodegradability³ and low ecotoxicity.⁴
- Helps to avoid or reduce emissions through material choices^{2,5} and manufacturing processes.⁶
- Carbon neutral⁷ thanks to Shell’s global portfolio of nature-based carbon credits.

REAL-WORLD CUSTOMER EXAMPLE



Equipment protection

- Oxidation and thermal stability
- Wear protection
- Water and air separation
- Low-temperature protection



Ecosystem protection

- Low aquatic ecotoxicity
- No bioaccumulation
- Rapidly biodegradable
- Environmentally acceptable lubricants (EAL)



Sustainability

- Carbon neutral from 2021 by protecting and restoring nature
- Using the power of the sun⁶
- Reusing waste (post-consumer resin in packaging)⁵
- High percentage of renewable



¹ 85% of Shell Naturelle volumes sold in 2019 held an EU Ecolabel licence. ² Tested in accordance with ASTM D6866 standard test methods for determining biobased content; RSPO-certified source materials. ³ Readily biodegradable in accordance with OECD 301 B, >60% degraded by the end of the 28-day test. ⁴ Meeting the requirements of OECD common acute toxicity tests for assessing EALs according to US EPA requirements. ⁵ At least 25% post-consumer resin in all plastic packaging, pails and IBCs. ⁶ Bern, Switzerland, 90 MWh of electricity generated from solar energy, representing 19% of the plant’s total electricity use and avoiding an estimated 0.004 kt/y of greenhouse gas emissions (2019 data). ⁷ In participating locations. “Carbon neutral” indicates that Shell has engaged in a transaction where an amount of CO₂ equivalent to the CO₂e amount associated with the raw material extraction, transport, production, distribution, use and end-of-life of the product has been avoided as emissions through the protection of natural ecosystems or removed from the atmosphere through a nature-based process. CO₂e (CO₂ equivalent) refers to carbon dioxide (CO₂), methane and nitrogen oxides.



3

State-of-the-art oil condition monitoring



Shell LubeAnalyst



To watch the video, [click here >](#)

Shell LubeAnalyst is an oil condition monitoring service helps ensure that your equipment and lubricants are in optimum working order – reducing downtime to maximise productivity.

KEY BENEFITS¹

Shell LubeAnalyst helps you to:

- Identify potential problems at an early stage.
- Optimise maintenance and oil-drain intervals.
- Monitor the performance of equipment over time.

WHAT YOU GET

- ✓ ■ Equipment-based diagnosis and insights
- Strong support from Shell experts
- An easy-to-use digital platform

NEW FEATURES INCLUDE

- ⊕ ■ Benchmarking against our extensive database
- Define your oil limits and set your engine’s warranty status
- API integration enables the exchange of data from your oil sample report to your CMMS

REAL-WORLD CUSTOMER EXAMPLE



Challenge

A mining company wanted an engine lubricant that would give it a longer oil-drain interval (ODI).



Solution

It switched to Shell Rimula R4 and adopted the Shell LubeAnalyst service to monitor the oil’s condition.

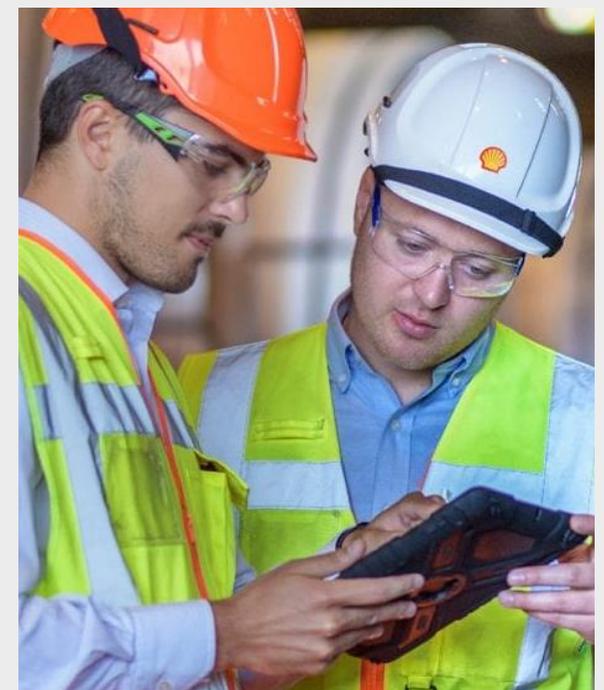


Value

Its ODI increased by 70% and the company has reported a total estimated saving of

US\$189,000 per year.¹

¹The savings indicated are specific to the calculation date and mentioned site. These calculations may vary from site to site and from time to time, depending on, for example, the application, the operating conditions, the current products being used, the condition of the equipment and the maintenance practices.





4

Your machinery has a lot to say: discover what matters with predictive oil monitoring



Shell Remote Sense



To watch the video, [click here >](#)

A smart oil condition monitoring service delivering insights for industrial companies to optimise equipment health, lower maintenance costs and increase operational efficiency.





5

All your data, all in one place

MachineMax is a wireless telematics solution that gives enhanced visibility over fleet performance.

KEY BENEFITS¹

A digital equipment management platform for fleets that uses smart sensors and next-generation analytics to help you maximise fleet utilisation, productivity and profitability – all while reducing environmental impact:

- Track your entire fleet in real-time via a single dashboard
- Non-invasive, wireless sensors installed in less than a minute
- Integrates existing telematics data
- Cut costs by increasing utilisation and optimising maintenance
- Lower emissions by reducing engine idle times



REDUCE wasteful idling times, fuel consumption and CO₂ emissions



IMPROVE productivity and utilisation of your mobile, heavy machinery



MAXIMISE machine utilisation and minimise costs

REAL-WORLD CUSTOMER EXAMPLE



Within two weeks, one customer that tracked its fleet using MachineMax realised that its loading shovels were over-utilised, and that their dumpers were under-utilised.

This helped the company to increase productivity by up to 40%.





Shell
Tactic EMV
 Automatic Single Point Lubricators



To watch the video,
[click here >](#)

6

Enhance operational efficiency through precise and reliable lubrication

Shell Tactic EMV is an electro-mechanical single point lubricator designed to provide optimal lubrication to greased machinery components, such as rolling element bearings

KEY BENEFITS

- Efficient and safe lubrication process
- Regular grease purge for accurate dispensing and contamination prevention
- Immediate grease delivery
- Remote mounting flexibility, Inspection and operational safety

SHELL TACTIC EMV PROVIDES

- A reliable alternative to manual lubrication;
- A superior solution when compared to gas/chemical type lubricators; and
- an alternative solution where centralised lubrication systems are not practical.

HEALTH AND SAFETY

- Eliminates manual lubrication
- Reduces excess grease losses
- Ensures lubrication at the right time, in the right place, in the right amount
- Workforce optimisation
- Avoids working at heights and operator exposure to moving parts



Reduces exposure by
80%

REAL-WORLD CUSTOMER EXAMPLE



Value
 A mining customer reports saving over

US\$ 167,000¹

a year through using the Shell Tactic EMV system with a high-quality Shell Gadus grease to increase maintenance efficiency.

¹The savings indicated are specific to the calculation date and mentioned site. These calculations may vary from site to site and from time to time, depending on, for example, the application, the operating conditions, the current products being used, the condition of the equipment and the maintenance practices.





Our value to you: Long-standing experience within the sector



**SHELL'S
TECHNOLOGY**



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Our value to you



Products and services that demonstrate our **sector intimacy** include:

1

On-site support:

Shell
Lube**Expert**

2

On-site reliability services:

Shell
Lube**Optimiser**

3

Technical advisors:

Shell
Lube**Advisor**

4

Training:

Shell
Lube**Coach**



To see products by equipment type,
[click here >](#)

We have a strong team of Lubricant Solutions technical specialists and access to more than 50 product application specialists worldwide, supported by distributor partners that provide a suite of lubrication management services.



Their expertise usually stems from years working for mining companies or OEMs.



We have a strong patent portfolio with 9,449 granted patents and pending patent applications.



We hold more than 150 patents for base oils, lubricants and greases; and carry out millions of miles of field trials every year.



On-site support



Shell LubeExpert



To watch the video, [click here >](#)

Leveraging a comprehensive toolkit of services, our experts help you anticipate and avoid issues. We work with your team to inspect, audit and optimise equipment, systems and processes according to the highest industry standards to address your evolving needs.

SHELL LUBEEXPERTS



- Work on machines and mills
- Provide insight and innovative technology from around the world
- Inspect using strobe-o-scope, thermal imaging and vibration analysis
- Audit lubrication systems and injectors
- Perform injector spectrum sleeve fitment
- Optimise grease onto fixed and mobile equipment

THE VALUE TO YOU



- Anticipate and avoid issues
- Boost productivity
- Lower your total cost of ownership

REAL-WORLD CUSTOMER EXAMPLE



Challenge

Routine equipment inspection found a propel pinion bush deteriorating abnormally quickly.



Solution

A shutdown was planned, components ordered, contractors and cranes arranged with minimal disruption.



Value

- The customer avoided hundreds of hours of lost production and the cost of components that would've been damaged had a catastrophic failure occurred.
- The customer reported savings of

US\$ 189,000

¹Case study savings/benefits were reported by one customer. Actual savings/benefits will vary. More details available on request.

DID YOU KNOW?

In more than 20 years of operation, the Shell LubeExpert programme has never experienced a lost-time incident.





2

On-site reliability providers



Shell
Lube Optimiser

An end-to-end solution designed to help companies address common challenges, such as simplifying operations, reducing downtime and protecting equipment.

KEY BENEFITS¹

Along with our network of on-site reliability service providers, we deliver:

- Maintenance support and troubleshooting activities during the lifetime of your machinery oil
- Expertise to identify areas of improvement to help avoid unexpected disruptions and increase uptime

This can help tackle issues such as:



Loss of productivity



Lack of manpower



Missed opportunities

Filtration

High velocity Oil flushing

Dehydration

Initial fill Services

Reclamation

Cleaning

Varnish removal Or mitigation



3

Give your equipment the support it requires



Shell LubeAdvisor



To see products by equipment type, [click here >](#)

Shell LubeAdvisor helps you use the right Shell oil, at the right time, every time. Helping you on-site to improve lubrication and maintenance practices can drive productivity and limit downtime.

KEY BENEFITS¹

Shell LubeAdvisor is delivered through highly trained Shell technical staff, consisting of:

- Office-based technical helpdesks
- Field-based lubrication engineers
- Helpful and convenient tools

The complete Shell LubeAdvisor service offers you a wealth of engineering, technical and application knowledge.



REAL-WORLD CUSTOMER EXAMPLE



Trained technical support
On-site or over the phone



Detailed plant assessments
Field-based engineers help identify areas for improvement



Lubrication surveys
Identify your lubrication requirements, the products needed and recommended maintenance intervals



Highly trained technical professionals



Technical Assistance



Lubricant surveys



Plant assessments



Best practice advice on ordering, selection, storage, application and disposal



4

Lubrication training designed for your business



Shell
LubeCoach

Shell LubeCoach is a comprehensive training programme designed to empower your staff to deliver the benefits of a well-designed lubrication plan.

KEY BENEFITS

Optimising the application of lubrication in your operations can play a decisive role in minimising downtime and maximising productivity, which translates directly to your bottom line.

KEY FEATURES



- Modular
- Workshop-based
- Tailored to your needs

WE HELP DELEGATES UNDERSTAND



- Which lubricants are applied to what types of machinery
- How, and how often, these lubricants should be applied
- What the health, safety and environmental issues are



“The learning outcomes will go a long way to improve our employees’ skills and knowledge so that they can support our maintenance programme. We are looking forward to working with Shell on future initiatives.”

Victor Asare Gyapong
Mine Maintenance Training Co-ordinator,
Newmont Ghana Gold Ltd



Our value to you: Gateway to the wider Shell network



**SHELL'S
TECHNOLOGY**



**LONG-STANDING
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Our value to you



To support your wider operational and decarbonisation needs, you can benefit from Shell's experience and solutions in areas such as bitumen, lower-carbon fuels, hydrogen or renewable energy for your site. All while providing the core lubrication management programme that you rely on.



Leveraging solutions and insights from the wider Shell network.



When you work with Shell Lubricant Solutions, you're also working with the wider Shell network – some 85,000 innovators, thinkers and collaborators around the globe, who are all eager to help you unlock ultimate business value.

Products and services that can be accessed from the **wider Shell network** include:

- 1 Carbon compensation
- 2 Shell Decarbonisation solutions:
 - Electrification
 - Renewable energy
 - Hydrogen
 - Biofuels
 - GTL
- 3 Shell Bitumen
- 4 Shell Chemicals
- 5 Shell Commercial Fuels:
 - High-efficiency fuels (e.g. Shell FuelSave Diesel)



Accelerating the electrification of off-road mining vehicles

Shell's Mining Electrification Solutions for Off-Road Vehicles aims to help the mining industry to break new ground with their climate goals by reducing emissions without compromising on operational efficiency or safety.

POWER PROVISIONING	MICROGRIDS	ULTRA-FAST CHARGING	IN-VEHICLE ENERGY STORAGE
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Benefit from an integrated solution that:

- Is end-to-end
- Is inter-operable between different OEMs and models
- Is modular in design
- Reduces emissions

KEY BENEFITS

Mobile equipment is currently responsible for 40–50% of mining's CO₂ emissions. By 2030, it's estimated that a battery-electric haulage truck will:

- ↓ Lower total cost of ownership
- ↓ Involve 20% lower maintenance costs
- ↓ Incur 40% lower fuel costs than existing diesel trucks

Consortium companies: Skeleton, Microvast, Stäubli, Carnegie Robotics, Heliox, Spirae, Alliance Automation, Worley and Shell



2

Shell Commercial Fuels: High-efficiency fuels



Shell FuelSave Diesel



To see products by equipment type, [click here >](#)

Your fuel choice ultimately impacts your total cost of ownership and operating efficiency. Shell FuelSave Diesel, with our most advanced DYNAFLEX Technology I, can help reduce your operating costs.



Our advanced cleaning formula¹



Improved vehicle reliability



Faster refuelling



More load-pulling power



Better fuel economy



Corrosion protection



Lower CO₂ emissions and black smoke



Wide range of applications

WHAT OUR CUSTOMERS SAY

“Thanks to Shell FuelSave Diesel with DYNAFLEX Technology, we’ve managed to reduce fuel-related operating cost by 30% compared to the regular diesel used before, by reducing engine system failures and vehicle downtime as a result of fewer breakdowns.”

Mr Simon Lee
Director of Chung Nyap Yoon Sdn Bhd, Malaysia

¹DYNAFLEX Technology or DYNAFLEX formulation are our names for our latest generation of advanced formulations for gasoline and diesel fuels. *Customer statement. As experienced by customer rather than Shell protocols. Compared to regular diesel without fuel economy formula. Customer benefits vary according to type of operations, vehicles, driving conditions and driving style. ²Compared to regular diesel without fuel economy formula. Actual savings may vary according to vehicle, driving conditions and driving style. Internal Shell tests and with our customers have shown a range of fuel saving depending on age of vehicle and type of operations.



3

Shell Commercial Fuels: High-efficiency fuels

Carbon-neutral offerings
Carbon offsets
using Nature Based
Solutions

Lubricants and
greases for
renewable power
generation

Extended ODI with
engine, transmission,
hydraulic, gear oils and
condition-based oil
monitoring

Energy and fuel
efficiency
enhancing
products

Use of
environmentally
acceptable
lubricants

Alternative fuels:
e.g. Biodiesel
and LNG



Sustainable
packaging
solutions

Circularity



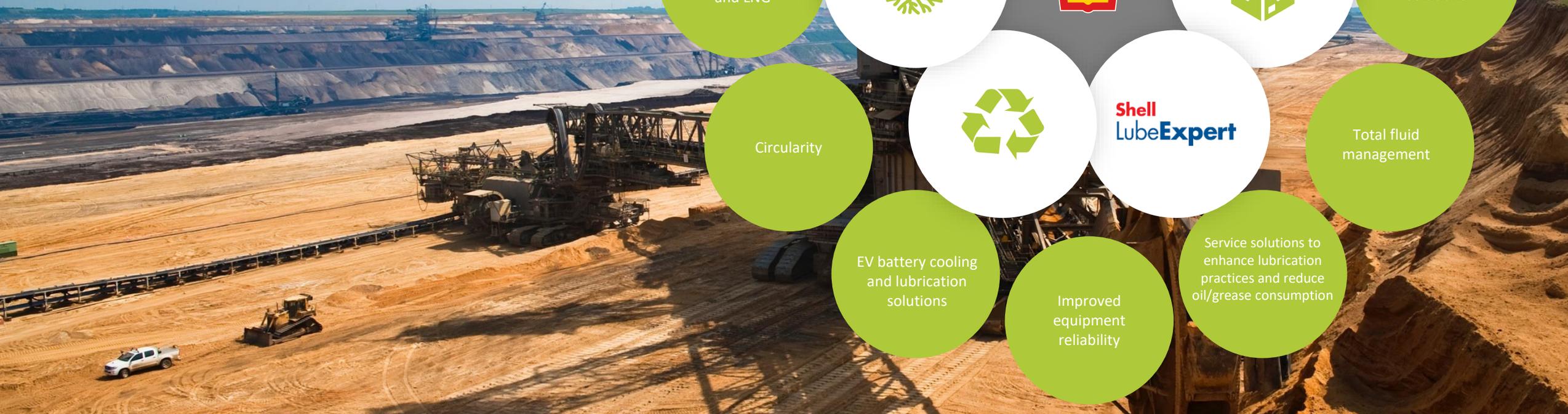
Shell
LubeExpert

Total fluid
management

EV battery cooling
and lubrication
solutions

Improved
equipment
reliability

Service solutions to
enhance lubrication
practices and reduce
oil/grease consumption



The new Mining differentiators – our lubricant solutions



Thank you

