



# 2021

Sustainability Commitment



**PALADIN**

Clean energy. Clear future.

# Resourcing a global carbon-free future

**Paladin Energy Limited (ASX: PDN  
OTCQX: PALAF) is an independent uranium  
mining and exploration company.**

Paladin has a strategic footprint in the world's most attractive uranium mining jurisdictions via our 75% stake in the globally significant Langer Heinrich uranium mine in Namibia, and an extensive high grade exploration portfolio in Canada and Australia.

Our Langer Heinrich Mine is a world-class asset and long-life operation. It has already produced over 43 million pounds of  $U_3O_8$  over a successful 10-year track record and is positioned to produce over 76 million pounds in the future.

The Langer Heinrich Mine Restart Plan is complete, highlighting the strong operational and economic parameters of the asset. Paladin has successfully reset its capital structure, leaving the company with no corporate debt. This provides a clear pathway to bring the mine back into sustainable production in the right uranium price environment.

Paladin supports the goals of the Paris Agreement on climate change, with sustainability being a core focus for the company. We are committed to minimising any impact we may have on the environment, and to limiting our greenhouse gas emissions through efficient operations.

We will provide safe, clean, affordable and reliable energy, thereby displacing more emissions intensive energy sources and helping drive the global energy transition to a carbon-free, sustainable future.



**NAMIBIA**

**Langer Heinrich**

Mine on Care  
& Maintenance



# From our Chairman and CEO

Dear Paladin Stakeholders,

**Sustainability is at the core of every action we take as a company, and it ensures we remain firmly committed to our people, the environment and our community – today and well into the future.**

Paladin remains focused on progressing our Langer Heinrich Mine towards an operational restart. Our Sustainability Commitments in the areas of Health, Safety and Wellbeing, People and Opportunity, Community and Social Investment, and Environmental Stewardship support every decision we take. We are determined to uphold these commitments and develop our assets through strong governance to ensure we deliver sustainable economic, social and environmental outcomes.

At Paladin we are poised to contribute significantly to global decarbonisation through clean nuclear energy by the restart of our Langer Heinrich Mine. Nuclear energy remains one of the most cost effective and lowest carbon emitting forms of energy generation. The growing global demand for electricity, coupled with targets for reduced CO<sub>2</sub> emissions, will ensure nuclear energy plays a key role in the decarbonisation of global power generation. Paladin looks forward, once again, to positively contributing to global decarbonisation. We remain committed to supporting emissions reductions in order to achieve the goals of the Paris Agreement on climate change.

Paladin employs ethical work practices and takes proactive steps to provide a safe and secure working environment for all our staff. We endeavour to employ our workforce from communities local to our operations, and we strive to continually develop our



people's skills and expertise through learning and structured training. We foster a strong, positive culture, that promotes employee engagement within a diverse and inclusive environment.

Governance is a core function at the heart of the company's sustainability efforts. During the past year, we extended our Board of Directors to reflect Paladin's commitment to developing and upholding the highest standards of governance. The additional appointments complement the attributes, experience and diversity already present within the Board, providing a broader skill set that further enhances the effective governance of Paladin.

For all of us at Paladin, delivering sustainable value means managing environmental, social and economic impacts safely and responsibly, and ensuring – as individuals and as a company – that our actions fully reflect our values and commitments.

Yours sincerely,

A handwritten signature in dark ink, appearing to read 'Cliff Lawrenson'.

**Cliff Lawrenson**  
Chairman



A handwritten signature in dark ink, appearing to read 'Ian Purdy'.

**Ian Purdy**  
Chief Executive Officer



# Paladin Values



## Integrity

We act with integrity and honesty in all we do and say.



## Respect

We respect and value all people equally.



## Courage

We meet all challenges and seize opportunities with courage.



## Community

We invest in our communities to create lasting value.



# Reducing Carbon Emissions: Paladin's Role



**Paladin is committed to the core principles of delivering value through sustainable development, and supporting carbon emission reductions.**

Uranium mining and processing are critical components of the nuclear fuel cycle as they provide the raw material for producing clean, sustainable base-load electricity. With the growing global demand for electricity, and the targets set for reduced CO<sub>2</sub> emissions, nuclear energy will continue to play a key role in the decarbonisation of global power generation. Nuclear energy provided over half of the USA's carbon-free electricity in 2020, making it their largest domestic source of low carbon energy. Nuclear power plants do not emit greenhouse gases while generating electricity, and every reduction in CO<sub>2</sub> emissions reduces the impacts of climate change and global warming.

Importantly, uranium is a highly efficient fuel source. While renewable power sources such as wind and solar are gaining market share in the global energy mix, nuclear power has a capacity factor of almost two times that of natural gas and coal, and three times that of wind and solar, making it the most reliable energy source.

The relatively high capacity factor will ensure that nuclear power, and uranium, remain key components of carbon-free base-load power production, as the world moves towards decarbonisation.

At Paladin, we are committed to making a valuable contribution to the reduction in carbon emissions. The uranium that will be mined and processed at the Langer Heinrich Mine will be used to resource nuclear power plants, thereby displacing coal-fired electricity. Paladin's future production can reduce CO<sub>2</sub> emissions by up to 100 million tonnes per year, and around 1.3 billion tonnes over the life of the Langer Heinrich Mine.

Paladin is positioned and committed to ensure our projects are delivered with a keen focus on sustainability and on reducing our own Tier-1 carbon emissions. We are undertaking benchmarking of our historical water, fuel and carbon emissions footprint to allow us to continue in our efforts to minimise our footprint, and to improve the future performance of our operations.



# World Nuclear Power Facts



10% of global electricity generation<sup>1</sup>



20% of United States Electricity Generation<sup>1</sup>



2nd largest source of global clean energy with almost Zero Carbon Emissions<sup>1</sup>



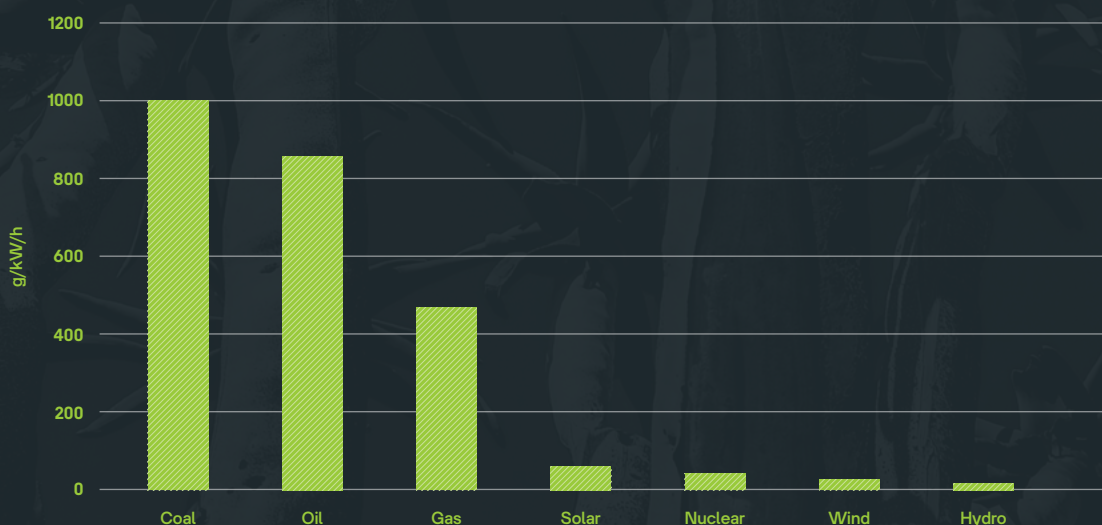
442 reactors in operation across 33 countries<sup>2</sup>



57 reactors under construction in 19 countries<sup>2</sup>

<sup>1</sup>IEA.org <sup>2</sup>World Nuclear Association "The Nuclear Fuel Report" September 2021

## Emissions intensity by energy source



Source: IPCC

# Health, Safety and Wellbeing

**We put the health, safety and wellbeing of our workforce and all stakeholders at the forefront, with a positive culture of safety that underpins all our decisions and actions.**

Paladin acts with integrity in all things, and we strive to achieve the highest standards of safety. We are focused on creating, providing and actively maintaining a healthy, safe and secure work environment by preventing injuries, illness, accidents and incidents. Paladin once again recorded no lost time injuries or reportable incidents during the year.

We foster safe and responsible behaviour among our employees and all contractors by promoting a clear mindset that injuries are preventable. We have implemented operationally targeted safety interventions and training programs. These include: the application of risk mitigation assessment and measures, continuous employee engagement sessions, sharing of lessons learned and industry best practice. We have also advanced continual safety improvement processes.

The health and wellbeing of our workforce matters, so private health cover is provided to all our employees at Langer Heinrich.

Strict procedures are followed as part of our radiation protection measures, and calibrated equipment is used to monitor employees, contractors, visitors and specific work area exposure levels.

The results are provided on an annual basis to the Namibian National Radiation Protection Authority for assessment, for which Langer Heinrich has received annual approval.

Health providers counsel employees on healthy lifestyles and identify risks including raised blood pressure, cholesterol, and HIV exposure.

A range of protocols have been instituted across all locations to safeguard our workforce against COVID-19 and minimise its transmission. Five members of our workforce at Langer Heinrich tested positive for COVID-19 during the year, but we are pleased to report they have fully recovered and returned to work. Paladin has actively monitored and adhered to government regulations and advice at all locations, and employees have been encouraged to work from home as appropriate. Employees and contractors have been strongly encouraged to be vaccinated as soon as possible. Paladin has provided support throughout the pandemic, including donations of medical equipment, provision of care packages to affected staff, and the offer of wellness sessions for employees to assist in dealing with the negative impacts of the pandemic.

0

Lost Time Injuries

1,374 Lost Time Injury Free Days

0

Reportable Incidents

0 Reportable incidents in 2021

100%

Safety Indicators

100% Achievement of lead Safety Indicators

100%

Private Health

100% of Langer Heinrich workforce have private health cover





## Safety Training

Paladin continues to focus on training across all locations. Firefighting skills amongst the team at the Langer Heinrich Mine are critical in a remote operation.

Personnel are also provided with extensive opportunities to update their broader safety skills, including emergency preparedness.

# People and Opportunity

**We value and respect all our people as central to what we do, embracing diversity and promoting equal opportunities to thrive and be recognised.**

Our Values of Integrity, Respect, Courage and Community are supported by the Board, management and employees at all levels throughout Paladin, and are central to relationships between all employees and representatives.

At Paladin we recognise that our people are crucial to our business. We strongly support them and encourage them to grow. We are committed to fostering a positive culture, and promoting employee engagement, and a diverse and inclusive workplace. We are dedicated to ensuring a safe and secure work environment for all our staff members.

Employees and contractors are provided with growth opportunities, and we strive to continually develop our people's skills and expertise through structured learning and training. We provide local and regional employment opportunities wherever possible.

We embrace our diverse mix of people, including different ages, cultural backgrounds, genders, education and experience levels, and actively foster the benefits from collaboration. Our Paladin recruitment process recognises the benefits of securing, developing and retaining a talented, diverse and motivated workforce. We make sure that our employees are of legal working age and that our workforce receives equal pay for equal work.

Paladin has recently made a number of key staff appointments to ensure the company has the right people and skill sets for the next phase of Paladin's evolution.

**30**

Employees

30 Total Full Time Equivalent Employees

**100%**

Local

100% of Paladin workforce is local to its operations

**40%**

Were disadvantaged

40% of Langer Heinrich workforce are historically disadvantaged employees

**30%**

Women

The proportion of women in roles in the Paladin Group is 30%

**17hrs**

skilled training p.p

17 hours skilled workforce training per person in Namibia





## Investing in people

Paladin recognises the importance of investing in our people and providing opportunities to employees and local communities. Throughout the year, Langer Heinrich offered a range of training initiatives that included: Certified First Aid training by SaveMED Namibia for several employees and contractors, safe snake training, and Intermediate Life Support Supervisory training. Other opportunities included: operational training, work experience for local apprentices on using SCADA systems and reading mine maps, and numerous Emergency Response Drills.

## Ethical Business Practices

Paladin is committed to complying with all applicable laws and regulations in the countries where we operate, and we conduct our business in line with the highest ethical standards and absolute integrity. Our framework of compliance with legislative requirements, government policies and our internal policies, including our Code of Conduct, ensures that our standards are encompassed in all our business dealings and practices globally.

We conduct business in a way that contributes to sustainable development by acknowledging and respecting the human rights of all people, including

the communities in which we are present, and the customers and suppliers in our supply chain.

Paladin condemns all forms of modern slavery, and we are committed to following the UN Guiding Principles on Business and Human Rights. We will comply with the requirements under the Modern Slavery Act (Cth) 2018 as part of our Langer Heinrich Mine restart.

Paladin exercises zero tolerance for corruption and bribery in any manner or situation in which it may arise.



# Community and Social Investment

**We engage positively with local communities, actively listening and contributing to their social prosperity and development with integrity.**

At Paladin we are committed to our local communities, and are focused on having a positive impact and making meaningful contributions to their lives and livelihoods.

We achieve this through a range of initiatives, including local recruitment practices, establishing community development programs, and participating in local industries to support growth and economic value to local regions.

Stakeholder engagements with local and government authorities are key priorities, in addition to supporting local community causes. Paladin is pleased to have delivered assistance to those in need during the COVID-19 pandemic, including the provision of equipment and oxygen concentrators to the Directorate of Health in the Erongo region, Namibia, for use in COVID-19 hospital wards.

By donating equipment and fuel, Paladin continues to support the Namib Anti-Poaching Unit and Park Wardens of the Ministry of Environment, Forestry and Tourism who are responsible for patrolling the area surrounding the Langer Heinrich Mine and the Namib Naukluft National Park.

We were pleased to have met with the newly appointed Erongo Regional Governor to provide an update on the Langer Heinrich Mine's care and maintenance status and the restart project work completed to date. There has been regular engagement throughout the year with Commissioners for Mining, Labour and Safety, the Chamber of Mines Safety Committee, NamWater, NamPower, other Ministers and local community groups.

**\$1.6M**

Goods and Services

US\$1.6M of goods and services procured from local communities across Namibia

**0**

Complaints

0 Local community grievances or complaints

**100%**

Permits Remain

100% Permits remain in place for leases, mining and export of uranium

**230**

Meetings

230 Stakeholder engagement meetings across Canada, Namibia, Australia



## Community engagement

Throughout the year, Paladin has engaged in Namibian uranium and mining industry forums on numerous topics including sustainability. We have participated in meetings with many other groups including the NUA Swakop River Farmers and the NUA Radiation

Safety Working Group. We have also engaged in National Radiation Protection Authority Stakeholder Consultations, and attended the Employment Equity Commission Affirmative Action Training Workshop.



# Environmental Stewardship

**We protect the environment and work to minimise our impacts on it, achieving continuous improvements in sustainability practices and committing to support emission reductions to achieve the goals of the Paris Agreement on climate change.**

Paladin recognises the increasing global impacts of climate change and we are focused on our role in providing a low carbon fuel source to reduce CO<sub>2</sub> emissions as part of the world's energy transformation in order to achieve climate change goals. Our robust guidelines and policies for all our mining and exploration activities focus primarily on water and land use management, rehabilitation, mineral waste, and reducing greenhouse gas emissions.

Water is integral to our operations and vital to sustainability. Through our effective water governance and stewardship we manage our water use closely, and minimise impacts on water resources. Work undertaken within the restart project includes planned decreases in water consumption during operations through equipment modifications, and improvements in recycling and drainage efficiencies.

At Paladin, we apply a Water Use and Quality Standard at all our operations. This ensures efficient, safe and sustainable use of water and the protection of water resources and ecosystems around our sites. We also welcomed a joint delegation led by the Honourable Minister of Agriculture, Water and Land Reform and their representatives, in conjunction with NamWater, to discuss ways to ensure the reliability and security of water supply for Langer Heinrich. The Namibian Agricultural Minister also recently completed a site visit.

At our Langer Heinrich Mine and our exploration leases, we conduct biodiversity studies to establish biodiversity composition, structure and processes, enabling us to monitor and adapt our activities in response to any negative impacts.

Rehabilitation that returns the environment to its natural state is undertaken when mining and exploration activities in that area have been completed.

Paladin's Langer Heinrich Mine remains fully permitted to resume mining, production, and uranium exports, having recently received extensions for our Environmental Clearance Certificate Permit and our Wastewater and Effluent Disposal Exemption Permit.

Radiation management and the safe disposal of radioactive waste are essential to our business success and we focus on excellence in this area in our operations. We have implemented and comply with the Langer Heinrich Radiation Management Plan which provides for assessment of radiological conditions on the mine. We adhere to strict controls, and confirmation of their enforcement is provided by the internal delegated Radiation Safety Officer and inspections by external parties, including the National Radiation Protection Authority. We remain fully committed to achieving minimum radiation exposure for our workforce, members of the public and the surrounding natural environment.

Across our exploration portfolio we ensure that we operate in strict compliance with all tenement requirements, and legal requirements and responsibilities. Baseline Environmental Site Assessments are completed, and site visits are regularly conducted to monitor the status and condition of all our exploration environments. Revegetation is completed following exploration activities in order to return the landscape to its original condition. The fieldwork program at Michelin's exploration site in Labrador, Canada, includes drill casings being cut off, and the covering of disturbed areas with organic material to allow revegetation of the area to continue.





## Rehabilitation and minimising our impact on the environment

Paladin's exploration activities at all locations, including Mount Isa shown above, are managed to ensure minimal impact on the surrounding environment. Rehabilitation to the previous natural vegetation after mining or exploration activities restores the physical condition of the site as closely as possible to the original surrounding landscape. Our rehabilitation works have seen a return of native flora and fauna to the previously disturbed areas, and constant monitoring throughout the seasons ensures rehabilitation is progressing as planned.

0

New Land Disturbance

0 New Land Disturbance

62%

Down on CO<sub>2</sub>

62% Down on CO<sub>2</sub> emissions YoY (1.04kt CO<sub>2</sub>) in Namibia

0

Incidents

0 Reportable Environmental Incidents

100%

Compliance

100% Compliance with Laws and Regulations

16

Meetings

16 external stakeholder meetings focused on the environment



## Protecting nationally significant flora

Our approach to sustainable operations helps ensure the survival of the Quiver Tree (*Aloe dichotoma*), which is found on the eastern side of the Langer Heinrich Mine and is protected by Namibian Law. According to the International Convention on Trade in Endangered Species (CITES), the trees are a threatened species.

The tree takes its name from the fact that it was used by people for making quivers for their arrows. The Sociable Weaver, a bird endemic to Southern Africa, builds its nests in the tree. The Quiver Tree's yellow flowers attract bees during June and July, and its roots were historically used for asthma treatment.









# PALADIN

Clean energy. Clear future.

Level 8  
191 St Georges Terrace  
Perth WA 6000

+61 8 9423 8100  
[paladin@paladinenergy.com.au](mailto:paladin@paladinenergy.com.au)

[paladinenergy.com.au](http://paladinenergy.com.au)

PALADIN ENERGY LTD  
ABN 47 061 681 098  
ASX code: PDN  
OTCQX:PALAF