

ASX Announcement

11 October 2021



Senex releases Decarbonisation Action Plan to support growth and a cleaner energy future

Senex Energy Limited (Senex, ASX:SXY) has today announced the release of its Decarbonisation Action Plan that details its ambition to reduce greenhouse gas (GHG) emissions across its operational footprint to net zero by 2040, with transparent and bold near-term emissions intensity reduction targets.

Senex supports the objective of limiting the global temperature rise to well below two degrees Celsius and has defined its ambition, targets and actions over the short, medium and long term to reduce GHG emissions across the full value chain.

Managing Director and CEO Ian Davies said in a [video statement](#) that Senex is committed to supporting the global transition to a cleaner energy future and low-carbon economy.

“Natural gas is integral to meeting demand for reliable and affordable energy and we are focused on being the natural gas supplier of choice through the transition.

“We plan to expand our valuable natural gas business to deliver 60 PJe per year by year-end FY25 and, at the same time, materially reduce the carbon intensity of our operations and use our knowledge and technology to help our customers to do the same,” Mr Davies said.

Senex has adopted the following targets and ambition to reduce Scope 1, Scope 2 and Scope 3 Processing¹ GHG emissions that are within its direct influence:

30% FY25 TARGET	75% FY30 TARGET	NET ZERO 2040 AMBITION
30% reduction in GHG emissions intensity vs FY21 baseline	75% reduction in GHG emissions intensity vs FY21 baseline	Net zero operational GHG emissions using mitigation hierarchy

There are three pillars in Senex’s clear and simple approach to decarbonisation, underpinned by practical and achievable actions:

PILLARS	KEY ACTIONS AND INITIATIVES
1. Become the gas supplier of choice in the transition	Electrification of all new processing facilities from renewable sources Reducing flaring: 70% by FY25 and 100% by FY30; reducing fugitive emissions Executive remuneration linked to performance against climate-related targets
2. Actively decarbonise our value chain	Conduct a customer engagement program to identify and set customer-related Scope 3 GHG emission reduction targets in the next year
3. Invest in low-carbon growth	Allocate at least 5% of annual EBITDA to low-carbon investments; review annually Appointed an EGM to deliver on Senex’s decarbonisation ambition and targets Consider investment in credible Australian offsets for hard-to-abate emissions

¹ Scope 3 GHG emissions resulting from the processing and compression of Senex’s natural gas in third-party-owned gas processing facilities upstream of the gas sales point. Refer to Senex’s attached Decarbonisation Action Plan for further information.

Mr Davies said that efforts to decarbonise the global economy are likely to increase in urgency and that Senex was at the start of its journey.

“Decarbonising the energy system will require sustained and cooperative action across the entire energy sector.

“We are proud to be taking these first steps and are committed to reducing our emissions while meeting growing energy demand through increased low-carbon natural gas production.

“Our Decarbonisation Action Plan, including our ambition, targets and actions, will be regularly reviewed and we will reset our commitments accordingly.

“We will also report publicly and transparently on our progress,” Mr Davies said.

Transparency and assurance

We are committed to transparency in relation to our Decarbonisation Action Plan through public disclosures and regular reviews.

In developing this Decarbonisation Action Plan Senex sought expert advice. Senex engaged a globally recognised, specialist climate advisory and investment firm in order to understand its emissions profile, to understand best practice decarbonisation targets and strategies, to build capability within Senex, and to ensure its plan is meaningful, practical, achievable, and fit for purpose.

Environmental Accountants, Greenbase Pty Ltd, were engaged to review and validate data and verify Senex’s decarbonisation model (from which emissions calculations are derived). Greenbase concluded the decarbonisation model has been prepared with due care and, in its opinion, there were no material issues with the methodology, emission factors or emissions calculations.

EY was engaged to perform certain agreed upon procedures on the methodology and calculations applied to determine the emissions reduction pathway in this Decarbonisation Action Plan to 2030.

Disclaimer and important notice

This announcement is subject to the advice and information relating to “Forward looking statements” contained on page 25 of Senex’s “Decarbonisation Action Plan” dated 11 October 2021.

The Decarbonisation Action Plan can be viewed on the following pages.

View the video presentation by Managing Director and CEO Ian Davies [here](#).

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About Senex

Senex is an established, rapidly growing and low-carbon Australian natural gas producer. Our long-life Surat Basin assets contribute around 20 petajoules of natural gas per year into the east coast gas market to support our customers. Senex is focused on sustainably delivering balance sheet strength, resilient cashflows, growing dividends to support Australia’s energy needs as it transitions to a lower carbon future.



Decarbonisation Action Plan

Our ambition,
targets and actions
to deliver a cleaner
energy future

About Senex

Senex Energy Limited (Senex, ASX: SXY) is an established, rapidly growing Australian natural gas producer. Our long-life assets in the Surat and Bowen Basins contribute around 20 petajoules (PJ) of natural gas per year into the east coast gas market to support our customers. Senex is focused on sustainably delivering balance sheet strength, resilient cashflows and growing dividends to support Australia's energy needs as it transitions to a low-carbon future.

Our purpose

A growing and independent company, providing gas to improve lives and support the energy needs of Australia and the world

Our mission

We **protect** our people and the environment

We **build** quality relationships with our customers, partners and stakeholders

We **deliver** what we promise

We **attract** and retain talented people with drive and energy

We **create** value for our investors

Our values



Protecting our people and the environment



Striving for excellence



Integrity in everything we do



Winning together

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FRONT COVER:

A roadmap to delivering a cleaner energy future. Mount Saltbush Road about 30 minutes from Roma in Queensland's Surat Basin is travelled daily by the men and women working with Senex to deliver reliable and affordable natural gas.

Message from the Chairman and the Managing Director and Chief Executive Officer



Senex is committed to supporting the global transition to cleaner energy and a low-carbon economy.

It is what the world needs and what the Australian market requires. It is also what our investors, customers, employees, communities and regulators expect.

As we move to a low-carbon future, natural gas has an integral role to play in meeting demand for reliable and affordable energy.

Our natural gas is already helping industry and manufacturing to reduce greenhouse gas (GHG) emissions and we are committed to being the gas supplier of choice through the transition.

This Decarbonisation Action Plan outlines our ambition, targets and actions to reduce the direct and indirect GHG emissions across the full value chain, encompassing our suppliers, our operations and our customers.

Our ambition is to reduce GHG emissions across our operational footprint to net zero by 2040. It addresses Senex's Scope 1, Scope 2 and that portion of our Scope 3 GHG emissions resulting from the processing and compression of Senex's natural gas in third-party-owned gas processing facilities upstream of the gas sales point (Scope 3 Processing) within our direct influence. To achieve that, we have set targets to reduce emissions intensity by 30 per cent by FY25 and 75 per cent by FY30. This will also be achieved in the context of expanding our natural gas production to deliver our target of 60 PJe per year by year-end FY25.

As a customer-led business, we look forward to engaging with our customers to help them identify and set targets to accelerate their own decarbonisation journey in the next year.

We have created a dedicated Energy Solutions Team to deliver on our plan and appointed a new Executive General Manager to lead our transition, with at least 5 per cent of annual EBITDA to fund commercially viable, low-carbon investment opportunities. Further, we will consider investment in credible Australian offsets to address hard-to-abate emissions.

For the first time, executive remuneration will be linked to performance against climate objectives. For FY22, executives' at-risk short term incentive includes decarbonisation performance measures.

We acknowledge that we are at the start of our decarbonisation journey and we understand that the decarbonisation landscape is dynamic. We also acknowledge the need to balance our decarbonisation ambition with financial and economic realities.

Accordingly, we will regularly and transparently review this Decarbonisation Action Plan, including our ambition, targets and actions, and publicly disclose our performance.

Decarbonising the energy system will require sustained and cooperative action across our value chain and the entire sector.

We are committed to taking action now to deliver on our targets and ambition as we move towards a cleaner energy future.

TREVOR BOURNE
Chairman

IAN DAVIES
Managing Director and
Chief Executive Officer

Our position on climate change

The Board of Senex approved the following Climate Change Policy and has responsibility for reviewing its effectiveness annually.

Senex supports the objective of limiting global temperature rise to well below 2 degrees Celsius.

Our role is to provide access to affordable and reliable energy that contributes to economic growth in the context of sustainable development and a low-carbon future.

We believe that natural gas will continue to play an integral role in the energy mix within a low-carbon future.

Senex is committed to:

- identifying, assessing, managing and reporting material climate-related risks to create a sustainable business
- measuring and reporting Scope 1, 2 and 3 greenhouse gas emissions in a transparent manner
- setting and publishing meaningful short-term and long-term targets to encourage innovation and drive reductions in our greenhouse gas emissions
- identifying and pursuing greenhouse gas emission reduction opportunities for our business, operations and supply chain
- working with partners, customers, suppliers and other stakeholders towards the shared objectives of greenhouse gas emissions reductions
- evaluating the resilience of our portfolio and investment decisions to potential changes in policy, including the application of internal carbon pricing
- actively engaging in climate dialogue with governments, industry associations and other stakeholders in the design of practical, sustainable climate regulation and policies

First steps on a long journey

Senex has come a long way. From a junior oil and gas explorer in the 1980s, the business has grown rapidly over the past decade to be a leading natural gas producer increasing supply into the east coast domestic market.

In FY21, Senex sold its legacy oil assets in the Cooper Basin and delivered on bold plans to expand its natural gas portfolio in Queensland's Surat Basin to meet increasing energy demand.

Today, Senex aims to be the natural gas supplier of choice as we, our customers and society transition to a low-carbon future.

This Decarbonisation Action Plan outlines our ambition, targets and actions to materially reduce the emissions and emissions intensity of our operations over the short, medium and long term.

Our ambition is to achieve net zero greenhouse gas emissions from our operational footprint by 2040* and use our experience and technology to support our customers and suppliers to also reduce their emissions over time.

We are at the start of a journey to decarbonise our operations and influence our customers and suppliers to do the same.

We have taken these first steps because we understand that delivering cleaner energy will, in turn, deliver a sustainable and profitable business.

*When we say net zero greenhouse gas emissions, we refer to the Scope 1, Scope 2 and Scope 3 Processing emissions within our direct influence.

Our ambition, targets and actions

We acknowledge that the energy transition is accelerating and the decarbonisation landscape is dynamic.

Accordingly, Senex's ambition, targets and actions will be reviewed annually within our governance framework.

We will also regularly disclose progress against, and changes to, these measures.

Our ambition

2040
NET ZERO

Operational GHG emissions using mitigation hierarchy*

Our targets

FY25
30%

Reduction in GHG emissions intensity vs FY21 baseline*

FY30
75%

Reduction in GHG emissions intensity vs FY21 baseline*

Our actions



Electrification of all new processing facilities from renewable sources



70% reduction in flaring as a proportion of produced natural gas by FY25 and eliminating flaring by FY30



Annual executive remuneration linked to performance against climate targets



Work with customers and suppliers across the value chain to reduce their Scope 1 and 2 GHG emissions



Dedicated Energy Solutions Team with accountable Executive General Manager



At least 5% annual EBITDA allocated to new low-carbon investment opportunities

*Our net zero ambition for 2040 and targets for FY25 and FY30 address Senex's Scope 1, Scope 2 and Scope 3 Processing GHG emissions within our direct influence.

What is natural gas?

Natural gas is an abundant, naturally occurring hydrocarbon gas mixture consisting primarily of methane.

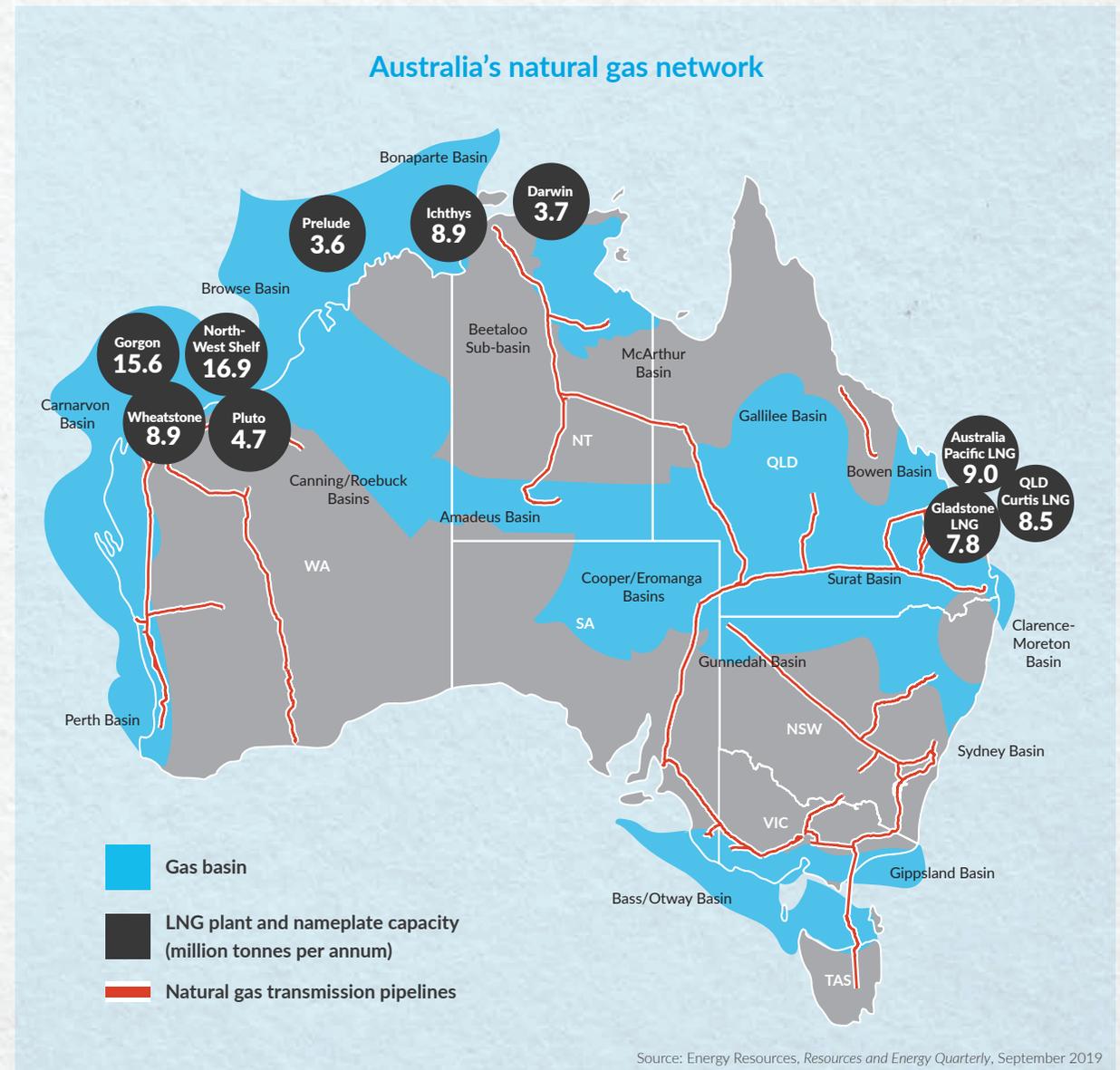
It is colourless and odourless and is found in various rock formations.

It is also the cleanest-burning hydrocarbon. When used for electricity generation, natural gas emits around half the greenhouse gas emissions of coal. Vehicles running on natural gas have 20 to 30 per cent lower greenhouse gas emissions than those running on petrol.

Australia's gas industry and our role

In 2019, Australia was the world's seventh largest gas producer and one of the largest exporters of liquefied natural gas (LNG).*

Senex's portfolio is comprised of 100 per cent natural gas assets in the Surat and Bowen Basins. The natural gas we produce is high-quality as it has less than 0.5 per cent by volume carbon dioxide (CO₂) content. Our low-carbon natural gas is able to be distributed via the east coast gas network to our customers without the need for high energy-intensive processes to remove CO₂ or other contaminants.



*BP Statistical Review of World Energy 2021



What is natural gas used for?

Natural gas is relied on globally as a versatile and efficient fuel.

It has been used extensively in Australia for more than 50 years and currently supplies 26 per cent of the nation's energy demand*.

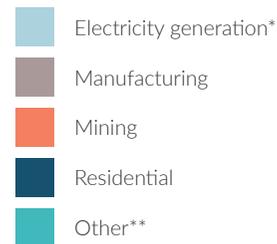
Australians rely on natural gas to:

- provide electricity
- heat their homes
- cook their meals
- manufacture everyday household products
- provide construction materials such as bricks and concrete
- fuel transport, including buses, trains, ships and trucks
- support mining and export industries

Natural gas is a reliable fuel for baseload power. It is a complementary partner to renewable energy sources such as solar and wind as we transition to a low-carbon future.

*Sourced from analysis of data from the Australian Department of the Environment and Energy *Australian Energy Update 2019*

Domestic gas use by sector for Australia's east coast



Source: Department of the Environment and Energy, *Australian Energy Statistics*, Table K, September 2019

*includes LNG plant electricity generation

**includes transport, gas supply, construction, agriculture, waste and other end uses

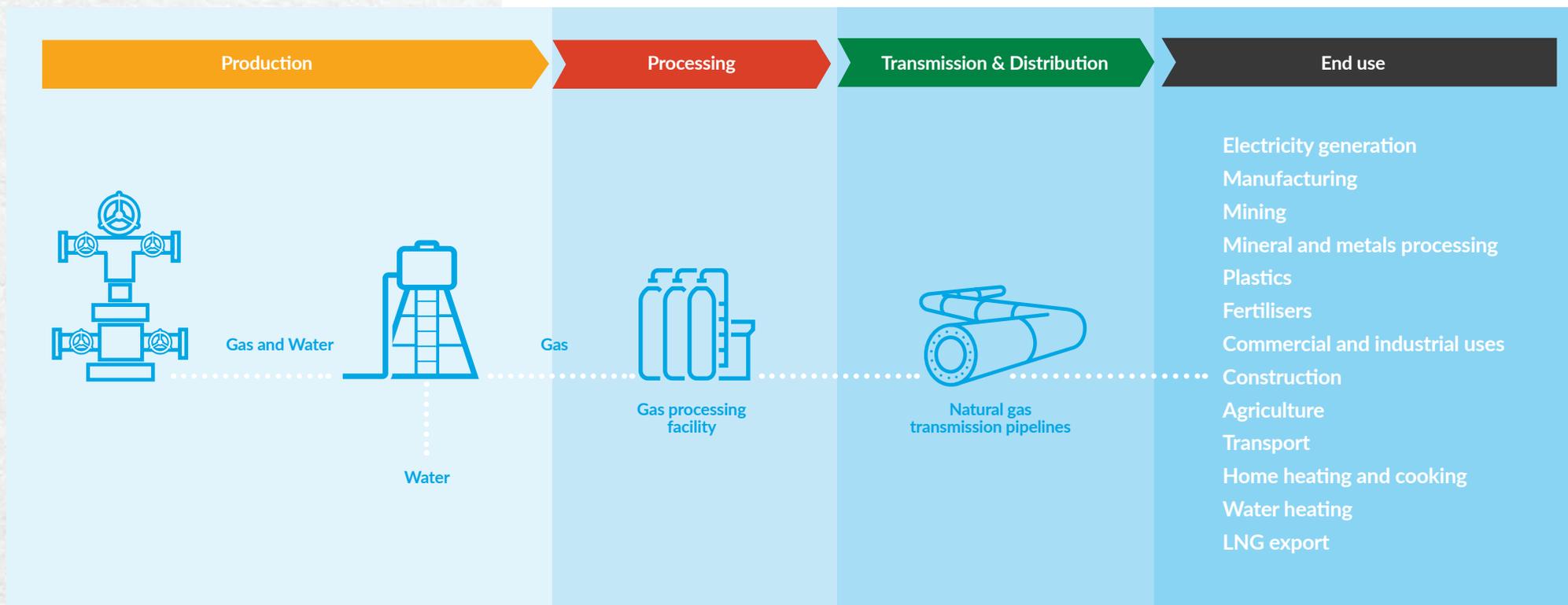


The natural gas value chain

Australia's natural gas value chain is playing an integral role in the transition to a low-carbon future.

Producers, including Senex, extract natural gas from wells and process it to prepare it for transmission and sale in domestic and overseas markets.

Natural gas producers are supplying domestic customers across a wide range of industries on the east coast. Australian gas is also exported globally as LNG, contributing materially to the national economy.



The role of natural gas in a low-carbon future

As we transition to a low-carbon economy, natural gas will continue to be an integral source of energy for industry, manufacturing, business and homes.

“Natural gas will be a part of Australia’s energy mix for many years to come.”

Alan Finkel, Special Adviser to the Australian Government on Low Emissions Technology

21 March 2021

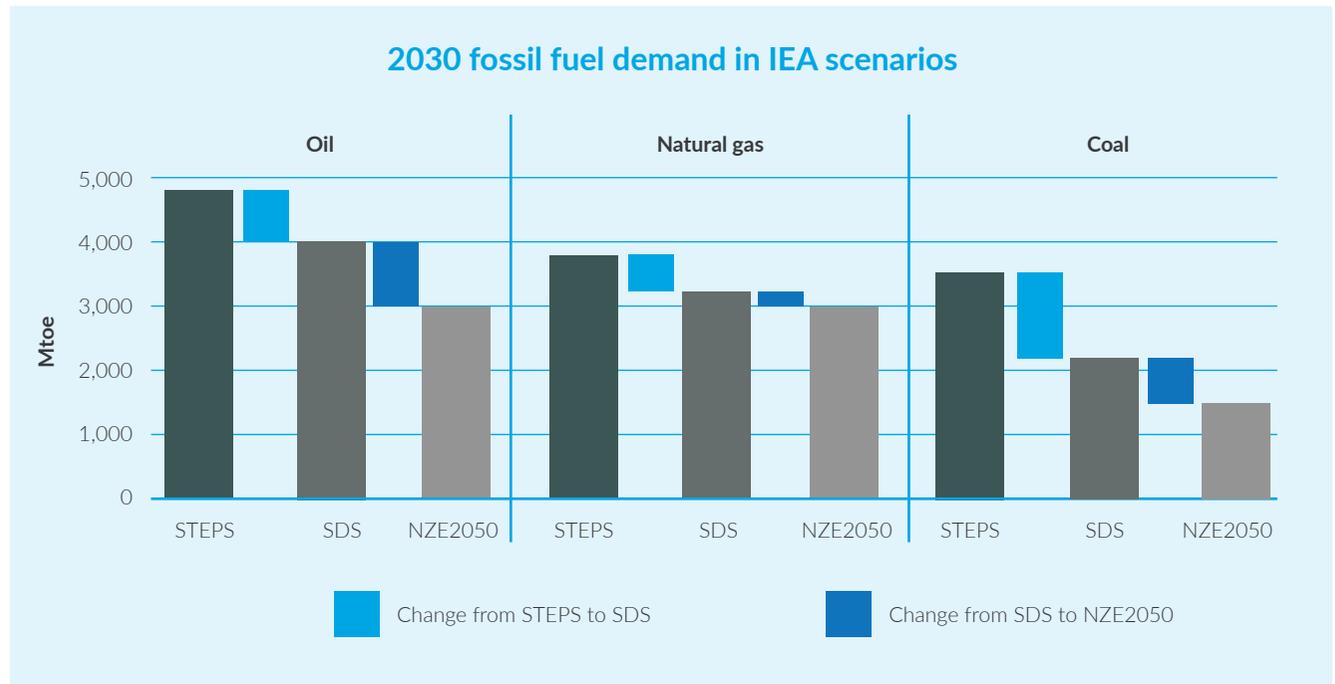
Decarbonising the energy system is a key part of mitigating climate change risks and will require sustained co-operation across the entire energy sector. Prominent net zero scenarios such as the International Energy Agency’s (IEA) Stated Policies Scenario (STEPS), Sustainable Development Scenario (SDS) and Net Zero Energy Scenario (NZE2050) recognise natural gas will continue to play an integral role in the energy mix as we transition to a low-carbon future. It is a lower emissions-intensive fuel source than coal and oil, complements intermittent renewable power and supports industrial processes that are difficult to electrify.

As a leading Australian natural gas producer, we are supporting these outcomes. Natural gas is our core business, with Senex focused on being the gas supplier of choice through the transition. We are committed to

decarbonising the value chain by actively exploring investments in broader energy solutions.

We already supply customers that are household names across eastern Australia, from leading cement manufacturer Adbri in South Australia to paper and packaging manufacturer Opal in New South Wales to resources company New Century Resources in Mount Isa. In Ipswich, CleanCo Queensland is using Senex’s natural gas to generate low-emission, reliable power for business customers right across the State’s south-east.

We are committed to reducing our operational carbon footprint, and supporting our customers in doing the same, by investing in a strong and resilient long-term portfolio with an increasing focus on sustainability and decarbonisation.



Source: IEA World Energy Outlook 2020, IEA Key World Energy Statistics 2019



Scope 1, 2 and 3 greenhouse gas emissions

In recent years, Senex has pursued both exploration for, and development of, oil and gas in the Cooper Basin, and the development of our natural gas assets in the Surat and Bowen Basins. These activities have meant that Senex's emissions profile from our operations has fluctuated markedly due to variations in exploration activity and the more recent commissioning of our Roma North and Atlas natural gas facilities in Queensland.

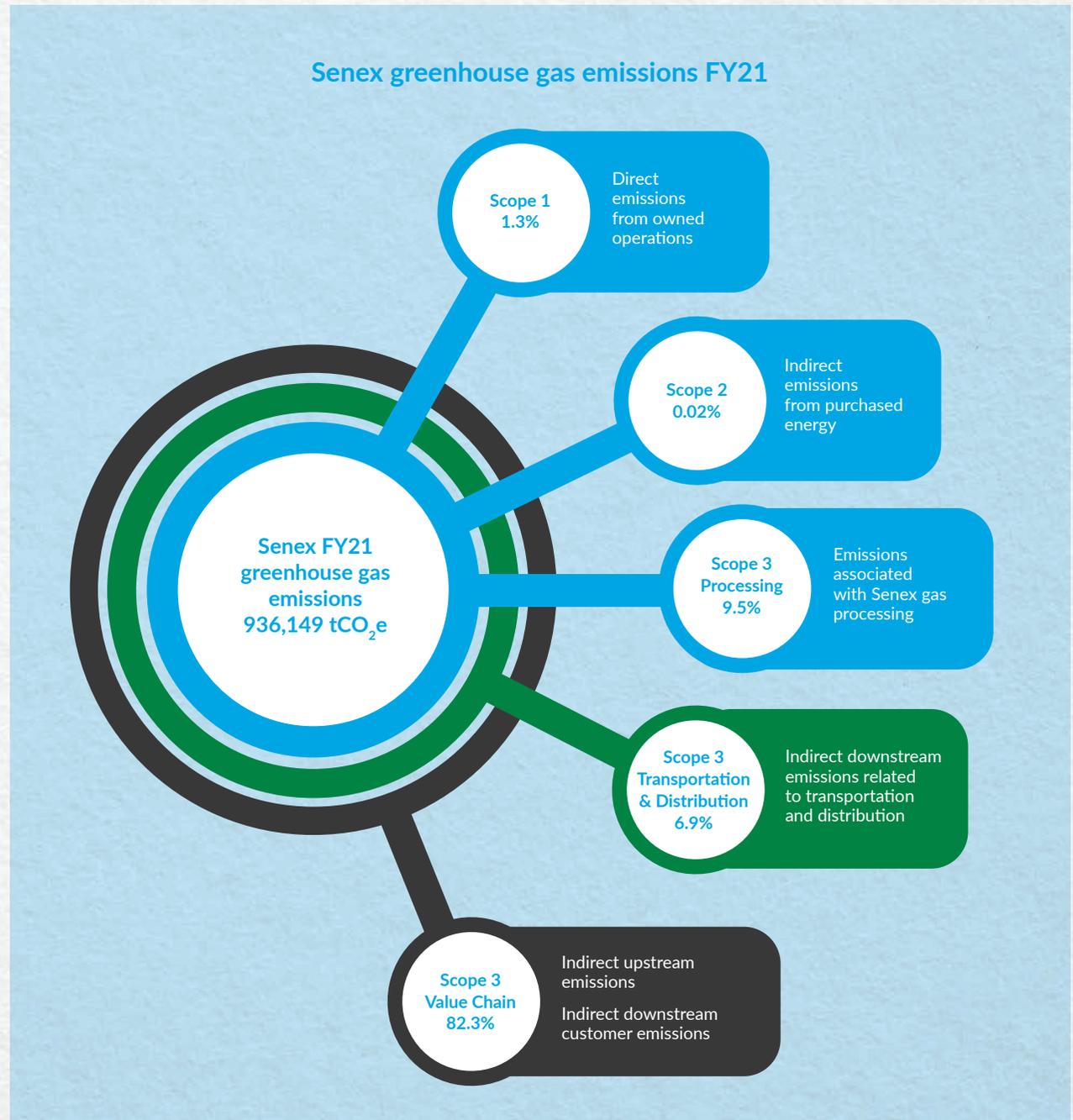
Accordingly, we have set FY21 as the baseline year for GHG emissions reduction targets and our longer-term ambition.

The graphic to the right illustrates our FY21 baseline GHG emissions, which totalled 936,149 tCO₂e.

The blue ring sets out the Scope 1, Scope 2 and Scope 3 Processing GHG emissions within our direct influence. Our quantitative ambition, targets and actions stated within this Decarbonisation Action Plan are principally focused on emissions within our direct influence.

The green ring represents indirect Scope 3 GHG emissions related to Senex's transportation and distribution.

The black ring represents the Scope 3 GHG emissions across the value chain, which includes customers and suppliers, for which Senex has limited influence.



Owning our emissions

Our Scope 1 and 2 GHG emissions accounted for less than 2 per cent of total value chain greenhouse gas emissions in FY21.

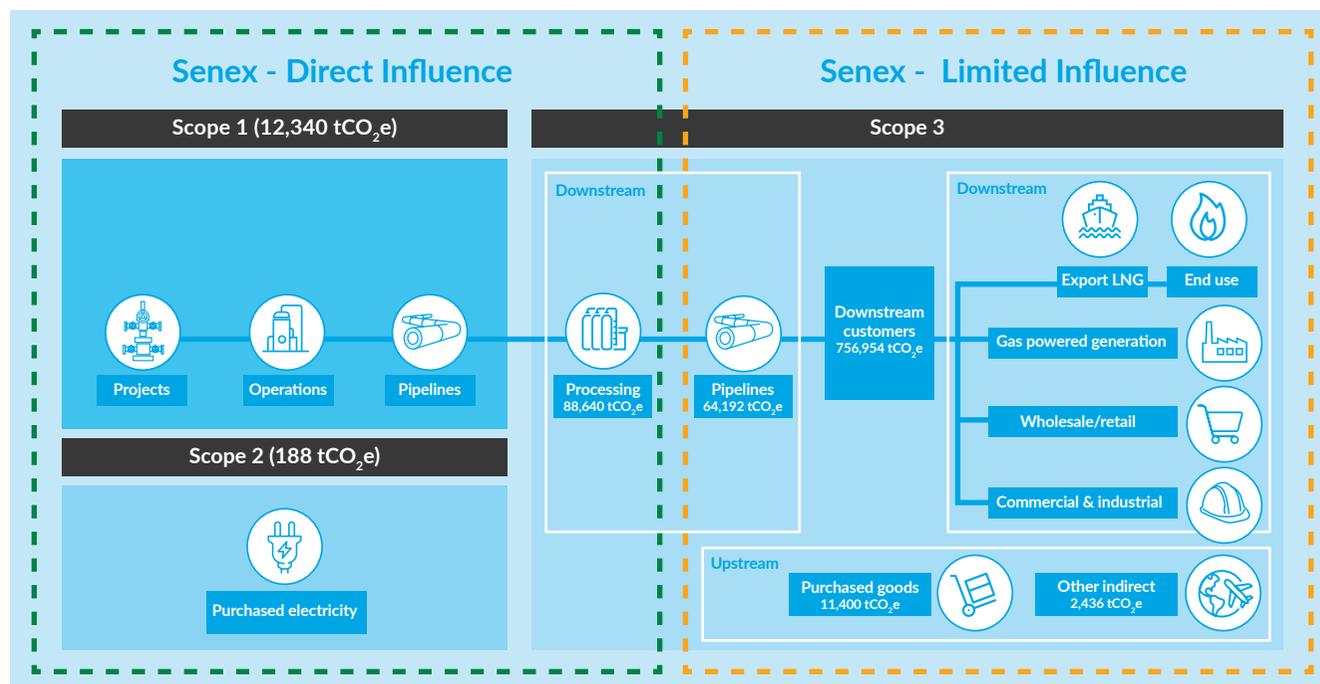
We report our total Scope 1 and 2 GHG emissions, energy produced, and energy consumed, under the *National Greenhouse and Energy Reporting Act 2009* (NGER). Our GHG emissions are independently audited each year.

We are not required to report Scope 3 emissions under NGER. However, we believe it is important to take responsibility for influencing emissions across the value chain and this year we have undertaken a detailed analysis to estimate Scope 3 GHG emissions for the first time.

Emissions associated with the processing of our natural gas account for 9.5 per cent of our GHG emissions. However, we do not have

operational control of, nor equity share in, the third-party owned facilities that process our natural gas at Roma North and Atlas. NGER categorises the emissions from these facilities as Scope 3 for Senex. As the mode of operation for these facilities has been dictated by Senex, we have elected to treat the emissions relating to these processing facilities as being part of Senex's operational emissions. We have set our emissions reduction targets and ambition on the basis that Senex is responsible for these emissions, as they would commonly be understood to be part of our operations.

Senex has limited influence over the vast majority of its emissions profile, with 82 per cent from Scope 3 emissions related to end-use and upstream activities.



Our approach to decarbonisation

Senex has undertaken climate scenario analysis and aligned its decarbonisation actions to the Task Force on Climate-Related Financial Disclosures (TCFD).

Our decarbonisation approach is practical and achievable and consistent with our values and reputation for delivering on our commitments.

To meet our customers' future energy needs and support their decarbonisation efforts, as well as our own, we have identified three key focus areas for the Senex business strategy:

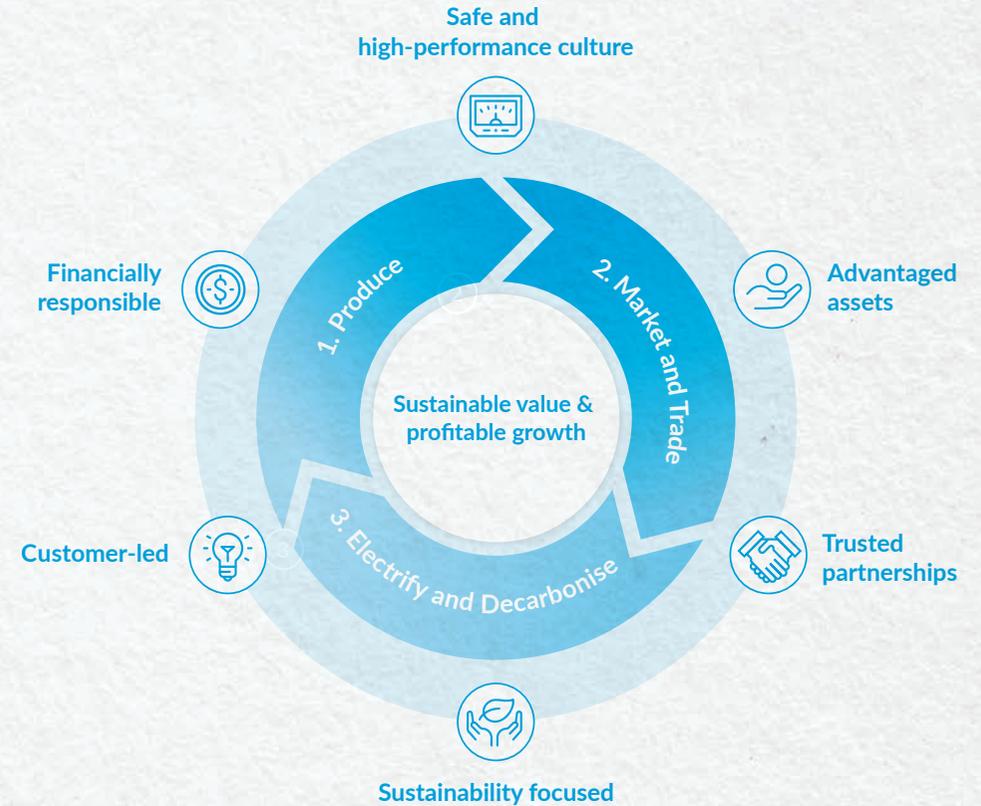
1. Produce: Safely deliver on our promise as a low-cost, low-carbon, high-growth natural gas producer. We will deliver our material production operations from highly valuable acreage in the Surat Basin and pursue development-ready expansions and future production opportunities to achieve our target of 60 PJe per year by end-FY25

2. Market and trade: Through focused and ambitious natural gas marketing and trading we will:

- support our customers' energy needs
- leverage our low-carbon portfolio
- expand our access to new customers and new markets
- manage our risks and pursue opportunities

3. Electrify and decarbonise: Electrification via renewable sources is the key to decarbonisation of the economy. We will make targeted efforts to electrify and decarbonise our own operations and partner with our customers to do the same

Senex recognises the world needs access to reliable, affordable, and sustainable energy delivered in cleaner ways. We believe natural gas is integral to society and the transition to a low-carbon future.



Mitigation hierarchy

We will apply a mitigation hierarchy which considers:

- direct and indirect emissions across the full value chain, encompassing our suppliers, our operations and customers
- current and emerging expectations of stakeholders, including investors, lenders, communities, employees, customers and regulators
- balancing our decarbonisation ambition with financial and economic realities

Best practice

- 1 Implement existing renewables and energy efficiency technologies **Decarbonise**
- 2 Invest in developing innovative decarbonisation technologies **Innovate**
- 3 Invest in credible Australian offsets to address hard to abate emissions **Offset**

Our path to net zero

There are three pillars in our clear and simple approach to decarbonisation.

Natural gas will continue to be an integral source of energy as we transition to a low-carbon economy.

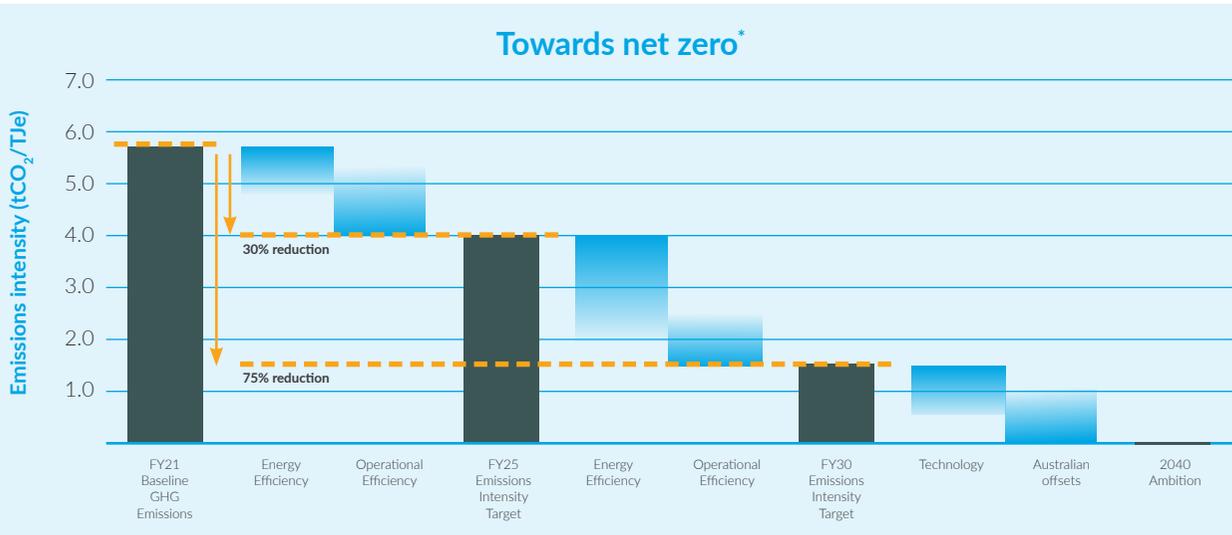
Senex has an ambition to grow its portfolio to 60 PJe per year by year end-FY25.

While our 2040 ambition is for net zero emissions, our targets for FY25 and FY30 are based on emissions intensity.

We have identified significant opportunities to reduce the emissions intensity of our operations and this is our initial focus.

To achieve our 2040 ambition, we will seek to use available technology to reduce our emissions and use credible Australian offsets where other options to decarbonise have been exhausted or are not commercially viable.

PILLAR 1 Become the gas supplier of choice	30% reduction in GHG emissions intensity by FY25 (target)
	75% reduction in GHG emissions intensity by FY30 (target)
	Net zero GHG emissions by 2040 across Scope 1, 2 and Scope 3 Processing emissions using a mitigation hierarchy (ambition)
	Focus on reductions in operational GHG emissions, such as eliminating flaring, reducing fugitive emissions and the electrification of facilities
PILLAR 2 Actively decarbonise our value chain	Conduct a customer engagement program and aim to announce customer-related Scope 3 targets in the next year
PILLAR 3 Invest in low-carbon growth	Appoint a new member of our Executive Committee to lead a dedicated Energy Solutions team to identify and fund low-carbon investment opportunities
	Allocate at least 5% of EBITDA per year to low-carbon investments and review annually
	Consider investment in credible Australian offsets to address any hard-to-abate emissions



*Our net zero ambition for 2040 and targets for FY25 and FY30 address Senex's Scope 1, Scope 2 and Scope 3 Processing GHG emissions within our direct influence. Reductions for individual initiatives are indicative only at this time

Pillar 1: Become the gas supplier of choice

Meeting Australia's growing need for sustainable energy forms a central part of Senex's ambition to become the natural gas supplier of choice. This means reducing greenhouse gas emissions and identifying efficiencies across every aspect of our operations, from exploration to production, to processing and distribution.

In the short to medium term our initiatives include:

- Electrification of new and existing facilities
- The reduction and elimination of flaring
- Recovery of methane from the water gathering system
- Recovery of methane from produced water

Senex has set GHG emission reduction targets for FY25 and FY30 to be achieved from energy efficiency initiatives and operational efficiency measures.

However, we acknowledge that achieving our net zero 2040 ambition is dependent on several enablers, including the commerciality of future technology and the availability of affordable and reliable renewable energy and the development of credible Australian offsets.

Roma North renewable energy hub

In our first material decarbonisation investment, we plan to construct a renewable energy hub as part of a multi-staged expansion at Roma North.

The initial project includes the installation of a high efficiency power station that will reduce fuel consumption by more than 20 per cent. The second phase of the project will be the connection of the facility to the electricity grid, allowing the purchase of green power, and the exporting of electricity from Roma North. Senex is investigating both behind-the-meter and export-capable options for solar and other renewable power generation at Roma North.

Senex's dedicated Energy Solutions Team, headed by a member of our Executive Committee, will be responsible for applying proven technologies and investigating low-carbon investment opportunities for the energy hub. Learn more about our low-carbon investment commitment on page 18.

30% FY25 TARGET

30% reduction in GHG emissions intensity vs FY21 baseline

(Scope 1, 2 and 3 Processing)

75% FY30 TARGET

75% reduction in GHG emissions intensity vs FY21 baseline

(Scope 1, 2 and 3 Processing)

NET ZERO 2040 AMBITION

Net zero operational GHG emissions using mitigation hierarchy

(Scope 1, 2 and 3 Processing)



“Decarbonising our direct operations makes sense both economically and environmentally. It demonstrates to our people, partners, investors and communities that we care about minimising our impacts and we value efficiency.”

Ian Davies
Managing Director and CEO Senex Energy

Pillar 2: Actively decarbonise our value chain

We are proudly a customer-led business and we understand many of our customers, suppliers and energy users are committed, like us, to decarbonisation.

More than 80 per cent of our total GHG emissions are Scope 3, over which Senex has limited influence.

Despite that, we are committed to not just decarbonising our operations but using the knowledge and expertise we develop to help our customers and suppliers achieve their targets and ambitions.

The Scope 1 and Scope 2 GHG emissions of our customers and suppliers are our Scope 3 GHG emissions.

To actively decarbonise our value chain we are investing in low-carbon growth (see page 18), positioning us to provide carbon neutral or low-emission energy products to assist our customers with their decarbonisation plans.

We believe we will strengthen the resilience of our business by actively working with our customers.

We will make deliberate decisions in respect to our current and future customer base by understanding sector demand for both existing and new energy products.

Further, we will conduct a customer engagement program and plan to announce customer-related Scope 3 targets next year.

We are also committed to assessing the emissions of our upstream activities such as the goods and services we purchase and business travel, to map a pathway for emission reductions.

Natural gas is powering manufacturers like Adbri who produce the building blocks of everyday life.



“We are pleased to execute this long-term agreement that helps underpin our low-cost and low-carbon cement manufacturing operations in South Australia, whilst also supporting the economy and local jobs. I commend the Senex team for its responsive, flexible and open approach to meeting our energy needs.”

Nick Miller
CEO, Adbri Limited
July 2021

“Facilities like this are only viable if we can source reliable and affordable energy. It’s one of the major inputs to the facility.”

Dan Czubala
Chief Operating Officer of Southern Oil Refinery
September 2020



Gladstone MP and Queensland Regional Development and Manufacturing Minister Glenn Butcher, left, with Dan Czubala, explains how natural gas is being used to power the refining process.

Pillar 3: Invest in low-carbon growth

Our commitment to change goes beyond setting an ambition and targets. It includes clear accountabilities for oversight and delivery as well as allocation of capital for investing in the cleaner energy future.

Dedicated Energy Solutions Team

One of our great strengths is our people and achieving what we promise. To deliver on our Decarbonisation Action Plan we are investing in our Senex team.

We have created a dedicated Energy Solutions Team and have appointed a new Executive General Manager to lead our business, our customers and our partners on a pathway to net zero.

Our new EGM Energy Solutions, Ben Lacey, has more than 25 years of senior energy market commercial and leadership experience, including in domestic gas and power supply as well as the development of renewable energy supplies.

Together he and the Energy Solutions Team will seek out opportunities to decarbonise our operations, support our customers and identify commercially viable investments to support us on our transition to a low-carbon future.

Investment commitment

At least 5 per cent of our annual EBITDA will be allocated to identify and fund commercially viable, low-carbon investment opportunities as well as investments in credible Australian offsets to address hard-to-abate emissions.

In time, we expect this will develop into a commitment in relation to total capital expenditure being directed towards low-carbon investments.

Investments in decarbonisation will be subject to our overall investment decision processes and to meeting economic investment thresholds providing for an adequate financial return.



Transparency

We are committed to transparency in relation to our Decarbonisation Action Plan through public disclosures and regular reviews.

Public disclosure	We will report publicly on our progress against this Plan in a timely way and regularly in our sustainability report.
Review and reset	We will progressively review our policies, ambition, targets and actions. In addition, we will track our implementation against what we have said in this Plan and reset our commitments accordingly.
Developing our targets	We recognise that decarbonisation is an evolving policy area and that Senex is commencing its decarbonisation journey. Accordingly, when we review our ambition, targets and actions, we will carefully consider changes in the macro environment, public policy, regulations, expectations around sustainability and our progress with implementation. Over time, we expect to further develop our targets and convert our ambition into new targets.
Executive remuneration	Our executive remuneration will include a meaningful component linked to decarbonisation and these measures will be set annually. How we perform against those measures will be reported as part of our annual remuneration reporting.

External support and assurance

Targets and Ambition

In developing this Decarbonisation Action Plan Senex sought expert advice. We engaged, and have been working with, a globally recognised, specialist climate advisory and investment firm in order to understand our emissions profile, to ensure we understand best practice decarbonisation targets and strategies, to build capability within Senex, and to ensure our plan is meaningful, practical, achievable, and fit for purpose.

Assurance

Environmental Accountants, Greenbase Pty Ltd, were engaged to review and validate data and verify our decarbonisation model (from which we derive our emissions calculations). Greenbase concluded the decarbonisation model has been prepared with due care and, in its opinion, there were no material issues with the methodology, emission factors or emission calculated.

EY was engaged to perform certain agreed upon procedures on the methodology and calculations applied to determine the emissions reduction pathway in this Decarbonisation Action Plan to 2030.



Governance

Our Decarbonisation Action Plan is underpinned by a robust governance framework that considers climate-related risks and ensures accountability.

Accountability

The Board oversees all sustainability matters, including climate-related risks and opportunities, with assistance from Board committees. Decarbonisation topics are a regular focus at Board and committee meetings, with day-to-day accountability delegated to executives including the Managing Director and CEO and Executive General Managers.

Review

Senex will review this Decarbonisation Action Plan regularly (and at least annually) in light of performance against the Plan, changes in the external environment and any need to further inform the market.

We expect the definitions, reporting customs, regulations, standards etc to change over time, and our approach is likely to also change over time in response. Our reviews will incorporate the evolving expectations of stakeholders, including investors, lenders, communities, employees, customers and regulators.

Executive remuneration

Remuneration plays an important role in motivating executives to deliver sustainable value and profitable growth. To align our long-term climate transition business strategy with the interests of our stakeholders, we have introduced a decarbonisation measure into executive incentive plans.

Investment decisions

Our Investment Committee considers climate-related risks when making investment decisions, ensuring our investment decisions align with our business strategy (which includes our decarbonisation ambition and targets) and stand up against a range of potential future scenarios. This includes testing against possible carbon prices.

In 2021, Senex stress tested the value of our portfolio against International Energy Agency's (IEA) World Energy Outlook scenarios, including the impact of the Paris Agreement goal of less than 2 degrees Celsius carbon reduction. Our analysis demonstrates that our natural gas portfolio will support the transition to lower emissions and ensure the resilience of our business in a low-carbon world.

Risk management

Climate-related risks and opportunities are identified, assessed and managed using the Senex Risk Management Framework. Material business risks are presented to the Board through quarterly updates and published in our annual report. In our FY21 report, we acknowledge that climate change and the management of carbon emissions may lead to increasing regulation and costs. Accordingly, we have committed to decarbonise our operations over time and support our customers and suppliers to do the same as we move to a low-carbon future.

More information about our Corporate Governance, including statements, charters and policies, can be found at www.senexenergy.com.au/about/corporate-governance/

Greenhouse gas emissions

Emissions and energy are reported on an Australian financial year basis in accordance with the *National Greenhouse and Energy Report Act, 2007*. Assessment of Senex Scope 1, 2 and 3 greenhouse gas emissions was conducted by Greenbase.

Senex has taken an operational influence approach to the measurement of greenhouse gas emissions. This means we account for 100 per cent of Scope 1 and 2 emissions from operations over which Senex has direct influence. Similarly, we report Scope 3 emissions on a 100 per cent basis.

GREENHOUSE GAS (GHG) EMISSIONS	2018	2019	2020	2021
GHG emissions by Scope (tCO₂e)				
Scope 1 - Direct	22,513	22,380	27,356	12,340
Scope 2 - Indirect	224	165	173	188
Scope 3 - Processing	3,190	9,818	26,712	88,640
Scope 3 - Upstream	20,298	30,884	17,516	13,835
Scope 3 - Downstream Transportation and Distribution	1,860	6,045	23,199	64,192
Scope 3 - Use of Sold Products	23,632	78,282	303,030	756,954
Total GHG emissions (Scope 1, 2, 3) (tCO₂e)	71,718	147,573	397,986	936,149

GHG emissions - Senex - Direct Influence (tCO₂e)				
Scope 1 - Direct	22,513	22,380	27,356	12,340
Scope 2 - Indirect	224	165	173	188
Scope 3 - Processing	3,190	9,818	26,712	88,640
Total GHG emissions (Scope 1, 2, Scope 3 Processing) (tCO₂e)	25,927	32,363	54,241	101,168

Scope 1 GHG emissions composition (tCO₂e)				
Methane	404	1,376	708	895
Carbon Dioxide	22,053	20,925	26,558	11,437
Nitrous Oxide	56	79	90	8
Total Scope 1 GHG emissions (tCO₂e)	22,513	22,380	27,356	12,340

GHG emissions intensity - Senex - Direct Influence (tCO₂e/TJe) Produced)				
Production (TJe)	7,379	10,094	14,588	17,297
Total GHG emissions (Scope 1, 2, Scope 3 Processing) (tCO ₂ e)	25,927	32,363	54,241	101,168
Scope 1, 2, Scope 3 Processing emissions intensity (tCO₂e/TJe) Produced)	3.51	3.21	3.72	5.85

Scope 1 & Scope 2 data is consistent with NGER reporting by Senex
 Scope 1 & Scope 2 data includes Surat and Cooper Basin emissions for 2018, 2019 & 2020; Surat only for 2021 (Cooper assets sold, effective June 30 2020)
 Scope 3 data relates to Surat assets only
 May not add due to rounding

Glossary

Term	Definition and/or usage
Ambition	An outcome that we aspire to and will seek to achieve in relation to which we have identified one or more pathways that we expect will deliver the outcome, subject to establishing details as opportunities, technologies and markets evolve
CO₂ equivalent (CO₂e)	The universal unit of measurement to indicate the global warming potential of each greenhouse gas, expressed in terms of the one unit of carbon dioxide. It is used to evaluate releasing (or avoiding releasing) different greenhouse gases against a common basis
Cooper Basin	The sedimentary geological basin of upper Carboniferous to middle Triassic age in north-east South Australia and south-west Queensland
Decarbonisation	Reducing or removing the amount of carbon emitted into the atmosphere
Direct emissions	Emission from sources that are owned or controlled by the reporting company
Direct influence	Activities where a party has either operational control or operational influence
Downstream emissions	Scope 3 greenhouse gas emissions that are a consequence of the activities of Senex but occur at sources owned by another entity (ie. downstream transportation and distribution, processing of sold products, use of sold products)
EBITDA	Earnings before interest, taxes, depreciation (or depletion) and amortisation
Electrification	The process of making a machine or system operate using electricity when it did not before. In Senex's case, converting the processing facilities from gas powered to be electrically powered
Emission intensity	A factor that converts activity data into greenhouse gas emissions data (e.g. tCO ₂ e emitted per TJ of natural gas produced or sold)
Emissions	Refers to greenhouse gas emissions unless otherwise stated
Flaring	A process to release gas by burning the methane in specially designed flares within infrastructure. Flaring converts methane to carbon dioxide, which is a less potent greenhouse gas than methane
Fugitive emissions	Emissions that are not physically controlled but result from the intentional or unintentional release of greenhouse gases
FY	Financial year
Greenhouse gas (GHG)	Any gas that absorbs infrared radiation in the atmosphere. Greenhouse gases include, but are not limited to, water vapor, carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O), hydrochlorofluorocarbons (HCFCs), ozone (O ₃), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF ₆)
Hydrocarbon	Hydrocarbons are particles made of hydrogen and carbon atoms

Term	Definition and/or usage
IEA	International Energy Agency
Limited influence	Activities where Senex has a direct or indirect commercial relationship with a third party (such as a customer or supplier), but Senex's ability to influence the actions of that third party are limited as it is an arm's length relationship
LNG	Liquefied natural gas, which is natural gas that has been liquefied by refrigeration for storage or transportation
Low-carbon natural gas	Natural gas or coal seam gas with greater than 98 mol% methane (CH ₄) and less than 0.5 mol% carbon dioxide (CO ₂) content
Methane	A colourless, odourless flammable gas which is the main constituent of natural gas. It is the simplest member of the alkane series of hydrocarbons
Mitigation hierarchy	Hierarchy by which actions to decarbonise are determined with highest priority being technology and science-based solutions, and offsets only being utilised where other options to decarbonise have been exhausted or are not yet commercially available
Natural gas	Natural gas is a fossil energy source that is formed deep beneath the earth's surface. Natural gas contains many different components including methane and nonhydrocarbon gases, such as carbon dioxide and water vapor. In some basins, natural gas also contains smaller amounts of natural gas liquids (NGL, which are also hydrocarbon gas liquids)
Net zero	In relation to Senex, net zero refers to achieving an overall balance between greenhouse gas emissions produced and greenhouse gas emissions taken out of the atmosphere, in respect of its Scope 1, Scope 2 and Scope 3 Processing emissions including the use of carbon offsets as required, when other options to decarbonise have been exhausted or are not yet commercially available
Offset or carbon offset	A unit representing an emission reduction or removal of greenhouse gases. These units are issued by regulated and voluntary carbon crediting programs and are uniquely serialized, issued, tracked, and cancelled by means of electronic registries. 'Carbon offset' is often used interchangeably with 'carbon credit'
Operational control	Where a party has the authority to introduce and implement operating policies, health and safety policies and environmental policies in respect of a facility or operation
Operational influence	Where a party has a commercial arrangement with a third party who has operational control in respect of a facility or operation, and who has influence over the operations undertaken by that third party
PJ	Petajoules
PJe	Petajoules equivalent

Term	Definition and/or usage
Produced water	Water that is brought to surface during operations which extract coal seam gas from underground coal seams
Scope 1	Scope 1 greenhouse gas emissions are direct emissions from operated assets that are owned and/or controlled by Senex
Scope 2	Scope 2 greenhouse gas emissions are indirect emissions from the generation of purchased or acquired electricity, that is consumed by operations that are owned or controlled by Senex
Scope 3	Scope 3 greenhouse gas emissions are all other indirect emissions (not included in Scope 2) that occur in Senex's value chain, primarily emissions resulting from our customers using the fossil fuel commodities and processing the non-fossil fuel commodities we sell, as well as upstream emissions associated with the extraction, production and transportation of the goods, services, fuels and energy we purchase for use at our operations and emissions resulting from the transportation and distribution of our products
Scope 3 Processing	Scope 3 GHG emissions resulting from the processing and compression of Senex's natural gas in third-party-owned gas processing facilities upstream of the gas sales point
Senex	Senex Energy Limited and its subsidiaries
Surat Basin	The sedimentary geological basin of Jurassic to Cretaceous age in southern Queensland and northern New South Wales
Target	An intended outcome in relation to which we have identified one or more pathways for delivery of that outcome, subject to certain assumptions or conditions
Third party	Third party is an individual or entity that is involved in a transaction but is not one of the principals
TJe	Terajoules equivalent
Upstream emissions	Scope 3 greenhouse gas emissions that are a consequence of the activities of Senex but occur at sources owned by another entity that feed into the Senex Operations (ie. purchase of goods and services, capital goods, fuel and energy related activities, upstream transportation and distribution, waste generated in operations, business travel)
Value chain	Refers to all of the upstream and downstream activities associated with the operations of the reporting company, including the use of sold products by consumers and the end-of-life treatment of sold products after consumer use
Venting	The process that relieves pressure in the system, releasing gas
Workover	The repair of an existing production well using a well servicing rig for the purpose of restoring production of hydrocarbons

Forward looking statements

This Decarbonisation Action Plan ("Plan") contains certain forward looking statements, which can be identified by the use of forward looking terminology such as "plan", "target", "ambition", "may", "expect", "intend", "anticipate", "estimate", "assume", "project" or "forecast" or comparable terminology.

Forward looking statements in this Plan:

- are based on management's current expectations and reflect judgments, assumptions, estimates and other the information available when this Plan was compiled or scenario analysis were undertaken; and whilst we think the expectations reflected in these statements are reasonable, they may be affected by a range of variables which could cause actual results to differ from what was planned or expected; including but not limited to production levels, gas composition, development progress, operating results, physical risks, regulatory developments, economic and financial conditions, technology development and availability and cost estimates;
- are subject to risk factors associated with the gas industry and decarbonisation technologies and potentially carbon products and markets and the inherent limitations that are associated with scenario analysis (namely, that it is difficult to predict what might actually eventuate, and scenarios may be impacted by additional factors to the assumptions disclosed);
- involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance, achievements and outcomes to be materially different from the forward-looking statements contained in this Plan (including things such as availability of technology or the cost of technology or other emission reduction proposals);
- should be read in the context of the variables, risks, uncertainties and other factors outlined above or mentioned in the Plan.

Accordingly, this Plan should not be relied upon as a recommendation, forecast or guarantee by or expectation of Senex, its related or

controlled entities or officers, directors, employees or agents (Senex entities), and the Senex entities disclaim any liability whatsoever (including for negligence) for any loss howsoever arising from any use of this Plan or reliance on anything contained in or omitted from it or otherwise arising in connection with this. The Senex entities further disclaim any duty or undertaking, except to the extent we have separately committed to in this Plan or as required by law or the Listing Rules of the Australian Securities Exchange, to release publicly any updates to any forward looking statement in this Plan to reflect changes to relevant risks, uncertainties or other factors, and/or the Senex entities' understanding of them.

Measurement of data

Due to the inherent uncertainty and limitations in measuring GHG Emissions and the differences in calculation methodologies used in respect of Emissions data, all GHG Emissions data or volumes in this Plan by their nature are estimates. There may be differences in how third parties calculate or report GHG Emissions data compared to the methodology Senex uses, which means that third party data may not be comparable to our data.

No offer of securities

Nothing in this Plan should be construed as either an offer or a solicitation of an offer to buy or sell Senex securities or be treated or relied upon as a recommendation or advice by Senex.

Third party information

The views expressed in this Plan also contain information that has been derived from publicly available sources that have not been independently verified; for example, forecasts from the International Energy Agency were utilised in the development of the climate scenario analysis that helped shape the Plan. No representation or warranty is made as to the accuracy, completeness or reliability of information of that kind.

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