REACHING CLIMATE GOALS
WITH NATURAL GAS AND LNG

Through bold steps and technological innovation, natural gas and LNG are working to enable a clean energy future for all. **THIS IS WHAT THE PATH FORWARD LOOKS LIKE, DECADE BY DECADE.**

THE 2020s

PLEDGING TO LIMIT EMISSIONS.

- ConocoPhillips targets **35-45% reduction** in operated GHG emissions intensity **by 2030.**[1]
- Equinor's global operation aims to be **carbon neutral by 2030**[2] and **near zero methane intensity by 2030.**[3]
- ExxonMobil plans to **reduce operated upstream emissions by 30%** as well as flaring and methane emissions by **40-50% by 2025.**[4]
- bp **targets 30-35%** reduction in operated GHG emissions on an absolute basis **by 2030.**[5]
- Chevron targets a **26% reduction** in emissions intensity of upstream production **by 2028.**
- Shell targets **20% reduction** in carbon intensity **by 2030.**

PLEDGING TO ELIMINATE ROUTINE FLARING.

- NGSA members have pledged to **eliminate routine flaring, as defined by the World Bank,**[6] **by 2030.**[7,8,9,10,11]
- bp aims for **zero routine flaring** in US onshore operations **by 2025.**[12]
- ConocoPhillips has an ambition to **reach zero routine flaring by 2025.**

IMPROVING OUR ABILITY TO RESPOND TO AND REDUCE EMISSIONS WITH DRONES, INFRARED CAMERAS AND REAL-TIME MONITORING.[13,14,15]

- Shell expands drone use to enhance their existing **methane leak detection and repair** program.[16]
- ExxonMobil expands the use of aerial LiDAR™ imaging[17] and SOOFIE[18] fixed continuous **methane detection technologies.**
- bp aims to **install methane measurement** at all existing major oil and gas processing sites globally **by 2023.**[19]

INVESTING BILLIONS IN RENEWABLE TECHNOLOGIES AND LOW-CARBON SOLUTIONS.

- bp invested **$750 million in 2020**[20] and aims to increase its **annual low-carbon investment** to around **$5 billion per year by 2030.**[21]
- Equinor commits to increasing its share of gross capital **expenditures for renewables and low-carbon solutions** to more than **50% by 2030.**[22]

INCREASING RESEARCH INTO AND BEGINNING TO UTILIZE CARBON CAPTURE USE AND SEQUESTRATION TECHNOLOGIES.

- Equinor's ambition is **5 to 10 million tons of CO_2 storage** per year **by 2030.**
- **Carbon injection and storage began in 2019** at Chevron's Gorgon Project.[23]

CARBON NEUTRAL LNG CARGOES HIT THE MARKET.[24]

ESG-BASED CERTIFICATION PROGRAMS FOR NATURAL GAS BEGIN.

- ExxonMobil pursues **certification of natural gas in the Permian Basin** and evaluates potential expansion to other areas.[25]

THE 2030s

ONGOING INVESTMENTS IN RENEWABLES AND LOW-CARBON SOLUTIONS REAP REWARDS.

- Shell expects to provide enough **renewable electricity for 50 million homes and reduce its carbon intensity by 45%.**[26]
- Through Chevron's partnership with the Getting to Zero Coalition, commercially viable **deep-sea zero-emissions vessels** are expected to be in operation.[27]
- bp aims to grow its net renewable generating capacity from **2.5GW in 2019** to **20GW by 2025** and to around **50GW by 2030.**[28]

CCUS TECH TAKES HOLD AND HELPS REDUCE U.S. EMISSIONS.

- ExxonMobil's CCUS Hub in Houston expects to capture and store **100MMT of CO_2 a year by 2040.**[29]
- Shell is seeking access to an additional **25 million tonnes/year of CCS capacity by 2035**—equal to 25 CCS facilities.[30]

THE 2040s

EFFICIENCY AND EMISSIONS INTENSITY REDUCTIONS IN OIL AND NATURAL GAS ARE EXPECTED TO SUPPORT A NEARLY 45% DECLINE IN CARBON INTENSITY OF THE GLOBAL ECONOMY.[31]

CREATING HYDROGEN FROM NATURAL GAS HELPS DECARBONIZE ENERGY-INTENSIVE INDUSTRIES.[32]

- bp expects **hydrogen** to have more than a **15% share** in total global energy consumption **by 2050.**[33]
- Equinor's ambition is to have **3-5 major industrial H_2 clusters** developed worldwide **by 2035.**

REDUCTIONS IN GHG EMISSIONS AND CARBON INTENSITY HELP THE WORLD ACHIEVE A CLEANER FUTURE.

- bp pledges to **cut the carbon intensity** of its products by **50% by 2050**—and its scope 1, 2 and 3 emissions to be at **net-zero by 2050 or sooner.**[34]
- ConocoPhillips sets an ambition to become a **net-zero company for operational emissions by 2050.**[35]
- Equinor continues commitment to become a **net-zero energy company by 2050**—a net carbon intensity **reduction of 100%.**[36]
- Shell aims to **reduce its carbon intensity by 100% by 2050.**

DESTINATION: 2050

AMBITION OF NET ZERO EMISSIONS.[37,38,39,40,41,42]

NGSA
Natural Gas Supply Association