Private Equity, Divergent Demand Forecasts and the Energy Transition

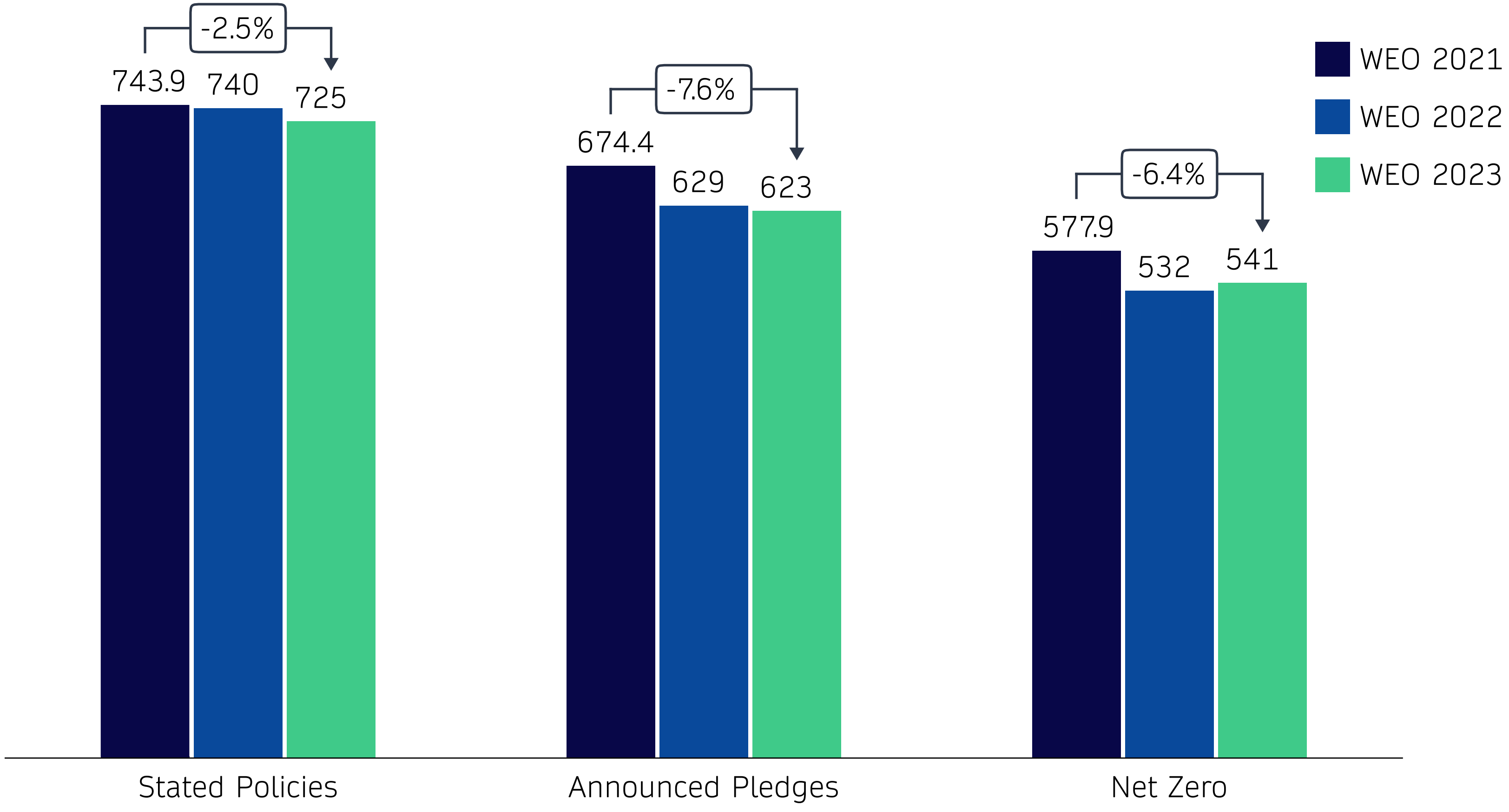
December 2023

LONDON **ABERDEEN**

Global Energy Demand Forecasts Have Been Reduced

Since 2021, the overall energy demand in the IEA's three main scenarios global energy demand has fallen between -2.5% and -7.6%. However, the composition of these scenarios has changed, with renewable energy displacing traditional hydrocarbon fuels

Global Energy Demand 2050 by Scenario



- The **Stated Policies** scenario provides a view of the prevailing direction of energy system progression based on the current policy landscape.
- The **Announced Pledges** scenario is the extent to which announced ambitions and targets can deliver the emissions reductions needed to achieve net zero emissions by 2050.
- **Net Zero** describes a pathway for the global energy sector to reach net zero CO_2 emissions by 2050

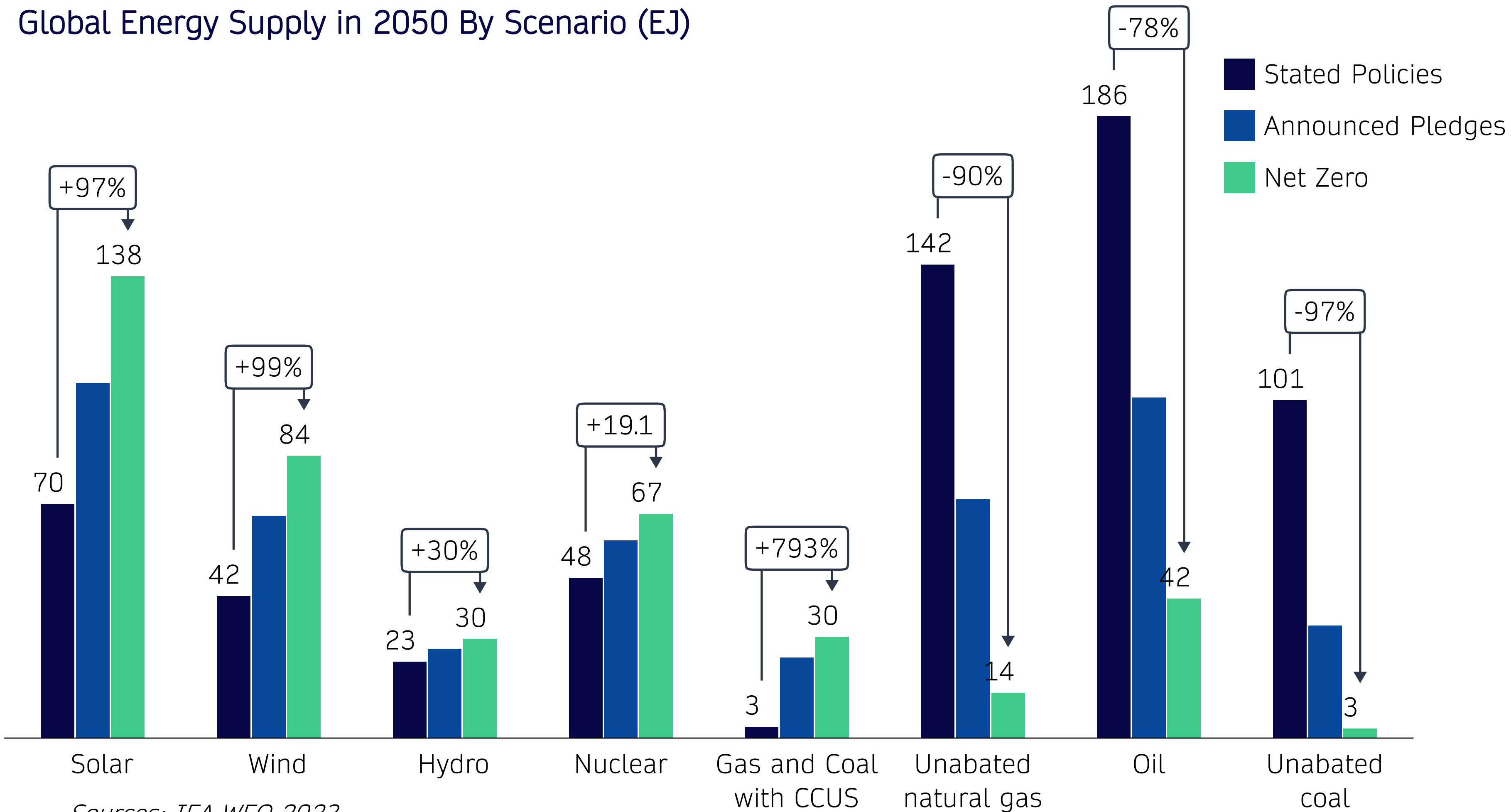
Sources: IEA WEO 2021, IEA WEO 2022, IEA WEO 2023

CALASH

On the Road to 2050

The direction of travel for all energy sources and technologies is clear – hydrocarbon decline and renewable increase – but growth remains subject to political risk, with the rate of change varying greatly between what has been stated and what has been suggested.

Global Energy Supply in 2050 By Scenario (EJ)



Sources: IEA WEO 2023

The choice of scenario can have an impact on investment decisions.

The scenario that tells the most positive story for the target investor is given, for Oil and Gas businesses this may be the Stated Policies scenario as it shows the gentlest decline in demand, while a Net Zero scenario would be used to bolster the perceived growth potential of a renewables business.

Stated Policies have continually been upgrades, so Announced Pledges may appear the safest scenario but it is very difficult to pick a 'neutral' scenario that doesn't require a subjective view on growth.

The Challenge of Shifting Energy Forecasts and PE Investment

Closed-end funds focused on the oil and gas space have traditionally had longer holding periods than for other sectors due to their exposure to commodity price trends and investing in renewables may similarly present challenges that require a non-standard expectation of the timeline to exit.

The differing demand growth scenarios means that the normal holding period for private equity of three to five years may need to be reconsidered when investing in the renewable energy supply chain and cleantech. If a market grows slower than forecasted, it may be necessary to hold the business for longer to achieve return-on-exit targets.

Alternatively, if an initially conservative growth outlook is taken and then the speed of deployment is faster, energy transition investments may return to the market faster than in other sectors.

Which scenario is chosen may depend on the type of technology that is being assessed. Mature technologies, like wind and solar, are more exposed to policy risks, such as changes to subsidies, which makes growth easier to predict but exposed to political risk, whereas earlier stage technologies like hydrogen and CCUS retain technical risk as well as market growth uncertainty.

With growth so linked to government policy and commodity prices, there can sometimes be little room for financial investors to enable transformative growth, except through M&A. Winning a greater portion of the pie organically, rather than just the pie getting bigger, will become more difficult as strategic investors in adjacent markets start to win market share.

Differentiated and defensible technology or services are key.

Recent Calash Cleantech and Renewables Engagements

Commercial Due Diligence
Advised
windhoist, STAR Capital
on its acquisition of
STOWEN

Commercial Due Diligence
Advised
The Scottish National Investment Bank
on its investment in environmental monitoring and BEMS company
UTOPI

Commercial Due Diligence
Advised
WestBridge, APEM
on its acquisition of
GoBe APEM Group

Commercial Due Diligence
Advised
BRIDGES Fund Management
on its acquisition of
GEV Wind Power

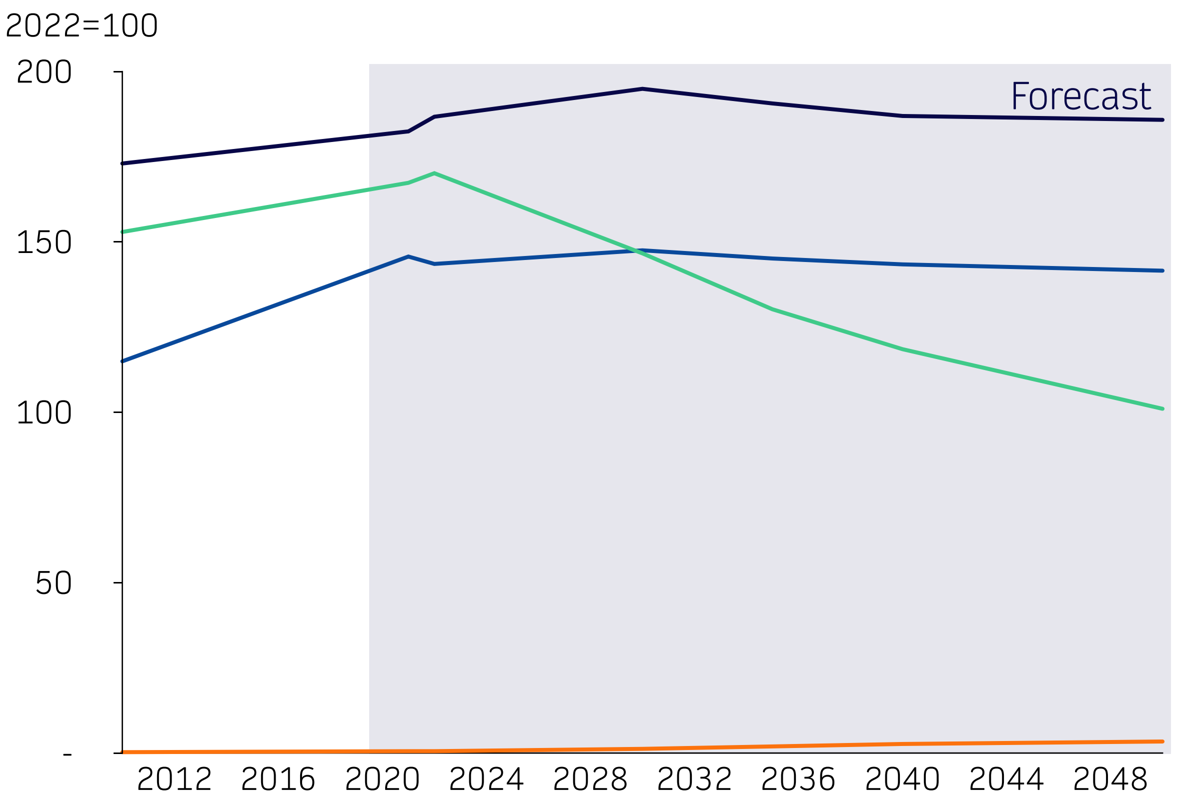
Commercial Due Diligence
Advised
LDC
on its acquisition of
BOSTON ENERGY

Vendor Due Diligence
Supported
WT Wood Thilsted
in receiving investment from
inflexion

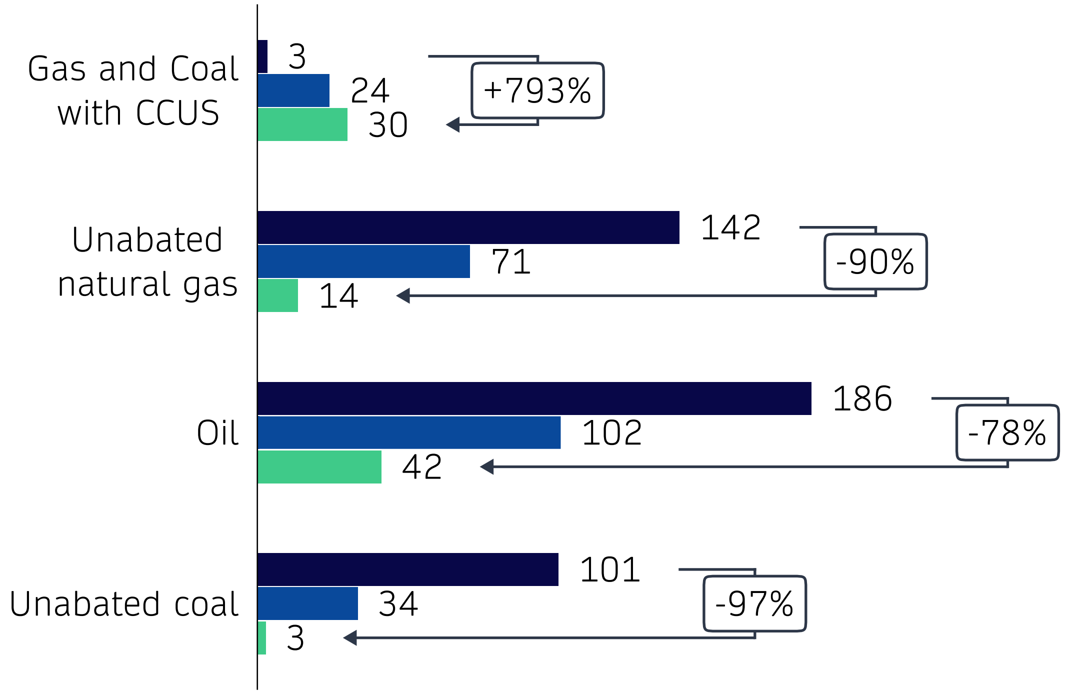
Hydrocarbon Outlook

The IEA's Stated Policies scenario expects fossil fuel production to remain high but assumes no further changes to government policies or market drivers. This should be considered when evaluating new opportunities, particularly those with long investment time horizons.

Hydrocarbon Production Forecast, Stated Policies



Hydrocarbon Production Forecast, Scenario Comparison



Sources: IEA WEO 2023

Should Private Equity Remain Exposed to Oil and Gas?

Many PE funds remain cautious of oil and gas, driven by their own commercial investment thesis and by the ESG preferences of their LPs, but some are returning to the sector.

Selection of Recent Sponsor-led Oil and Gas Supply Chain Deals

`	Target	Description	Rationale
Kingswood Capital Management	Covenant Testing Technologies	Houston-based provider of flowback, production and sand management, and pressure control equipment rentals and associated technical services	To expand customer base and service offering.
Nesma & Partners	kent	Dubai-headquartered engineeeing and mechanical services business, providing consulting to design, build, commissioning, maintenance and decommissioning services	Regional technology domestication/localisation.
Partners Group	ROSEN	A Swiss inspection, maintenance and repair business focused on pipelines, storage tanks and processing facilities.	Large, stable business with well established TIC offering.
Endless	ASCO	Aberdeen-headquartered offshore logistics business.	Exposure to increased offshore activity and the potential to track shifting end markets.
Sullivan Street; Souter Investments	Tracerco	UK-headquartered carveout from Johnson Matthey, focusing on diagnostic services.	Strong IP and market leader in its space.

Private equity buyside interest is still dampened by fears of jumping into a super cycle without a clear way out (not to mention how to square the ESG angle with an investment committee), but an attractive transaction window has emerged for those with an appetite for highly cash-generative businesses.

Investing in a cyclical market that faces a backdrop of shifting policy and regulatory levers is not for the faint-hearted.

That said, several sponsors are now factoring into their thinking that the investible lifespan of the industry will far outlive their holding period. Importantly, in all but the most climate-conscious demand scenarios, it would also outlive the holding period of the subsequent investor – so a business acquired now should, theoretically, find a ready buyer pool in five years' time.

However, the fact that assumptions around demand can shift so dramatically depending on the geopolitical direction of travel will continue to deter many from re-entering the oil and gas market. This results in two considerations for those who are willing to invest in this sector. Firstly, oil and gas-related acquisitions will remain good value for money from a transaction multiple standpoint and, secondly, investors will need to have firm conviction around the long-term market outlook and commercial positioning of any new portfolio companies.

Shifting Goalposts

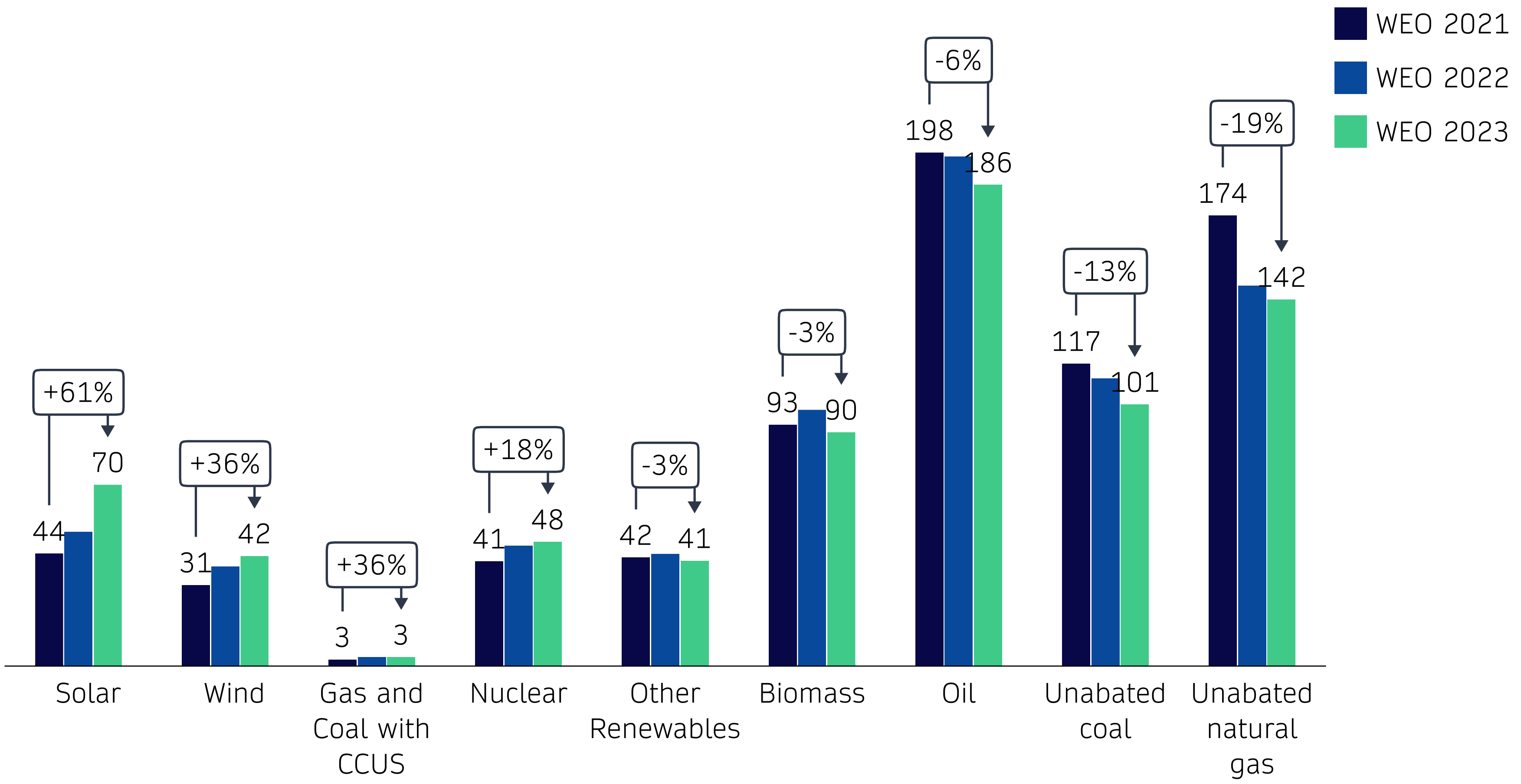
Although there has not been a significant change in the overall energy supply forecast, low-carbon technologies such as solar and wind have been the biggest winners since 2021, but oil and gas remain the largest energy sources.

The Stated Policies scenario effectively assumes the status quo, but it may not be the most accurate bellwether of growth given the rate at which announced pledges have become stated policies has accelerated.

Local market conditions and the underlying political momentum for climate change legislation will determine the rate at which intentions become binding objectives.

If a business is selling its products or services into an oil-dependent economy, the best forecast to be used would likely be the Stated Policies, whereas if the end market is a European country, it may be that the Net Zero scenario in time becomes the true pacesetter.

Global Energy Supply in 2050, Stated Policies Scenario (EJ)



Sources: IEA WEO 2021, IEA WEO 2022, IEA WEO 2023

CALASH

Considerations For Deploying Capital Amid Differing Growth Scenarios

With addressable markets constantly shifting due to policy changes, there are several key considerations that investors should keep in mind when assessing any energy-sector opportunity.

To what extent is the seller's view on policy scenarios overly positive (or negative)?

What right does the company have to win market share in its target market?

Do I intend to exit this business in five years' time to an oil and gas investor? If not, is management's plan to diversify credible and validated?

How defensible is this technology or service? Why can't someone else do this?

Does the management team have the required knowledge and experience to execute on this growth strategy?

What is the target's real addressable market from a bottom-up, granular, perspective?

CALASH

Our Services

Our team works with businesses throughout the entire growth journey, from M&A through to business strategy, we are here to support clients in identifying the opportunities that deliver commercial success and maximum value at exit.

Due Diligence

- Commercial due diligence.
- Red flag reviews.
- Environmental due diligence.

Strategic Support

- Growth strategy development.
- Strategy evaluation.
- New product and service deployment.

Vendor Assist

- Preparation for exit.
- Business plan assessment.
- Commercial vendor due diligence.

Market Referencing

- Voice-of-customer reports.
- Expert referencing.
- Customer surveys.

Sustainability

- Energy transition support.
- ESG strategy.
- ESG benchmarking.

Target Identification

- Acquisition search.
- Target screening and assessment.
- Buy-and-build strategy.

Market Assessment

- Market segmentation and sizing.
- Market entry assessment.
- Competitive market analysis.

Technical Assessment

- Asset valuation.
- Benchmarking.
- Technology review.

Differentiation

Calash is differentiated by its in-house operational, technical and commercial expertise. We can offer a flexible approach to projects, tailored to provide practical insights.

- We can engage with client teams on a peer level, understanding the products, customer needs and market challenges from a technical and market perspective.
- Our technical and market knowledge is integrated with strong commercial and financial skills.
- Calash is not reliant upon a single data source, as some integrated consulting/data providers are, but is data agnostic, having access to several independent sources.
- As a boutique consultancy we can dedicate our time and energy in support of clients, and to efficiently execute tailored projects.
- Calash provides open access to its technical and commercial teams, allowing clients to interact peer-to-peer with expert counterparts.

Technical and operational excellence

Global coverage and perspective

We construct and align our market reports with an investor lens and ROI focus

Findings are evidenced using multiple data and market reference points

Delivering client projects at optimum value

About Us

Our team works with businesses throughout the entire growth journey, from M&A through to business strategy, we're there to support clients in identifying the opportunities that deliver commercial success and maximum value at exit. Working across a wide range of complementary sectors, Calash has extensive and diverse knowledge that can be applied to any situation, enabling clients to increase business performance, identify growth opportunities and deliver change.

LONDON ABERDEEN

Email: mail@calash.com
Phone: +44 1224 637 017

Strategy

- Strategic reviews, corporate assessments and change management
- Growth, new market and internationalisation support
- Target Identification & Market Entry
- Competitor intelligence
- Market sizing, identification and supporting initiatives

Transactional

- Calash pre-transaction 'sniff test'
- 100 day planning, post-merger integration and execution support
- Restructuring, divestment and cost-reduction
- Commercial, Operational and Technical Diligence

Energy Transition

- Incubator development and refinement
- Calash 'ESG Investor Filter' & market sizing
- White space potential client & monetisation identification
- Energy Transition strategic alignment and risk mitigation
- Guided technical workshops