

INNOVO Net Zero, Nil Capex for the Oil & Gas Industry

Commercial, Financial, and Strategic Impact Analysis on the Industry,
the First Mover, and Followers

An Open Strategic Briefing for PR Agencies



Executive Summary

Webpages and short videos:

Smoke2Value technology profitably digests CO₂ in industrial smoke emissions: [Smoke2Value](#)

The technology's high profitability enables Net Zero, Nil Capex for emitters: [Net Zero Nil Capex](#)

INNOVO's PR Briefing for Strategic Advisors: [PR Briefing for Strategic Advisors](#)

PR advisors and their teams have access to INNOVO's full Data Room

The PR Mandate: One of the Biggest in Energy Transition on Record

The oil and gas major that deploys INNOVO's technology first and becomes the industry's net zero leader will launch one of the largest energy transition communications campaigns on record. Based on comparable Fortune 500 transformation campaigns and the financial profiles of the most likely first movers (with average annual revenues of ~\$239 billion, average SG&A of ~\$9.3 billion, and average market capitalization of ~\$315 billion), the marketing campaign budget for a global net zero oil and gas launch is estimated at **\$240 million–\$480 million over 3 years**, with PR agency fees of **\$36 million–\$155 million over the same period** (\$12 million–\$52 million per year). INNOVO is offering no compensation or reward to any PR agency. The mandate comes from the agency's own client — the industry leader that wins the race to become first mover. The agency that identifies this transformational opportunity for its C-suite client first wins the mandate. The agency that waits loses.

The Technology and Its Validation

INNOVO and its Technology Partner have developed and commercially validated a Smoke2Value bio-farm technology that enables oil and gas companies to achieve net zero emissions at nil capital expenditure and nil operating expenditure. The technology has been validated through **\$16 billion in offtake contracts** secured by INNOVO's technology partner from five of the world's top 10 oil and gas majors, including Shell, Chevron, and BP, following two years of independent due diligence. Future production capacity is to be increased by two of the world's biggest renewable energy contractors to \$122 billion.

Transformational Technology for Oil & Gas Decarbonization

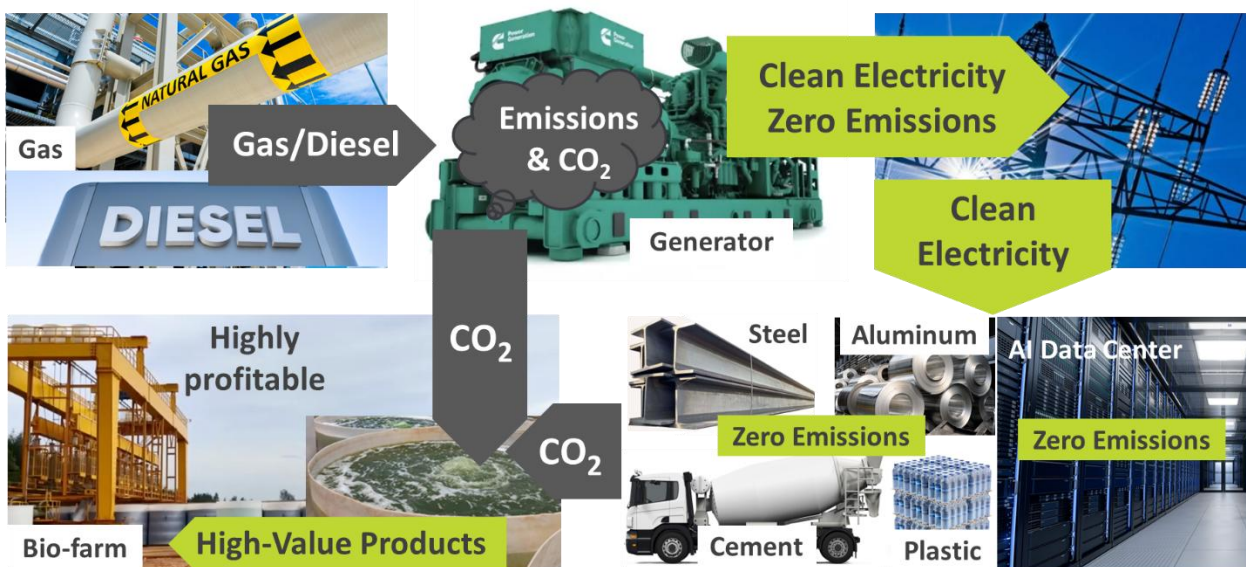
INNOVO offers a transformational solution to the oil and gas industry's most pressing challenge: achieving net-zero emissions without massive capital expenditure. Through its proven Smoke2Value algae bio-farm technology, INNOVO enables any oil and gas company to offer verified net-zero energy to its clients at nil capex. The bio-farms are being constructed by a world-class EPC consortium — KEPCO (Korea Electric Power Corporation, ~\$70 billion revenue, AA/Aa2 credit ratings), Samsung (\$27+ billion combined revenue), and ARCO Group (\$6.8 billion revenue) — with combined annual revenues exceeding \$83 billion and a proven track record including the \$20.4 billion Barakah Nuclear Power Plant.

The strategic impact on the oil and gas industry is seismic. Oil and gas has lost global energy market share from approximately 60–65% in 2020 to 50–52% in 2024, representing an estimated

\$700–900 billion in at-risk revenue. INNOVO’s technology reverses this decline by enabling the first mover to offer verified net-zero energy at nil capex to every heavy-emitting client.

Gas-powered data centers gain an equally transformational advantage. INNOVO’s solution enables gas generators at data centers to produce clean electricity at \$48–109 per MWh: 22% cheaper than solar with storage and 39% cheaper than nuclear, with full CO₂ digestion and on-demand baseload power.

For the SAF market, INNOVO’s first 24 bio-farms will double global SAF production. Current global supply is only 1.5 million tons per annum, less than 2% of demand. Future production capacity is to be increased by two of the world’s biggest renewable energy contractors to \$122 billion. With EU, US, ICAO CORSIA, and Asia-Pacific SAF mandates creating compounding regulatory pressure, the first mover captures a dominant position in a market projected to reach \$40–\$360 billion by the mid-2030s.



Key Metrics at a Glance

Metric	Value
CO ₂ digested per bio-farm per year	600,000 tons
Capex per bio-farm	\$392M (\$125M KEPCO/Samsung/ARCO scope)
IRR	58%
Payback period	2.6 years
US 45Q Tax Credits per bio-farm (12 years)	\$612M (\$51M/year)
EPC Consortium combined annual revenue	~\$83 billion
Profit per ton of CO ₂ digested	~\$200
24 bio-farms SAF output (annual)	1.5 million tons (doubles global supply)
Net zero data center power cost	\$48–109/MWh (22% cheaper than solar)
\$122 billion in 30-year SAF contracts	24 bio-farms × \$170M/year × 30 years
Estimated first mover PR campaign budget (3 years)	\$240M–\$480M
Estimated PR agency fees (3 years)	\$36M–\$155M

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1. Strategic Communications Opportunities for PR Agencies

As a strategic advisor to the C-suites of major industrial clients, your core value proposition is to bring them vital intelligence about major market developments before those developments become public. The INNOVO Smoke2Value clean energy transformation is exactly such a development.

This briefing is being provided to a select group of global PR agencies simultaneously. The first mover advantage for your clients is available now.

The mandate comes from the agency’s own client — the industry leader that wins the race. The agency that identifies this transformational opportunity for its C-suite client first wins the mandate. The agency that waits loses it to a competitor.

1.1 The Marketing Campaign Budget: Estimated \$240M–\$480M Over 3 Years

The oil and gas major that becomes the world’s first net zero oil and gas company will launch one of the most significant corporate transformation campaigns in energy history. Based on the financial profiles of the most likely first movers and comparable Fortune 500 transformation campaigns:

1.2 First Mover Campaign Budget Estimate

Campaign Component	Year 1 (Launch)	Years 2–3	3-Year Total
Global media and advertising (mainstream, trade, digital)	\$50M–\$80M	\$80M–\$140M	\$130M–\$220M
Investor relations and ESG communications	\$15M–\$25M	\$20M–\$40M	\$35M–\$65M
C-suite thought leadership and events (COP, WEF, CERAWeek)	\$8M–\$15M	\$12M–\$25M	\$20M–\$40M
Government affairs and regulatory engagement	\$8M–\$15M	\$12M–\$20M	\$20M–\$35M
Client communications and B2B marketing	\$8M–\$15M	\$12M–\$25M	\$20M–\$40M
Internal communications, employer brand, and contingency	\$5M–\$10M	\$10M–\$20M	\$15M–\$30M
TOTAL ESTIMATED CAMPAIGN BUDGET	\$94M–\$160M	\$146M–\$270M	\$240M–\$480M

1.3 PR Agency Fees: \$36M–\$155M Over 3 Years

PR agency fees for a mandate of this scale, complexity, and global reach typically represent 15–32% of total campaign budgets for enterprise-level energy transformation campaigns. Applied to the estimated campaign budget:

PR Fee Metric	Estimated Range
Total campaign budget (3 years)	\$240M–\$480M
PR fee percentage	15%–32%
Total PR agency fees (3 years)	\$36M–\$155M
Annual PR agency fees	\$12M–\$52M per year

For context, the average annual SG&A expenditure for the most likely first movers is approximately \$9.3 billion. A \$240M–\$480M campaign budget represents just 0.9–1.7% of annual SG&A over three years — a modest allocation for the most transformational corporate announcement in the energy industry’s history. This is one of the largest retainer opportunities in the energy sector globally.

1.4 Winning Long-Term Communications Mandates

The oil and gas major that deploys INNOVO’s technology first will require sustained, sophisticated communications support across multiple dimensions: investor relations, C-suite thought leadership, regulatory engagement, ESG reporting, media relations, industry body engagement, and client communications.

1.5 New Business Across Eight Industries

The eight industries most profoundly impacted by INNOVO’s technology all face versions of the same strategic challenge. Each will need a first mover communications partner with deep expertise in profitable decarbonization.

1.6 Building a Competitive Moat

The depth of technical and institutional knowledge required to advise on profitable decarbonization creates a defensible market position that competitors cannot acquire without years of investment.

1.7 Enterprise Value Enhancement for Your Agency

Building a leading energy transition communications portfolio drives higher valuation multiples at exit or in M&A transactions.

1.8 No Conflict of Interest

INNOVO is separately seeking its own global PR firm. There is no conflict of interest between INNOVO and your existing or potential clients. You are free to share the information in this briefing with any existing or potential clients without restriction or notification.

The competitive dynamic is real and time-sensitive. If a competing agency briefs their client’s C-suite before you brief yours, your client becomes a follower. The PR mandate for following, not leading, is a fraction of the first mover’s communications program.

2. The Industry Transformation: Net Zero Oil & Gas at Nil Capex

The oil and gas industry provides more than half of global energy supply and employs nearly 12 million workers worldwide.¹ Yet the industry faces an existential strategic challenge: achieving net zero emissions without destroying its own economics. The IEA projects that oil and gas demand will peak before the end of this decade under current policy settings, with demand falling 45% below today's level by 2050 if governments deliver on their national pledges.¹ Under a 1.5°C pathway, oil and gas use would fall by 75%.¹

INNOVO's Smoke2Value bio-farm technology eliminates this dilemma. By co-locating algae bio-farms adjacent to gas-powered generators, INNOVO digests the CO₂ from the generator's emissions through industrial-scale photosynthesis, enabling the generator to produce electricity with zero net emissions. The technology has been validated through \$16 billion in offtake contracts secured by INNOVO's technology partner from five of the world's top 10 oil and gas majors, including Shell, Chevron, and BP, following two years of independent due diligence. Future production capacity is to be increased by two of the world's biggest renewable energy contractors to \$122 billion.

The impact on the oil and gas industry is transformational across six dimensions: market share recovery, premium pricing, SAF market dominance, data center market access, stranded asset protection, and share price revaluation. The first oil and gas major to deploy this technology captures a permanent competitive advantage across all six. Every rival becomes a follower.

2.1 First Mover Advantage: Market Share Recovery

The oil and gas sector's share of global primary energy has declined from approximately 53% in 2019 to below 51% in 2024, with the IEA projecting continued erosion as renewables grow.² In revenue terms, this decline represents an estimated \$700–\$900 billion in at-risk industry revenue across the forecast period to 2030.³ The principal driver is not falling demand for energy but the substitution of fossil fuels by renewables in the energy mix, accelerated by tightening carbon pricing and regulatory mandates.

The first mover reverses this dynamic. By offering verified net zero energy to industrial clients at nil capital expenditure, the first mover transforms the competitive equation: the client receives the same energy supply, at the same or lower cost, with zero emissions — eliminating its own carbon tax exposure, regulatory risk, and ESG reporting burden. Heavy industries facing the most intense decarbonization pressure — steel (\$4.4 trillion in transition costs over 30 years⁴), cement (\$1.8 trillion⁴), and chemicals (\$2.7 trillion annually for power generation⁵) — become locked-in clients of the first mover, because switching away from a verified net zero supplier reintroduces carbon costs that the client has already eliminated.

Estimated market share impact: The first mover gains a 2–5 percentage point increase in global energy market share within 5 years, worth \$140–\$450 billion in incremental revenue, by converting price-sensitive industrial clients from commodity oil and gas to verified net zero oil and gas that eliminates their carbon compliance costs.

2.2 First Mover Advantage: Premium Pricing on Net Zero Oil & Gas

Carbon costs in EU markets currently run at approximately €80–100 per ton of CO₂ under the EU Emissions Trading System (EU ETS).⁶ The EU Carbon Border Adjustment Mechanism (CBAM), which entered its definitive phase on January 1, 2026, extends these costs to imports of steel, aluminum, cement, fertilizers, hydrogen, and electricity.⁷ Australia’s Safeguard Mechanism imposes declining baselines on heavy emitters at 4.9% per year, with ACCU prices projected to rise from AUD \$30–35 to AUD \$70–80 per tonne by 2035.⁸

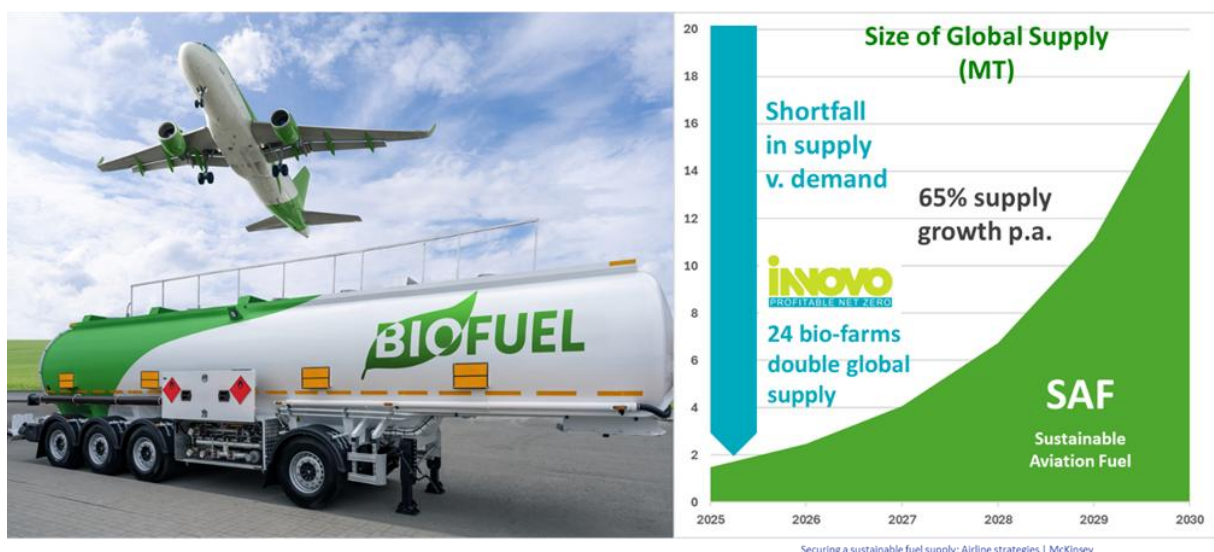
For the buyer of oil and gas, these costs are substantial and escalating. At approximately 0.43 tons of CO₂ emitted per barrel of oil combusted, EU ETS carbon costs add \$37–\$46 per barrel to the effective cost of conventional oil. Verified net zero oil and gas eliminates this burden entirely, enabling the first mover to command a **premium of \$30–\$50 per barrel** over conventional commodity benchmarks — a premium that reflects the buyer’s avoided carbon costs rather than an arbitrary markup.

For a major oil and gas company producing 2–3 million barrels of oil equivalent per day, a \$30–\$50 premium on even 30% of output (the portion sold to carbon-price-exposed buyers) translates to **\$10–\$16 billion in incremental annual revenue**. This premium widens over time as carbon prices tighten and CBAM extends to additional sectors.

The follower’s exposure: Followers cannot offer the same premium. Their product carries full carbon cost exposure, making it structurally less competitive in every carbon-priced market. As carbon prices rise, the follower’s discount to the first mover widens.

2.3 First Mover Advantage: Dominating the SAF Market

The global SAF market was valued at approximately \$2.3 billion in 2025 and is projected to reach \$16–\$26 billion by 2030 and **\$357 billion by 2035**, growing at a CAGR of 65–66%.^{9,10} Yet current global SAF production is only approximately 1 million tonnes per annum — less than 0.5% of jet fuel consumption.¹¹ SAF demand is expected to reach 15 million tonnes by 2030 and 40 million tonnes by 2035, creating a supply gap of 22–26 million tonnes by 2035.¹¹



Regulatory mandates are compounding this supply crisis from every direction. The EU’s ReFuelEU Aviation requires 2% SAF by 2025, rising to 70% by 2050.¹² The US SAF Grand Challenge targets 3 billion gallons per year by 2030.¹³ Japan mandates 10% by 2030. Singapore requires 1% by 2026, rising to 3–5% by 2030. ICAO’s CORSIA becomes mandatory for nearly all international flights from 2027.¹⁴

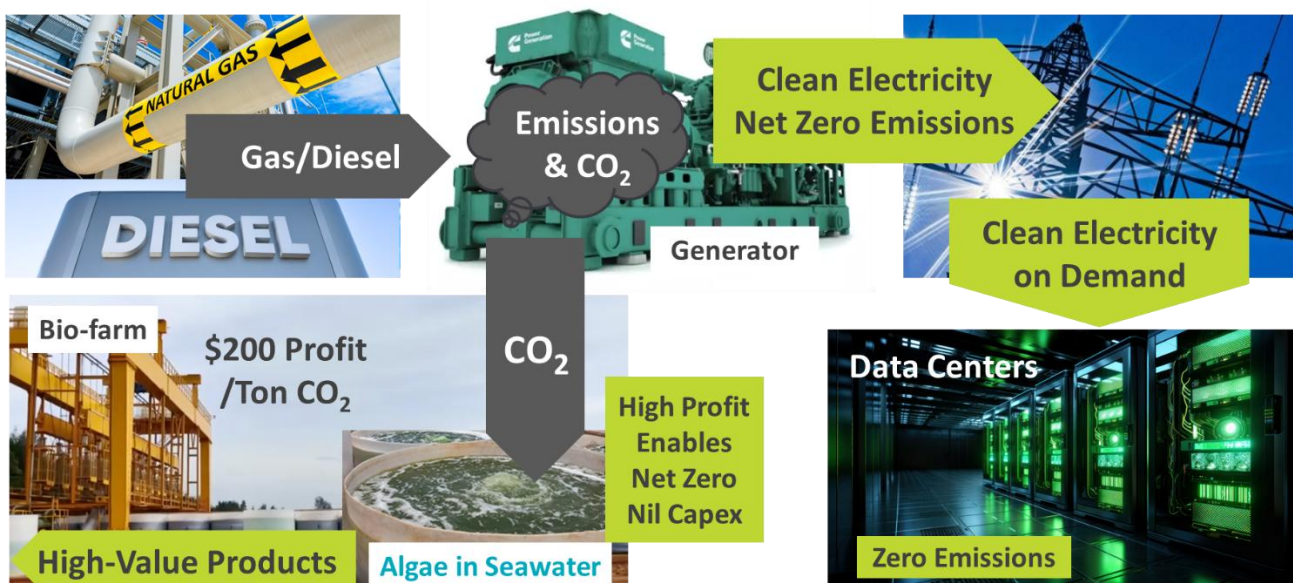
INNOVO’s first 24 bio-farms will produce crude algal oil sufficient to yield **1.5 million tonnes of SAF annually**, effectively doubling current global production. Total SAF contracts for 24 bio-farms over 30 years: \$122 billion. Future production capacity is to be increased by two of the world’s biggest renewable energy contractors to \$122 billion. The first oil and gas major to secure this production captures a dominant position in a \$357 billion market, locking in 30-year SAF feedstock offtake contracts worth **\$170 million per bio-farm per annum** (\$4.1 billion annually across 24 bio-farms at maturity).

The follower’s exposure: Followers have no access to INNOVO’s SAF feedstock at priority terms. They must source SAF from a market with a 22–26 million tonne supply gap, at premium prices, or face regulatory non-compliance penalties under ReFuelEU, CORSIA, and national mandates.

2.4 First Mover Advantage: Net Zero Gas-Powered Data Centers

US data center power demand is forecast to surge from 183 TWh in 2024 to 426–606 TWh by 2030, a growth rate of 133–230%.¹⁵ Goldman Sachs forecasts that 60% of all new data center power through 2030 will come from natural gas, because grid connections for renewable power face delays of 3–7 years in most US markets.¹⁶ This creates a multi-hundred-billion-dollar market for gas-powered data center electricity that currently carries full carbon emissions exposure.

INNOVO’s Smoke2Value bio-farm, co-located adjacent to a gas-powered data center generator, digests the CO₂ from that generator’s emissions. The result: clean electricity from gas at **\$48–109 per MWh** with nil net emissions — 22% cheaper than solar plus storage (\$55–140/MWh) and 39% cheaper than nuclear (\$88–185/MWh without subsidies).¹⁷ Unlike intermittent renewables, INNOVO delivers 24/7 on-demand baseload power.



For the first mover oil and gas major, this opens an entirely new market: supplying net zero gas-powered electricity to the world's largest technology companies. Each data center partnership generates long-term power purchase agreements worth hundreds of millions of dollars per year. The first mover that controls net zero gas power supply to hyperscalers captures a **multi-billion-dollar recurring revenue stream** that did not exist before INNOVO.

The follower's exposure: Followers can supply gas to data centers, but that gas carries full carbon emissions. Tech giants with aggressive net zero commitments (Microsoft: carbon negative by 2030; Google: net zero by 2030; Amazon: net zero by 2040¹⁸) will preferentially contract with the only oil and gas major that can guarantee zero-emission gas power.

2.5 First Mover Advantage: Releasing Stranded Assets

According to MIT and Carbon Tracker, the global net present value of untapped fossil fuel output through 2050 under a Net Zero 2050 scenario is **\$30.6 trillion**.¹⁹ Carbon Tracker's research finds that over \$1 trillion in oil and gas assets specifically risk becoming stranded as a result of climate policy and the rise of clean energy.²⁰ Under the IEA's Net Zero by 2050 scenario, production levels for most major oil and gas companies — including Shell and Chevron — would fall by at least half in the 2030s.²¹

The first mover fundamentally changes the stranding calculus. By neutralizing emissions from existing gas-powered infrastructure through co-located bio-farms, the first mover transforms assets that were on a path to regulatory stranding into verified clean energy assets. For a major with total assets exceeding \$300 billion, this protection is worth tens of billions of dollars in avoided write-downs. The first mover's existing gas infrastructure — pipelines, generators, processing plants — gains an extended economic life rather than facing premature decommissioning.

The follower's exposure: Followers' assets remain fully exposed to stranding risk. As carbon pricing tightens and IFRS S2 climate disclosure requirements²² force board-level accountability, the gap between the first mover's protected asset base and the follower's exposed asset base will be reflected in analyst valuations, credit ratings, and investor sentiment.

2.6 First Mover Advantage: Share Price Revaluation

Research by the IEA and Carbon Tracker demonstrates that sustainability leaders in carbon-intensive sectors trade at **10–20% higher EV/EBITDA valuation multiples** than laggards.²³ ESG-focused investment now represents a multi-trillion-dollar allocation globally, with over \$5.46 trillion committed to partial or total fossil fuel divestment as of 2024.²⁴

The combined financial impacts described in Sections 2–6 — market share gains, premium pricing, SAF revenue, data center contracts, and stranded asset protection — collectively trigger a fundamental revaluation of the first mover from “stranded asset risk” to “energy transition leader.” Based on the blended financial profile of the most likely first movers (average market capitalization ~\$315 billion, average net income ~\$18.5 billion, average revenue ~\$239 billion²⁵), the estimated share price impact is:

Revaluation Driver	Estimated Impact
EV/EBITDA multiple expansion (10–20%)	\$32B–\$63B incremental enterprise value
Premium pricing revenue capitalization	\$10B–\$16B annual revenue → NPV \$80B–\$130B
SAF market dominance capitalization	\$4.1B annual revenue → NPV \$30B–\$50B
Stranded asset write-down avoidance	\$20B–\$50B+ in protected asset value
Data center revenue stream capitalization	Multi-billion-dollar NPV
Net share price appreciation (12–24 months)	20–30% = \$63B–\$95B incremental shareholder value

For the most likely first movers, which returned record levels of capital to shareholders in recent years (\$26.3 billion by one major in a single year²⁶), an INNOVO partnership repositions the company from managed decline to growth leadership — the single most powerful driver of share price appreciation in the energy sector.

2.7 The Follower's Compounding Disadvantages

Once the first mover announces its INNOVO partnership, every competitor in the oil and gas industry becomes a follower. The follower's disadvantage is not a temporary gap; it is a **permanent structural impairment** that compounds over time across every dimension of competitive performance.

Narrative Disadvantage

The first mover defines the market narrative. The follower's subsequent announcement — whenever it comes — is measured against the first mover's benchmark. The first mover is “the company that made oil and gas net zero.” The follower is “the company that followed.” In a market where ESG narrative drives institutional capital allocation, this distinction is worth billions.

45Q Tax Credit Disadvantage

The first mover acquires US Section 45Q Production Tax Credits at the most favorable terms (\$160 million of credits for \$80 million cash per bio-farm, a 2:1 return). As INNOVO's negotiating position strengthens with each successive partnership, followers receive progressively less favorable terms. The 12-year credit period (\$612 million per bio-farm²⁷) means the first mover locks in a decade-long financial advantage before the follower even begins.

SAF Supply Disadvantage

The first mover secures priority 30-year SAF feedstock offtake contracts from INNOVO's 24 bio-farms. In a market where demand is expected to reach 40 million tonnes by 2035 against supply of only 18 million tonnes¹¹, the follower must source SAF from a structurally undersupplied market at premium prices, or face regulatory non-compliance penalties under ReFuelEU, CORSIA, and national mandates.

Client Retention Disadvantage

Heavy industrial clients — steel, cement, chemicals, aluminum — that have switched to the first mover's verified net zero energy supply have eliminated their carbon tax exposure and regulatory risk. Switching back to a follower's conventional supply reintroduces those costs. Client switching costs are therefore asymmetric: switching to net zero is free (nil capex); switching away from net zero is expensive (carbon costs resume). The first mover's client base becomes locked in.

Cost of Capital Disadvantage

As ESG-focused investment continues to grow and fossil fuel divestment commitments expand (over \$5.46 trillion committed as of 2024²⁴), the cost of capital diverges: the first mover's cost of capital falls (lower risk, higher ESG ratings, inclusion in sustainability indices), while the follower's cost of capital rises (higher stranded asset risk, lower ESG ratings, exclusion from sustainability funds). This divergence compounds over time and is difficult to reverse.

Asset Stranding Disadvantage

The follower's gas infrastructure remains fully exposed to stranding risk under tightening net zero scenarios. As IFRS S2 climate disclosure requirements²² force transparent reporting of climate-related financial risks, the follower's balance sheet reflects unprotected assets that the first mover has already de-risked. Analyst downgrades, credit rating pressure, and investor activism follow.

The Compounding Effect

These six disadvantages do not operate independently. They compound. The follower with higher carbon costs loses clients to the first mover with lower costs. The loss of clients reduces revenue. Reduced revenue weakens the share price. A weaker share price increases the cost of capital. A

higher cost of capital makes it harder to fund the follower’s own eventual decarbonization. The gap widens, not narrows, with each passing year.

2.8 Summary: First Mover vs. Follower

Dimension	First Mover	Follower
Market share	Gains 2–5 pts; locks in heavy industry clients	Loses clients to net zero competitor
Pricing	\$30–\$50/barrel premium on net zero oil & gas	Full carbon cost exposure; forced discounting
SAF market	Priority 30-year offtake; dominates \$357B market	Competes for scarce supply at premium prices
Data centers	Sole supplier of net zero gas power to tech giants	Cannot match net zero power requirement
Stranded assets	\$300B+ asset base protected and extended	\$300B+ asset base exposed to write-downs
Share price	20–30% appreciation (\$63B–\$95B value)	Valuation discount vs. first mover widens
Cost of capital	Falls (ESG leader, sustainability indices)	Rises (stranded asset risk, divestment pressure)
45Q tax credits	Best terms: 50% discount, \$612M/bio-farm	Less favorable terms; smaller margin
Narrative	“The company that made oil & gas net zero”	“The company that followed”

3. The Smoke2Value Bio-farm Technology

3.1 How It Works: Smoke2Value Technology Proven at Industrial Scale

Webpage and short video: [Smoke2Value](#)

Algae in the oceans grow by digesting half of the planet’s CO₂ using sunlight and photosynthesis. Microalgae have been profitably grown in shallow ponds for decades by hundreds of small companies to produce health products. Unlike traditional carbon capture, which stores CO₂ underground at a net cost, INNOVO’s approach digests CO₂ and converts it into high-value products, generating revenue and profit.

A revolutionary version of this clean technology has now been proven at an industrial scale. Using thousands of 2.4-meter high tanks and a harvester, it produces 127 times more algal biomass than shallow ponds. Five of the world’s top 10 oil and gas majors placed \$16 billion in offtake contracts after two years of due diligence.

Harvester

**\$800M Capex
500 acres**

Digests 1 million tons CO₂ yearly

Smoke CO₂

Air: CO₂

Algae in seawater digest CO₂

Algae in seawater digest CO₂ in sunlight (photosynthesis) to grow. The increased algal biomass is regularly harvested.

Algal Biomass is Refined to Yield High-Value Products

**The technology is highly profitable:
58% IRR 2.6 year-payback**

High profits enable Net Zero, Nil Capex Sustainable Aviation Fuel (SAF)

Animal Feed Fish Feed

Food supplements

Food colorants

Cosmetics Nutraceuticals

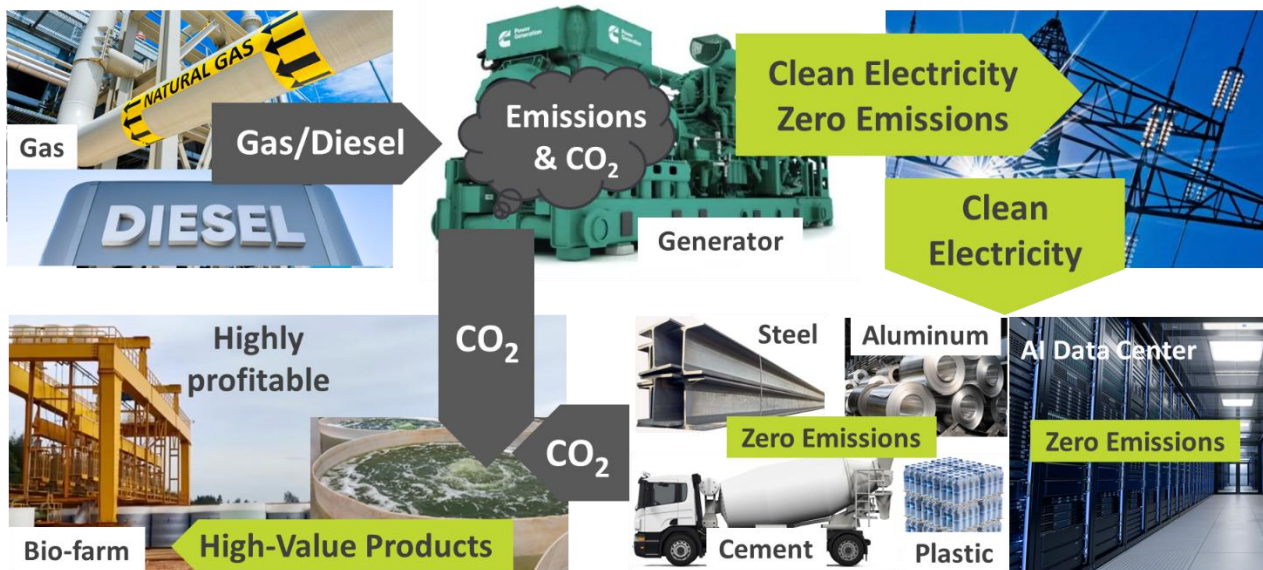
Smoke2Value Technology Proven at Industrial Scale

There are 250,000 tanks on a 500-acre bio-farm. The algae grow in bright sunlight through photosynthesis, just like they do in the sea. The algal biomass is harvested by the yellow overhead harvester that travels across the top of the tanks.

3.2 \$16B Offtake Contracts from 5 Oil & Gas Majors Including Shell, Chevron & BP

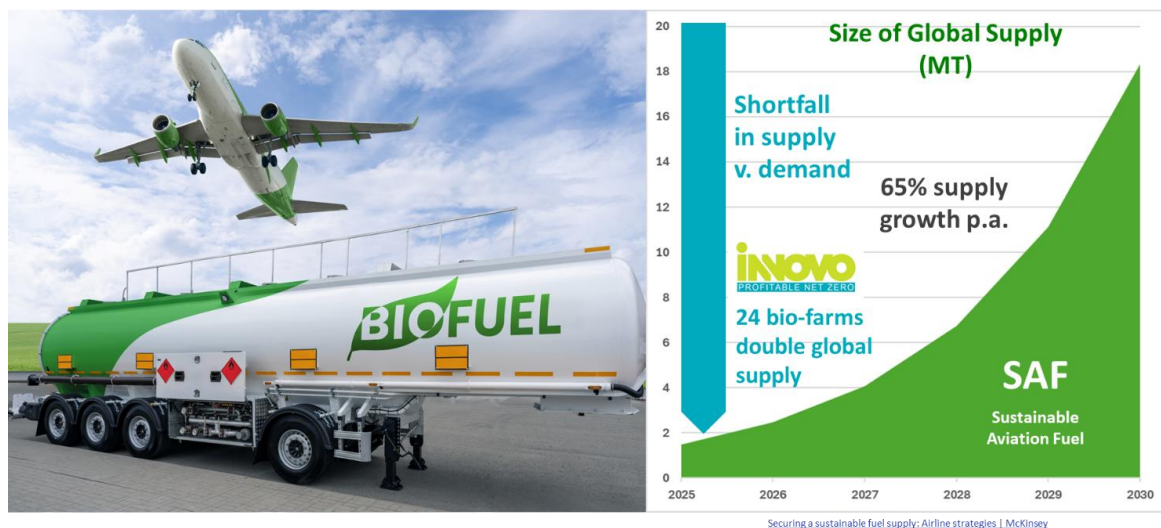
Five of the world’s top 10 oil & gas companies, including BP, Chevron, and Shell each performed 2 years’ due diligence on the technology. Between them, they then placed \$16 billion in three offtake contracts for crude algal oil, the feedstock for sustainable aviation fuel. **Future production capacity is to be increased by two of the world’s biggest renewable energy contractors to \$122 billion.**

Crucially, removing the CO₂ from the generator's smoke enables that generator to produce electricity with zero net emissions. The generator itself is unchanged: it is the adjacent bio-farm that transforms it into a source of clean electricity.



3.3 Comparison with Other Renewable Energy Sources

Solar plus storage costs \$55–140 per MWh without investment tax credits. Bio-farms deliver 22% cheaper clean power than solar and 39% cheaper than nuclear, with full CO₂ digestion and on-demand baseload power. Unlike intermittent renewables, INNOVO provides 24/7 baseload electricity.



3.4 High Profitability Enables Offer of Net Zero, Nil Capex to Emitters

The high profitability of Smoke2Value bio-farms enables INNOVO to co-locate its operations adjacent to heavy-emitters on a Net Zero, Nil Capex basis. This accelerates the deployment of the technology.



4. EPC Consortium: KEPCO, Samsung & ARCO Build Program

INNOVO has assembled a **world-class EPC consortium** to deliver the turnkey construction and full commissioning of twenty-four Smoke2Value bio-farms: 14 at shovel-ready sites in Corpus Christi, Texas, and 10 in Gladstone, Queensland, Australia. The total project value is \$9.41 billion (\$392M per bio-farm), of which the KEPCO/Samsung/ARCO construction scope totals \$3.0 billion (\$125M per bio-farm).

4.1 Consortium at a Glance

Entity	Role	Revenue	Employees	Credit
KEPCO	Primary turnkey EPC; harvester design; tanks; refinery	~\$70B	~49,000	AA / Aa2
Samsung C&T + E&A	Civil engineering; bio-refinery EPC; SAF facility	\$27B+	~5,500+	KOSPI 200
ARCO Group	US subcontractor; site prep; MEP; commissioning	\$6.8B	1,200+	ENR #4 DB

Combined annual revenues: ~\$83 billion. The \$3.0B construction scope represents approximately 3.6% of the consortium’s combined annual revenue.

4.2 KEPCO: Sovereign-Grade EPC Contractor

Korea Electric Power Corporation (KEPCO) is 51% South Korean government-owned, with credit ratings of AA (S&P, stable) and Aa2 (Moody’s, stable). KEPCO’s consolidated revenue for FY2025 was ~\$70 billion, with operating income of ~\$9.7 billion. KEPCO is ranked 258th on the Fortune Global 500.

KEPCO’s most significant international project is the **\$20.4 billion Barakah Nuclear Power Plant** in Abu Dhabi — the first nuclear power plant in the Arabian Peninsula. All four units are fully operational (2021–2024). KEPCO has also signed the \$18.6 billion Dukovany Nuclear Program in the Czech Republic. KEPCO has structured 23 overseas project finance arrangements without parent-company guarantees.

4.3 Samsung: Proven KEPCO Partner with Bio-Refinery Expertise

Samsung E&A secured a **\$955 million EPCC contract** for the Phoenix Biorefinery in Malaysia — producing 650,000 tons/year of SAF, biodiesel, and bio-naphtha. Samsung C&T operates 3 GW of solar in Texas and 1.3 GW in Australia — the exact INNOVO deployment geographies.

4.4 ARCO Group: US Construction & Commissioning Partner

ARCO Group generated \$6.8 billion in revenue, ranked ENR #4 Top Design-Build Firm, with 6,000+ completed projects across 48+ US offices. ARCO co-founded the Net Zero Data Center Alliance alongside INNOVO on April 23, 2025.

4.5 Deployment Plan

Location	Bio-Farms	EPC Scope	Total Cost
Corpus Christi, Texas	14	\$1,750M	\$5,488M
Gladstone, Queensland	10	\$1,250M	\$3,920M
TOTAL	24	\$3,000M	\$9,408M

Bio-farm technology holds both **US EPA certification** and **EU ISCC certification**, enabling immediate production start.

5. US Federal Tax Credits: Section 45Q and Section 45Z

5.1 Section 45Q Production Tax Credits

Each INNOVO Smoke2Value bio-farm in the United States qualifies for Section 45Q Production Tax Credits at \$85 per ton of CO₂ captured and utilized. At 600,000 tons captured annually, this generates \$51 million per year per bio-farm, or \$612 million over the 12-year credit period.

INNOVO's eligibility is unambiguous. Section 45Q(f)(5)(A)(i) explicitly authorizes credits for fixation of qualified carbon oxide through photosynthesis or chemosynthesis, such as through the growing of algae.

5.2 The INNOVO Financing Structure for Oil & Gas Partners

INNOVO sells \$160 million worth of 45Q tax credits to the first oil and gas major at a 50% discount, generating \$80 million in immediate cash. This \$80 million serves as the 20% equity requirement, enabling INNOVO to secure the remaining \$320 million through conventional project debt financing. The oil and gas major receives a verified 2:1 return, priority SAF feedstock offtake for 12 years, and the right to sell zero-emission oil and gas at a premium. The remaining \$330 million of tax credits is sold to data centers and other heavy emitters.

5.3 Section 45Z Clean Fuel Production Tax Credits

When an oil and gas major refines INNOVO's crude algal oil into SAF at its own refinery, it qualifies for Section 45Z Clean Fuel Production Tax Credits of up to \$1.00 per gallon of SAF produced.

6. Financing INNOVO Bio-Farms in Australia

While US bio-farms are financed primarily through the sale of Section 45Q Production Tax Credits, Australia's 10 bio-farms in Gladstone, Queensland, are financed through a combination of **Australian government grants, concessional finance, and initial sharing of CO₂ emissions tax savings with the emitter.**

6.1 Australia’s Safeguard Mechanism: The Compliance Cost Driver

Australia’s reformed Safeguard Mechanism (effective July 2023) requires all industrial facilities emitting more than 100,000 tonnes of CO₂-equivalent per year to keep their emissions within declining baselines. Baselines decline by 4.9% per year to 2030, creating escalating compliance obligations for heavy emitters. Facilities exceeding their baselines must surrender Australian Carbon Credit Units (ACCUs) or Safeguard Mechanism Credits (SMCs) to cover the excess.

ACCU prices are currently AUD \$30–35 per tonne of CO₂-equivalent, projected to rise to approximately **AUD \$70–\$80 per tonne by 2035**. As baselines tighten and demand for ACCUs increases, the financial cost of compliance will escalate significantly — creating a powerful incentive for emitters to partner with INNOVO.

6.2 The INNOVO CO₂ Tax Mitigation Sharing Model

Each INNOVO bio-farm in Australia digests 600,000 tonnes of CO₂ per year. Under the Safeguard Mechanism, this eliminates the emitter’s requirement to purchase 600,000 ACCUs per year to cover the corresponding emissions. The value of avoided compliance costs is:

ACCU Price Scenario	Annual Savings per Bio-Farm
Current (AUD \$30–35/tonne)	AUD \$18M–\$21M per year
Medium-term (AUD \$50–60/tonne)	AUD \$30M–\$36M per year
2035 projection (AUD \$70–80/tonne)	AUD \$42M–\$48M per year
Cumulative 12-year savings (rising prices)	AUD \$350M–\$500M+ per bio-farm

INNOVO’s qualifying first-mover partnership definition in Australia: INNOVO grants first-mover status to an industry leader in return for the generation of **\$200 million cash from \$300 million in Australian CO₂ tax mitigation obligations**, generating \$100 million immediate profit for the first mover. INNOVO and the emitter share the avoided compliance costs, with the emitter’s share providing the upfront cash to trigger project debt financing for bio-farm construction.

6.3 Australian Government Grants and Concessional Finance

Multiple Australian government programs provide grants and concessional finance for clean energy and industrial decarbonization projects of precisely the type INNOVO is deploying:

Clean Energy Finance Corporation (CEFC): Australia’s \$30.5 billion clean energy investment fund delivered a record \$6.1 billion in investments in H2 FY2026. The CEFC provides concessional debt and equity finance for clean energy projects, including carbon capture and industrial decarbonization.

Australian Renewable Energy Agency (ARENA): The \$1.2 billion Future Made in Australia Innovation Fund (opened February 2026) includes \$250 million specifically for Low Carbon Liquid Fuels and \$750 million for green metals — both directly applicable to INNOVO’s SAF feedstock production and industrial decarbonization. A second round of the \$65 million Carbon Capture Technologies Program is opening in early 2026.

Powering the Regions Fund: AUD \$1.9 billion to support regional decarbonization and industrial upgrades in regions affected by the energy transition, including Gladstone, Queensland — the site of INNOVO’s 10 Australian bio-farms.

6.4 Combined Australian Financing Structure

The Australian financing model combines three capital sources to replicate the 80/20 debt-to-equity structure used for US bio-farms:

- 1. Emitter CO₂ tax mitigation sharing (equity substitute):** The heavy emitter's upfront cash contribution from shared Safeguard Mechanism savings provides the 20% equity equivalent (~\$80M per bio-farm), triggering conventional project debt financing for the remaining 80%.
- 2. Government grants and concessional finance:** ARENA grants and CEFC concessional debt reduce the effective cost of capital and de-risk the project for commercial lenders. The combination of ARENA's innovation grants, CEFC's concessional debt, and Powering the Regions Fund support provides a substantial capital subsidy.
- 3. SAF offtake revenue:** Each Australian bio-farm produces ~\$170 million of SAF feedstock per annum, providing predictable long-term revenue that underpins project debt financing. With \$122 billion in total 30-year SAF contracts across all 24 bio-farms, lenders have strong revenue visibility.

7. The Regulatory Landscape Driving Urgency

The regulatory environment makes action urgent.

EU Carbon Border Adjustment Mechanism (CBAM)

EU Regulation 2023/956 applies carbon tariffs to imports of steel, aluminum, cement, fertilizers, hydrogen, and electricity from 2026.

EU Emissions Trading System (EU ETS)

Carbon prices at €80–100 per ton create substantial financial pressure on oil and gas clients.

IFRS S2 Climate Disclosures

IFRS S2 requires companies to disclose climate-related risks and opportunities that could affect financial performance.

ICAO CORSIA

ICAO's CORSIA framework becomes mandatory for nearly all international flights from 2027.

UK SAF Mandate

The UK's compulsory SAF blending mandate is driven by the Jet Zero Taskforce.

Australian Safeguard Mechanism

Australia's Safeguard Mechanism requires facilities emitting more than 100,000 tonnes CO₂-e per year to reduce emissions along declining baselines (4.9% annually to 2030), with a 2026–27 review set to consider more ambitious 2035 targets. ACCU prices are projected to rise from AUD \$30–35 to AUD \$70–80 by 2035, making INNOVO's zero-cost emissions digestion increasingly valuable to Australian emitters.

8. Getting Started

The strategic opportunity is time-sensitive. Once the first oil and gas major announces its INNOVO partnership, all others become followers.

8.1 Engagement Process

Step 1: Download the full industry impact documents. You can immediately download the complete net zero, nil capex proposition for each of the eight industries from INNOVO's PR Briefing webpage at innovo-net-zero.com/pr-briefing. You are at liberty to use this information to win or retain clients or with the media.

Step 2: Identify your clients' first mover opportunity. Review which of your existing clients in oil and gas, tech, heavy industry, or financial services are most immediately advantaged by first mover net zero status.

Step 3: Brief your C-suite client contacts. Prepare the intelligence package for your C-suite client contacts. The agency that briefs its client's C-suite first wins the mandate.

Step 4: Request an in-depth INNOVO briefing. Contact INNOVO for a comprehensive briefing on the technology, commercial model, and industry-specific opportunity. Following the briefing, you will receive access to INNOVO's comprehensive data room.

Step 5: Protect your existing clients. Rival PR agencies are now receiving this same briefing. If a competitor briefs your client before you do, you lose the mandate. Act now.

8.2 Contact

PR Agency Enquiries: public.relations@innovo-network.com

innovo-net-zero.com/pr-briefing

All information in this briefing is in the public domain. There is no requirement to notify INNOVO before approaching any client or media contact.

9. Sources

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Disclaimer: This document is prepared for strategic advisory purposes. All financial projections are indicative and based on current market data and INNOVO financial models. The difficulty of quantifying the far-reaching effects of clean energy transformation means all projections should be treated as indicative rather than definitive. This document does not constitute an offer or solicitation of any kind.