



Canadian clean tech driving circular economy impact

CORPORATE PRESENTATION 2025

FORWARD LOOKING STATEMENTS

This document, AdvEn Inc. and other publicly available documents, including the documents incorporated herein and therein by reference, contain, and our officers and representatives may from time to time make “forward-looking statements”. Forward-looking statements can be identified by words such as: “anticipate,” “intend,” “plan,” “goal,” “seek,” “believe,” “project,” “estimate,” “expect,” “strategy,” “future,” “likely,” “may,” “should,” “will,” “positions,” and similar references to future periods. Examples of forward-looking statements include, among others, statements we make regarding:

Guidance relating to proforma fiscal year net income and EBITDA which is a non-GAAP measurement.

- Expected operating results, such as revenue growth and earnings.
- Anticipated levels of capital expenditures for fiscal year 2025 - 2028.
- Expectations of the effect on our financial condition of claims, litigation, environmental costs, contingent liabilities and governmental and regulatory investigations and proceedings.
- Strategy for customer retention, growth, product development, market position, financial results and reserves.

Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based only on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of our control. Our actual results and financial condition may differ materially from those indicated in the forward-looking statements. Therefore, you should not rely on any of these forward-looking statements. Important factors that could cause our actual results and financial condition to differ materially from those indicated in the forward-looking statements as are applicable to the Issuer.

Any forward-looking statement made by us in this document is based only on information currently available to us and speaks only as of the date on which it is made. Except as required by applicable securities laws, we undertake no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

Executive Summary

Canada stands at a crossroads in industrial transformation. AdvEn offers a clean-tech pathway that aligns with national goals, unlocks stranded carbon, and delivers measurable public value.



Challenge

- Canada's heavy industry faces stranded carbon, rising emissions, and declining competitiveness



Solution

- AdvEn's clean-tech transforms asphaltenes into low-carbon products, unlocking circularity and economic resilience



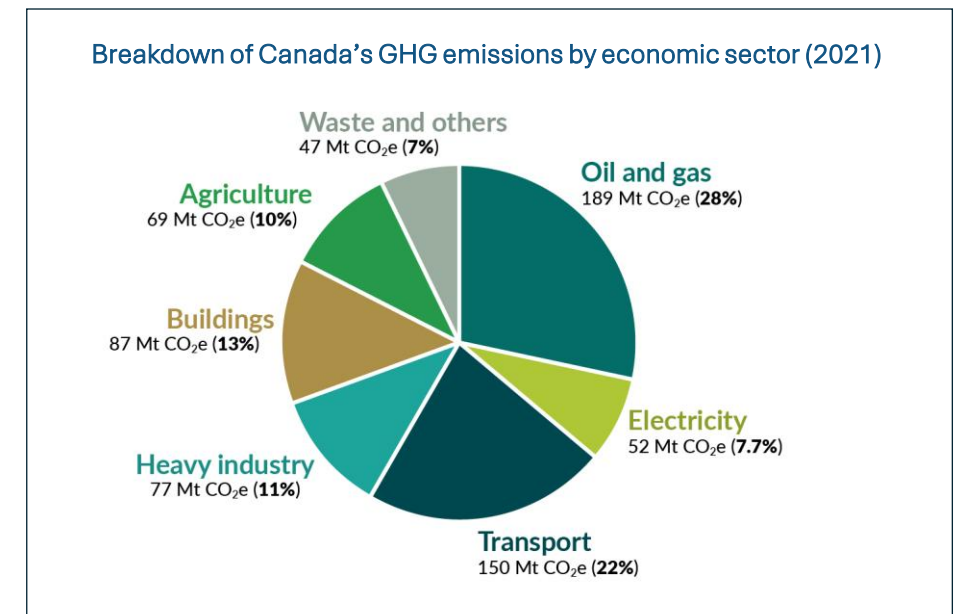
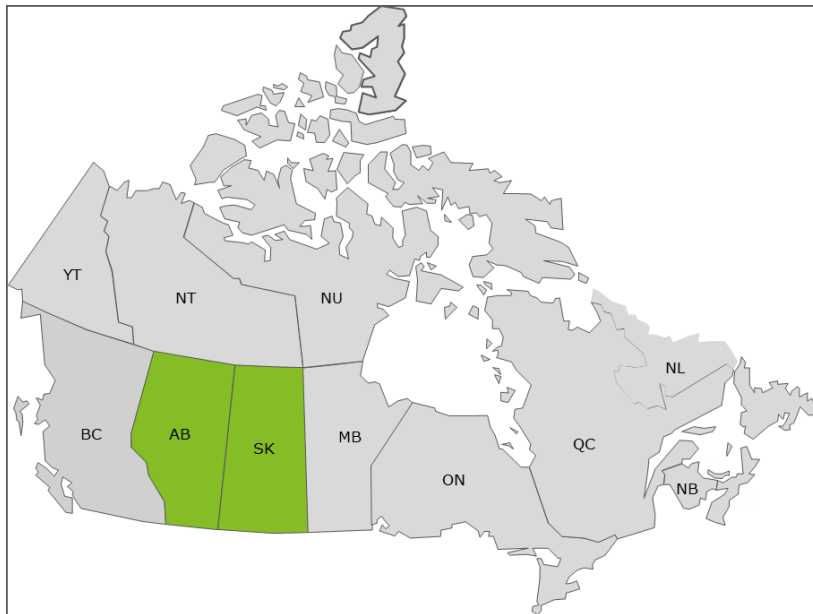
Impact

- Supports national climate goals, creates regional jobs, and de-risks industrial carbonization

Canada's Industrial Carbon Dilemma

Heavy industry remains one of Canada's most stubborn sources of emissions. Stranded carbon resources like asphaltenes represent both a challenge and a missed opportunity for innovation.

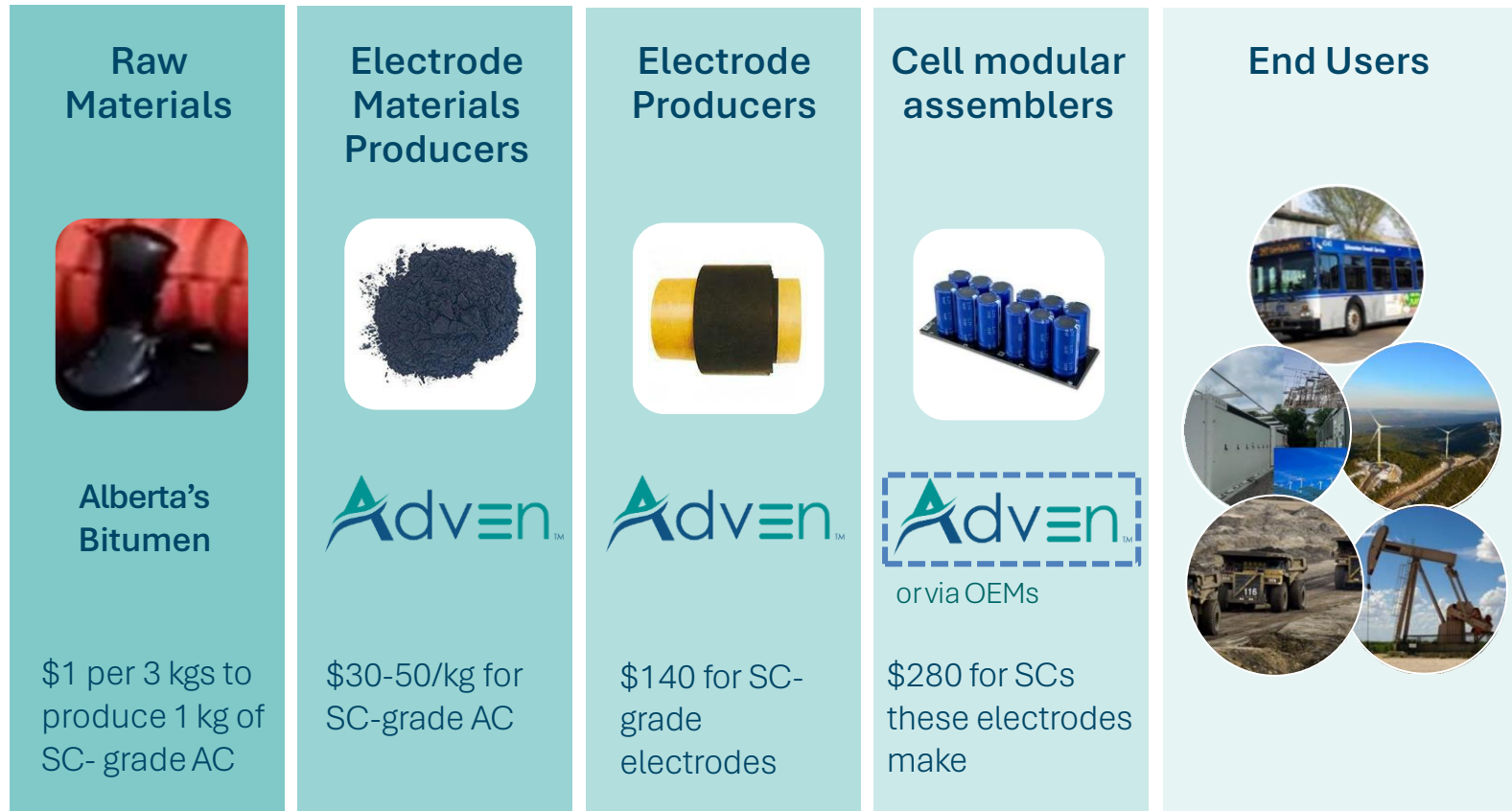
- Oil and Gas, and Heavy industry accounts for over 35% of Canada's industrial emissions
- Asphaltenes are underutilized, carbon-intensive, and environmentally problematic
- Government targets (Net Zero 2050, Clean Growth Strategy) demand scalable solutions.



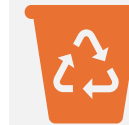
Transforming Asphaltenes into Strategic Value

AdvEn's proprietary process converts asphaltenes into low-carbon outputs through a scalable, modular platform ready for deployment

Example: Supercapacitor



Circular Value from Industrial Waste



Transforms **refinery by-products**, such as tank bottom sludge and biocrude, **into high-purity activated carbon** for energy storage, filtration, and industrial applications, turning legacy waste into strategic clean-tech assets.

Low-Carbon Intensity



Proprietary process **reduces greenhouse gas emissions by up to 65% and energy consumption by 90%**, transforming refinery waste into high-performance carbon without combustion or toxic byproducts. Exempt from environmental taxes - EU ETS and EUDR; certified non-charcoal.

Modular Deployment



ESS-AC platform is **producing at 800MT** capacity with a clear path to **scale beyond 10,000MT**.

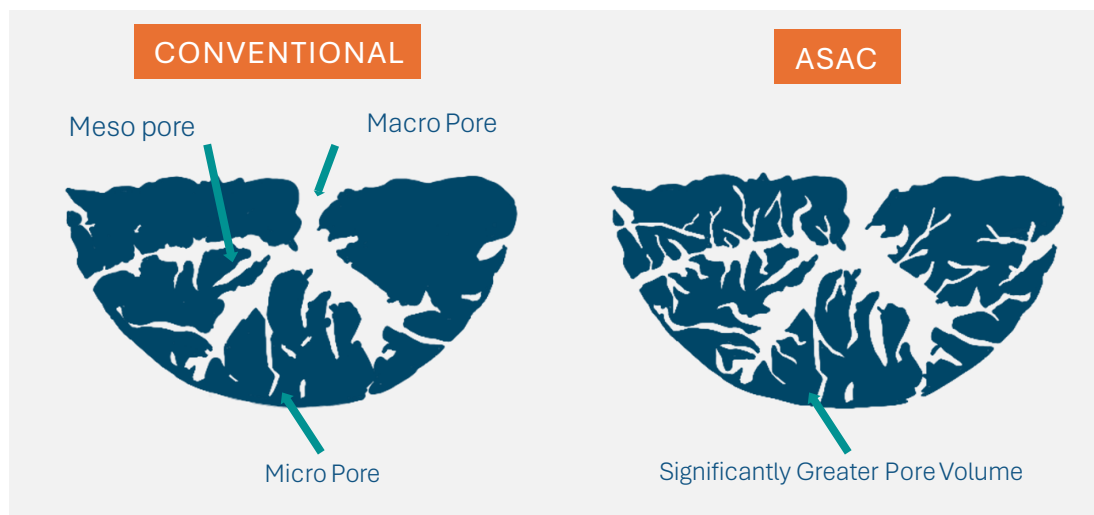
AdvEn's Core Technologies

Compatible with energy storage systems – standalone or integrated for greater value capture

ASAC

(Advanced Super Activated Carbon)

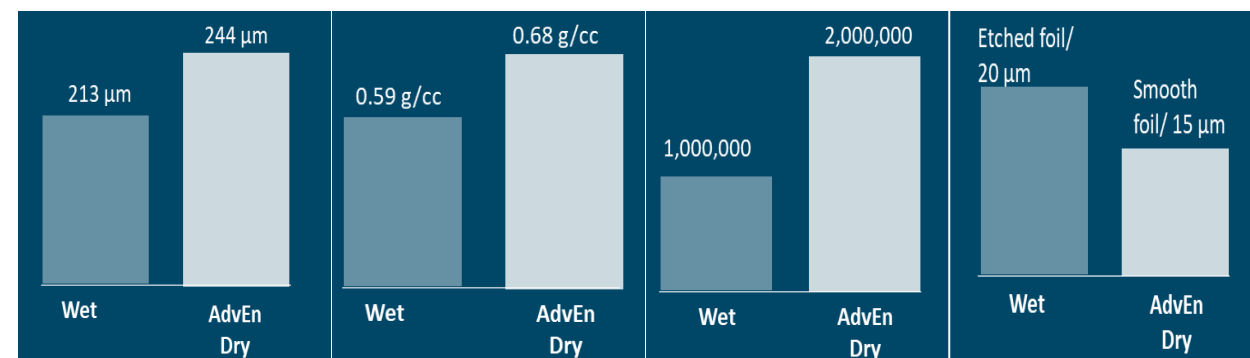
- Converts refinery waste into super-activated carbon
- Combustion-free, GHG-light process
- 30% greater surface area; faster charge/discharge



ESAC

(Dry Electrode Process)

- 100% increased cycle life
- High energy density, low cost, recyclable
- No toxic solvents, low-temp processing, & scalable licensing model



Coating thickness

Film density

Cycle life

Foil type/thickness

Delivering Environmental, Economic, and Social Impact

Beyond technology, AdvEn delivers tangible benefits to the environment, economy, and communities – creating a triple win for public stakeholders

Environmental



- 90% lower energy use and 65% fewer GHG emissions vs. conventional activated carbon production
- **Non-combustion, non-toxic process** avoids harmful byproducts and water/chemical waste
- Certified **non-charcoal, EU ETS/EUDR exempt**, supporting global ESG compliance

Economy



- Estimated 350+ high-quality **clean-tech jobs** created, supporting workforce transition from oil & gas
- **>\$200M in projected taxable income** by 2030, strengthening federal and provincial revenues
- **Regional supply chain development:** catalyzes Canadian manufacturing, engineering, and logistics ecosystems
- **Export growth:** positions Canada as a global supplier of ESG-compliant activated carbon

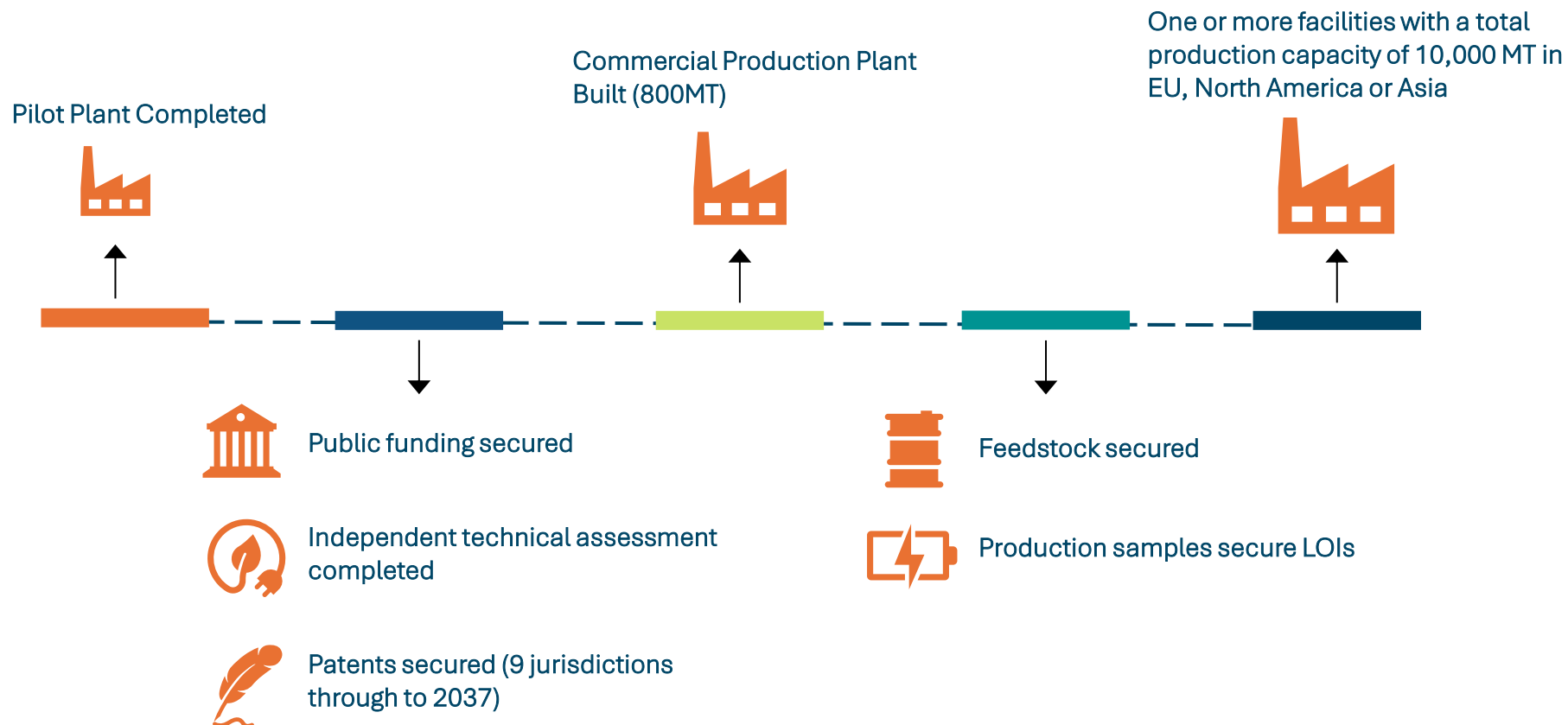
Society



- **Workforce transition pathways** for skilled trades and engineers from traditional energy sectors
- **Indigenous partnerships and engagement** embedded in project development and operations
- **Community benefits** through local hiring, training, and long-term economic participation

De-risked and Ready to Scale

AdvEn is not theoretical – it's validated, piloted, and backed by industry and public partners. The foundation is laid for rapid scale-up



Sales

Driving early revenue through direct sales from fully operational plant

Target sectors

Supercapacitors: Fast charge/discharge, ideal for burst power and short-term storage

Solid state & sodium-ion batteries: Higher energy density to deliver extended range and lifecycle

Stationary storage: Grid stabilisation, renewable integration

Other applications: Pharma, hydrogen, water purification, catalysts

COMMERCIAL TRACTION

50 active sample requests from
leading manufacturers

LOIs for **2,900MT**
underpinning long-term offtake
discussions

Positive customer **feedback** on
performance, cost, &
sustainability credentials

Revenue Model

Diverse revenue streams driving growth & market capture

Direct sales of ASAC to ESS players

Pilot sales of ASAC specialty uses - pharma, hydrogen, water purification

Grants & ESG incentives (non-dilutive capital)

ESAC technology licensing fees

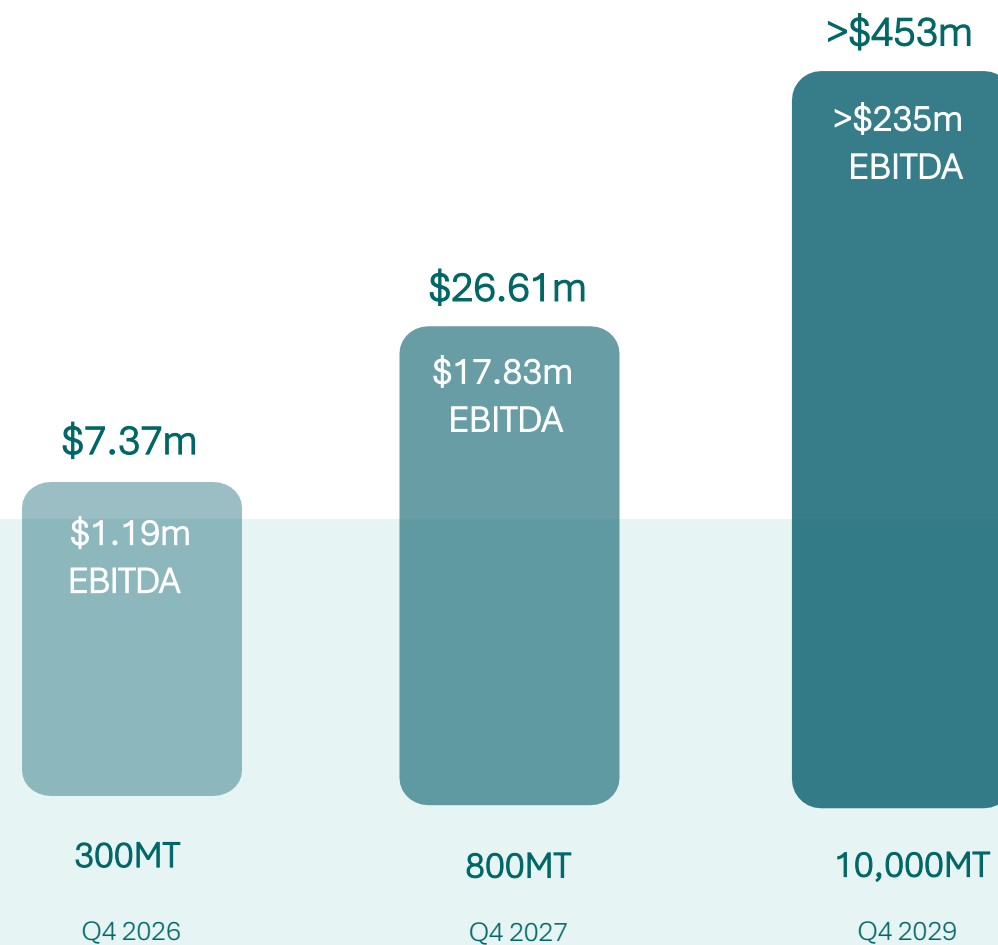
ASAC

EBITDA margins >50% achievable at scale

ESAC

Targeting a 2.6% share of TAM to deliver potential licencing revenue over several years from 2026 of \$64.1m

ASAC Forecast Revenue



Note: the chart above does not include the revenue from ESAC

Strategic Fit with Government Priorities

AdvEn's mission directly supports Canada's clean growth agenda and aligns with key federal and provincial funding programs designed to accelerate industrial decarbonization

AdvEn Mission Statement

'To create value through the commercialization of carbon-centric advanced technologies utilizing industrial waste, converting refinery residues into non-combustible products for energy storage, and maintaining a clean environment.'

- AdvEn directly supports:
 - Net Zero Accelerator
 - Industrial Carbonization
 - CO₂ reduction
 - Clean Fuels Fund
 - Low-carbon fuel production
 - Energy transition
 - Strategic Innovation Fund
 - IP-driven clean-tech
 - Economic growth
 - Alberta Technology Innovation and Emissions Reduction
- ~\$8M non-dilutive grants previously secured
- Amplifies existing public investments and accelerates climate targets



Investment Case

Proprietary, sustainable technology backed by robust IP and active customer engagement



Scalability

ESS-AC platform is producing at 800MT capacity with a clear path to scale beyond 10,000MT, enabling rapid market capture in a supply-constrained sector.



Environmental Impact

Proprietary process reduces greenhouse gas emissions by up to 65% and energy consumption by 90%, transforming refinery waste into high-performance carbon without combustion or toxic byproducts.



Proprietary, Patented Technology

Patented ASAC and ESAC technologies, protected in nine jurisdictions until 2037, deliver unmatched performance in energy storage and are the only North American solution for ESS-grade activated carbon.



Low-Emissions Process Aligned with ESG Priorities

Ultra-efficient, solvent-free process uses 1/10 the energy and emits 1/3 the GHGs of conventional methods, qualifying for ESG-aligned grants and exemption from EU carbon taxes.



Strategic Access to a High-Growth Market with Minimal Competition

The only scalable producer in North America and Europe, uniquely positioned to meet critical supply gaps.



Circular Value from Industrial Waste

Transforms refinery by-products, such as tank bottom sludge and biocrude, into high-purity activated carbon for energy storage, filtration, and industrial applications, turning legacy waste into strategic clean-tech assets.



Public Investment

AdvEn has secured non-dilutive government grant funding in recognition of its patented low-emissions technology and circular economy impact, reinforcing national and provincial priorities in clean tech, industrial reuse, and climate resilience.

Capital Raise

To unlock this impact at scale, we seek strategic support to accelerate deployment

Capital Sought: C\$5M. Target Close – 1Q 2026

Use of Proceeds

- **Plant Process Optimization** - Yield, Product Spec, Processing Time
- **Working Capital** – Support Customer qualification programs and LOI conversion
- **ESAC Pilot** – IP development, pilot production, offtake testing
- **Scale Modular Capacity** – design-build for 10,000MT commercial plant (NA/EU)

Investment Rationale

- **Proven Demand** - 2,900MT offtake LOIs signed; 50+ active sample requests
- **Early Commercial Traction** – 800MT production online, scalable to multi-KT
- **Public Validation** - ~\$8M non-dilutive grants secured; independent technical assessments complete
- **Near-term Economics** – revenue >C\$26M and EBITDA ~C\$17M by 2027 at 800MT run-rate

Risk Mitigation

- **Feedstock variability** - standardized pre-treatment specs and refinery co-engineering
- **Scale execution** - modular design and staged capex with partners
- **Market conversion** - LOIs and product qualification programs

Target Outcome

- Establish AdvEn as the leading North American & European ESS-AC producer
- Deliver >C\$235M EBITDA at 10,000MT scale by 2029
- Position for strategic partnerships, licensing



Appendix

Abbreviations

AC	Activated Carbon
ASAC	Advanced Super Activated Carbon
ESAC	Electrode Super Adhesive Coating
EIS	Enterprise Investment Scheme
ESS	Energy Storage Systems
VCT	Venture Capital Trust

Exchange Rate, 4 June 2025

USD	CAD	GBP
1	1.37	0.74

BOARD OF DIRECTORS

Experienced leadership driving strategic growth



Dr. Grzegorz Ombach
CHAIRMAN

25+ years of international experience in technology, power systems, & innovation. He currently serves as Senior VP & Head of Disruptive R&D at Airbus. Previous roles include executive positions at Draexlmaier Group & Qualcomm.



Ingo Mueller
CEO

Extensive global C-suite experience with public & private companies. He has provided strategic advisory services across various industries, including work with Daewoo Shipbuilding, BAO Minerals, & Petro China.



Benjamin Hill
DIRECTOR

A fund manager & legal expert with 20+ years' experience in private equity & capital markets including at RAB Capital, where he helped grow AUM from \$300M to \$2.7B. His expertise spans fund strategy, transactions, & risk, adding strong value across public & private investments.



Donald Nicholson
DIRECTOR

An experienced executive who began his career at Shell Canada and went on to hold directorships with several multinational companies. He also served as President of Pan Pacific Aggregates plc, leading major projects across LNG, power generation, mining, nuclear, natural gas, & pipeline construction.

KEY LEADERSHIP TEAM

Exceptional leadership with world-class R&D expertise



Ingo Mueller
CEO

Extensive global C-suite experience with public & private companies. He has provided strategic advisory services across various industries, including work with Daewoo Shipbuilding, BAO Minerals, & Petro China.



Dr. Weixing Chen
TECHNOLOGY ADVISOR

Co-inventor of core ASAC & ESAC technologies. With +25 years in material engineering R&D, he is a tenured professor at the University of Alberta & has published extensively.



Mark Wilfur
Director Operations

Extensive experience in managing large-scale oil and gas operations, with expertise in project management, lean practices, and behavior-based safety.



Joe Rossen
CCO

A specialist in supply chain management, strategic sourcing, product development, & business development. Extensive global network, with in depth understanding of the Activated Carbon sector.



PA Consulting
ADVISOR

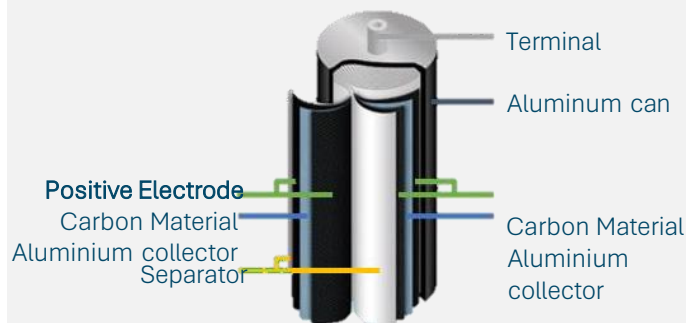
A global firm of over 4,000 experts based in 8 locations worldwide helping accelerate growth ideas from concept through design, development, and commercial success.

SETTING THE SCENE

AdvEn: Enabling the next generation of energy storage systems (ESS)

ESS: Essential for electrification, enabling the storage & delivery of energy

- ESS rely on electrodes, the “chipset” of the system, to store and release energy
- Electrode performance determines driving range, lifespan, safety, and cost
- Key ESS technologies that use electrodes include supercapacitors & batteries



Activated Carbon: The Essential Electrode Material

- Primary material in most commercial supercapacitors, accounting for ~50% of electrode value
- Key advantages:
 - Extremely high surface area (thousands of m^2 per gram)
 - Porous structure allowing for maximum charge separation & storage
 - Lightweight, conductive, & cost-effective

The AdvEn Advantage

- Proprietary activated carbon with controlled porosity, high surface area, and purity
- Improves supercapacitor energy storage by 30%
- Backed by major clients as a breakthrough, market-disrupting technology
- Produced via sustainable, scalable processes

MARKET DYNAMICS

Disrupting a constrained supply chain to capitalise on the clean energy storage boom



Surging Demand

The global energy storage market is projected to grow to \$42bn by 2032, at a CAGR of 25.2% (Persistence Market Research)



Grid instability & EV proliferation

EV sales grew 60% year-on-year in 2024, driving urgent demand for reliable, fast-charging storage solutions (IEA)



Supply Concentration

A substantial portion of global AC production is concentrated in Asia, where new export taxes & stricter environmental regulations threaten supply chains (Grand View Research)



ESG Pressure

Traditional AC production generates up to 54% more CO₂ emissions than AdvEn's processes, while incurring high water & chemical waste, leading to rising costs & regulatory scrutiny.

FORECAST GROWTH

9%

CAGR

SuperCap AC

\$1.5 bn in 2024 to \$3.8bn by 2033, 10% CAGR

24%

CAGR

Supercapacitors

\$5.4bn in 2023 to \$36.5bn by 2032

20%

CAGR

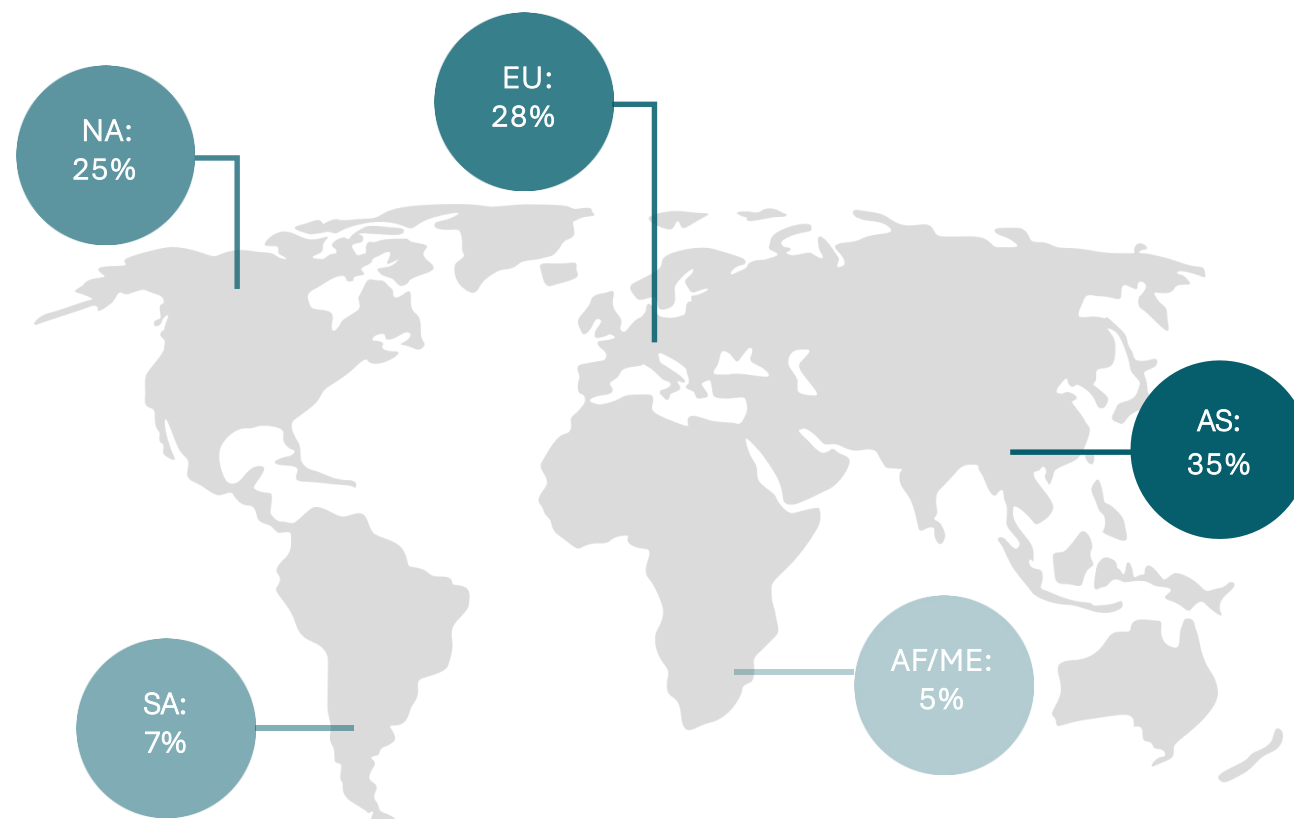
Lithium Batteries

\$54bn in 2024 to \$193bn by 2030

DIFFERENTIATIONS

Integrated processes positioned to unlock value across the energy storage chain

- AdvEn believes it is the only large-scale commercial producer of ESS-AC in North America and Europe
- Exempt from environmental taxes - EU ETS and EUDR; suppliers who use conventional means of charcoal-based inputs to produce AC will be subject to these taxes
- Iodine number (avg. pore structure) 1,700–3,000 vs. 800–1,500
- Reduced energy use and 65% lower emissions vs conventional physical activation of AC
- Potential to replace volatile Asian supply chains with localised ESG-compliant solution
- Modular, scalable, ESG-aligned production model

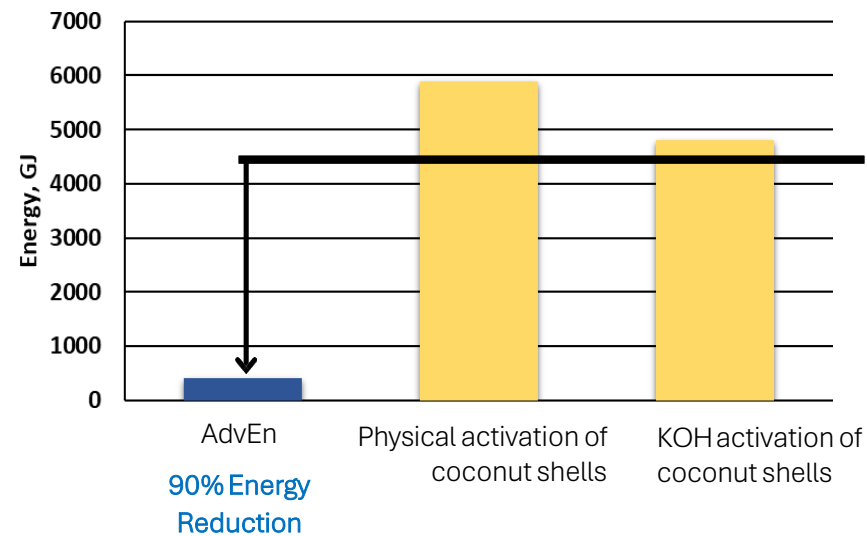


SUPERCAPACITOR MARKET SHARE BY REGION

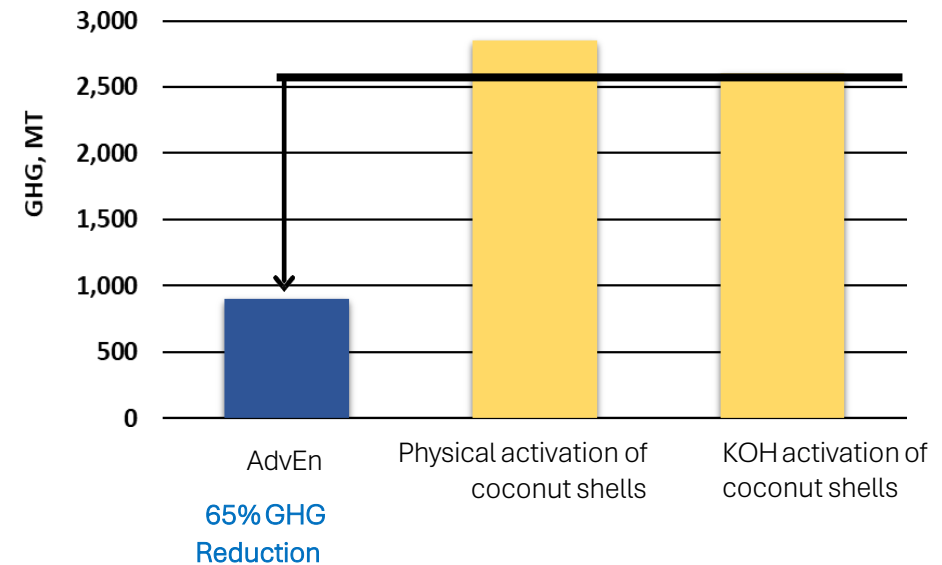
Sources: Verified Market Reports,
Global Market Insights and Interaction with Market

ASAC: ECONOMIC & SUSTAINABILITY BENEFITS

PROJECTED ENERGY CONSUMPTION*



PROJECTED GHG EMISSIONS*



Note: Based on management estimates at 400MT per year production capacity, & confirmed by SAISS, a 3rd party environmental consultancy

COMMERCIALISATION STRATEGY

Accelerated roadmap to scalable production and profitability

ASAC production output of **800MT**
(Net of max. 1,200MT capacity)

Establish IP, processes, & licensing
model for ESAC manufacturing

Launch ESAC commercial pilot

2025-26



2026-27

One or more facilities with a total
production capacity of 10,000 MT in
EU, North America or Asia

License ESAC to electrode
manufacturers; option to **co-invest** or
JV in commercial facilities

Achieve revenue target of
>\$453m & EBITDA of \$235m
annualised 10,000MT run rate

2028-29



2030

Expand total production
capacity



