



PROJECT EVEREST

An Ambient Energy Harvesting Infrastructure Platform

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Harvesting Ambient Energy from the World's Infrastructure

A new energy paradigm that transforms everyday infrastructure into continuous, distributed power sources – without disrupting how the world already moves.

INTELLECTUAL PROPERTY & DISCLOSURE NOTICE

Project Everest is protected under filed national and international patent applications.

This document intentionally presents the technology at a system, architectural, and conceptual level. Specific implementation methods, conversion mechanisms, materials, tuning strategies, and optimization techniques are not disclosed in order to preserve the integrity of the intellectual property.

The purpose of this disclosure is to enable understanding, strategic discussion, and collaboration – not replication.



PROJECT EVEREST

An Ambient Energy Harvesting Infrastructure Platform

EXECUTIVE SUMMARY

The global energy system is approaching a historic inflection point. Rapid electrification driven by data centers, artificial intelligence, electric mobility, industrial automation, and urban expansion is placing unprecedented strain on existing power infrastructure. While trillions of dollars are being committed to new generation and storage, a critical reality remains largely overlooked: vast amounts of energy are continuously generated – and wasted – by the infrastructure already in operation.

Project Everest introduces a new energy layer that complements traditional generation by harvesting ambient energy from high-activity infrastructure such as highways, bridges, and industrial corridors. Rather than competing with solar, wind, or centralized power plants, Everest captures energy that already exists as a byproduct of motion, vibration, airflow, and structural dynamics.

By channelizing and synchronizing these forces, Project Everest converts passive, unused energy into usable electrical output through a modular, scalable system designed for large-scale deployment. The platform integrates non-intrusively alongside existing infrastructure, operating continuously without altering traffic flow, land use, or structural behavior.

With foundational patents secured and early prototype validation completed, Project Everest is positioned as a platform technology with the potential to unlock approximately USD 300 billion in near-term value and more than USD 1.9 trillion through long-term global adoption.



PROJECT EVEREST

An Ambient Energy Harvesting Infrastructure Platform

TABLE OF CONTENTS

1. The Global Energy Challenge	Pg. 4~7
2. The Hidden Energy Economy	Pg. 8
3. Project Everest: Core Concept	Pg. 9~12
4. System Architecture & Modularity	Pg. 13
5. Energy Output & Scaling Logic	Pg. 14~16
6. Economic, Industrial & Social Impact	Pg. 16~17
7. Development Status & Roadmap	Pg. 18
8. Government & Policy Alignment	Pg. 18~19
9. Investor Perspective	Pg. 20
10. Vision, Responsibility & Next Steps	Pg. 21~23



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An Ambient Energy Harvesting Infrastructure Platform

SECTION I — THE ENERGY CHALLENGE

A GLOBAL ENERGY INFLECTION POINT

Green Central Banking

News Opinion EU Omnibus Podcast Scorecard Why Green Central Banking?

ASIA IN FOCUS MONETARY POLICY CAPITAL REQUIREMENTS DISCLOSURE NATURE LOSS SUPERVISION STRESS TESTS

← News

IEA sees energy security risks from climate as oil and gas demand keeps rising

November 17, 2025 | Written by [Emma Thomasson](#)

The International Energy Agency (IEA) has warned that the energy sector needs to prepare for the impact of climate change, as the world looks unlikely to reach targets to cut emissions and the agency predicts demand for fossil fuels will keep rising beyond 2050.

"The resilience of energy infrastructure in the face of extreme weather and other hazards is becoming more critical, as well as to cyberattacks and other malicious activity," the IEA wrote in its annual [World Energy Outlook](#).

The IEA noted that disruptions to critical energy infrastructure in 2023 affected more than 200 million households around the world with power lines particularly vulnerable to weather risks.

"Extreme temperatures driving up peak demand could lead to a loss of two-thirds of planning reserve margins in the worst affected regions, underlining the need for increased climate resilience planning and implementation," it said.

If governments pursue current policies, the IEA forecasts that demand for oil and natural gas will keep rising until mid-century, although coal is set to decline before 2030.



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The AI Race: Power Bill Scrutiny | Winter Blackout Risk

AI Data Centers Are Sending Power Bills Soaring

Wholesale electricity costs as much as **267% more than it did five years ago in areas near data centers. That's being passed on to customers.**

DIVE BRIEF

Electricity prices to continue rise in 2026: EIA

Electricity demand is also going up, with much of it concentrated in Texas due to “data centers and cryptocurrency mining facilities,” it said.

Published Nov. 13, 2025

Meris Lutz
Senior Editor

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The figure contains two charts from EIA. The left chart is a line graph titled 'U.S. monthly nominal residential electricity price cents per kilowatthour' showing a steady upward trend from 2009 to 2025, with a dashed line indicating the forecast. The right chart is a bar graph titled 'Annual growth in nominal residential electricity prices percent' showing growth rates of 1.1%, 1.1%, 3.8%, 10.1%, 6.4%, 3.0%, 4.7%, and 0% for the years 2009 through 2016, with the 2016 bar labeled as 'forecast'.

Electricity demand is no longer growing linearly – it is accelerating.

Artificial intelligence workloads, hyperscale data centers, electric transportation, advanced manufacturing, and climate-driven cooling demands are driving electricity consumption far faster than grid expansion, generation capacity, or storage deployment can realistically keep pace. Even regions with aggressive renewable adoption are experiencing rising wholesale prices, grid congestion, and reliability concerns.

Extreme weather events and climate volatility are further exposing the fragility of centralized energy systems. Energy security has become as much an economic and geopolitical issue as it is an environmental one.



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This moment marks a shift in thinking. The challenge is no longer only how to generate more energy, but how to capture, localize, and optimize the energy that is already being produced – and lost – every second.

Project Everest is positioned precisely at this intersection, as a complementary energy layer designed for efficiency, resilience, and decentralization.

LIMITATIONS OF CONVENTIONAL SOLUTIONS

While renewable energy sources such as solar and wind play a critical role in the energy transition, they face structural limitations that restrict their ability to meet rapidly accelerating demand on their own.

Large-scale power plants – hydroelectric, fossil-fuel, nuclear, or renewable – require complex feasibility analysis, long approval cycles, complex permitting, and multi-year construction timelines. These delays increasingly fail to align with the speed of demand growth driven by data centers, electrification, and industrial expansion.

Solar and wind systems are inherently intermittent, requiring extensive storage to ensure reliability. Large-scale storage remains material-intensive, costly, and constrained by supply chains for batteries and critical minerals.

Transmission and distribution introduce additional inefficiencies. As generation sites move farther from consumption centers, losses increase, grid congestion worsens, and infrastructure upgrades add further cost and delay.



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Most importantly, conventional strategies largely ignore a fundamental reality: massive amounts of energy are already being generated continuously by existing infrastructure and dissipated without capture.





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SECTION II — THE HIDDEN ENERGY ECONOMY

Every moving vehicle, braking event, airflow disturbance, and structural vibration represents energy being generated and immediately lost. This energy is not created intentionally for power generation, yet it exists persistently as a byproduct of modern civilization.

High-density infrastructure corridors – highways, bridges, freight routes, tunnels, and urban transit networks – function as vast, unrecognized energy systems. Unlike solar or wind, this energy does not depend on weather, daylight, or geography. It is present wherever people and goods move, and it increases naturally with economic activity and urban density.

Today's infrastructure is engineered to withstand, dampen, or absorb these forces as losses. The idea that they could be harnessed productively has been largely overlooked – not because it lacks merit, but because it challenges traditional assumptions about where energy comes from.

Project Everest is founded on a simple insight: if infrastructure already generates energy as part of normal operation, then capturing even a fraction of that energy – safely, passively, and continuously – represents a new class of clean power.

The hidden energy economy already exists. Project Everest is designed to unlock it.



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SECTION III — PROJECT EVEREST: CORE CONCEPT

WHAT IS PROJECT EVEREST?



Project Everest is a distributed ambient energy harvesting platform designed to integrate seamlessly alongside existing infrastructure and convert environmental forces into usable electrical power.



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An Ambient Energy Harvesting Infrastructure Platform

Everest operates as a parallel energy layer, coexisting with highways, bridges, transportation corridors, and industrial networks already in operation. It captures energy that is naturally produced during everyday activity and would otherwise dissipate unused.

The system is passive by design. It does not alter infrastructure function, safety, or capacity, nor does it require changes to traffic flow, land use, or structural behavior. Once installed, Everest operates continuously and silently in the background, converting ambient activity into steady electrical output.

WHAT MAKES EVEREST DIFFERENT

Project Everest represents a fundamentally different approach to clean energy:

- **No fuel dependency**
The system relies solely on ambient energy already present in the environment.
- **No reliance on weather cycles**
Output is driven by infrastructure activity rather than sunlight, wind, or seasonal variability.
- **Non-intrusive deployment**
Existing assets continue to operate exactly as designed.
- **Linear scalability**
Each module contributes independently, allowing predictable capacity growth without centralized bottlenecks.



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TYPES OF AMBIENT ENERGY UTILIZED

At a conceptual level, Project Everest harnesses:

- **Mechanical vibrations** generated by vehicular motion, braking, and acceleration
- **Airflow and turbulence** created by moving vehicles and pressure differentials
- **Structural oscillations** present in bridges and elevated infrastructure under dynamic loads



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The platform is engineered to operate across varying intensities and frequencies, enabling deployment across diverse infrastructure types without custom redesign.

SYSTEM PHILOSOPHY: CHANNELIZE, SYNCHRONIZE, CONVERT

Project Everest follows a three-stage system philosophy:

1. **Channelize** – Guide ambient energy into defined pathways to increase usable density
2. **Synchronize** – Align chaotic forces into coherent, stabilized dynamics
3. **Convert** – Transform stabilized motion into electrical output using protected architectures

Together, these stages maximize energy capture while preserving durability, modularity, and infrastructure compatibility.

SECTION IV — SYSTEM ARCHITECTURE & MODULARITY

MODULAR CHAMBER ARCHITECTURE



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Project Everest is composed of discrete, self-contained modules designed for scalability and resilience. Each chamber functions independently while contributing to a distributed energy network.

This architecture enables:

- Incremental deployment
- Phased investment
- Simplified maintenance
- Built-in redundancy

Modularity transforms energy harvesting from a monolithic project into a repeatable, infrastructure-native system.

INFRASTRUCTURE INTEGRATION & NON-INTRUSIVE DESIGN

Everest is designed as an infrastructure-native energy layer. Modules are structurally independent, silent in operation, weather-resilient, and accessible for maintenance without disrupting traffic or operations.

By integrating alongside infrastructure rather than within critical load paths, Everest preserves safety compliance, structural integrity, and regulatory alignment.

SECTION V — ENERGY OUTPUT & SCALING LOGIC

UNIT-LEVEL OUTPUT (CONCEPTUAL)



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Under sustained high-activity conditions, each module is architected to deliver continuous kilowatt-scale power output, operating across extended duty cycles rather than intermittent bursts.

Actual performance varies with traffic density, environmental dynamics, placement, and infrastructure characteristics. When deployed across dense corridors, aggregated module output supports localized loads such as lighting, EV charging, sensing systems, and grid injection.

Detailed performance metrics are intentionally undisclosed to preserve intellectual property integrity.

LINEAR SCALING MODEL

Each deployed unit contributes independently. Capacity increases proportionally with installation count, enabling deployment from localized applications to corridor-level, city-level, and ultimately grid-relevant distributed networks.

At scale, linear replication across national and global infrastructure enables annual cumulative energy recovery measured in thousands of terawatt-hours, without redesign or performance degradation.

ENERGY UTILIZATION PATHWAYS (Illustrative)



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Representative examples of how harvested energy may be integrated into existing electrical ecosystems.



*Visuals are conceptual and do not represent specific deployment configurations or output quantities.

1. **Grid Integration:** Strengthening local grid supply in high-demand corridors and reducing peak-load stress.
2. **Electric Mobility Support:** Supplying localized power for EV charging infrastructure co-located with transport networks.
3. **Community & Commercial Loads:** Providing distributed energy to nearby commercial centers, public facilities, and essential services.



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An Ambient Energy Harvesting Infrastructure Platform

SECTION VI — ECONOMIC & INDUSTRIAL IMPACT

NEAR-TERM & LONG-TERM VALUE

Even under conservative deployment scenarios, Project Everest represents an estimated USD 300 billion near-term global platform valuation, assuming limited infrastructure penetration.

As deployment expands, long-term global economic impact exceeds USD 1.9 trillion, driven by sustained energy production, manufacturing, services, maintenance, and exportable technology ecosystems. Annual energy output value alone reaches hundreds of billions of dollars per year at global scale.

INDUSTRIAL, EMPLOYMENT & SUPPLY-CHAIN IMPACT



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Project Everest establishes a new industrial category centered on infrastructure-integrated energy systems.

Deployment at scale drives demand for:

- Structural systems and assemblies
- Advanced materials and composites
- Precision manufacturing
- Power electronics and control systems

Global deployment supports thousands of direct manufacturing and installation jobs, with tens of thousands of indirect jobs created through supply-chain, logistics, services, and regional economic multipliers.

SECTION VII — DEVELOPMENT STATUS & ROADMAP



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Core principles have been validated through laboratory-scale prototypes. Multiple national and international patents have been filed. Development is now advancing toward full-scale prototypes, field pilots, and infrastructure-integrated deployments.

Parallel concept expansion has extended Everest's applicability beyond highways into dense urban environments, strengthening the platform as a multi-layer infrastructure solution.

SECTION VIII — GOVERNMENT & POLICY ALIGNMENT

Government participation is essential to unlocking the full potential of infrastructure-integrated energy systems. Public infrastructure ownership provides a unique opportunity for pilot access, regulatory clarity, and coordinated deployment at meaningful scale.

By supporting early pilots and structured evaluations, governments enable real-world validation while ensuring alignment with safety, planning, and environmental standards. National participation also accelerates standardization, allowing energy harvested from infrastructure to integrate cleanly with existing grid and distribution frameworks.

Early adoption offers multiple strategic advantages:



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An Ambient Energy Harvesting Infrastructure Platform

- Enhanced energy resilience through distributed, infrastructure-based generation
- Domestic technology leadership in an emerging global category
- Creation of exportable platforms rather than single-use assets
- First-mover advantage in infrastructure-integrated energy ecosystems

The cost of delay is not neutrality. It is the permanent transfer of leadership, industrial capacity, and economic value to regions willing to act sooner.



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SECTION IX — INVESTOR PERSPECTIVE

Project Everest is not a short-cycle product investment. It is a platform-level infrastructure technology designed for long-term relevance and compounding value.

Returns are driven by deployment density, geographic expansion, and sustained utilization over time rather than rapid market turnover. Each additional installation strengthens the network, increases aggregate output, and improves long-term economics without requiring redesign or reinvention.

For investors, early participation secures exposure at the foundational layer of a system intended to operate alongside critical infrastructure for decades. This positioning offers:

- Long-duration revenue potential
- Infrastructure-grade stability
- Participation in a globally scalable platform rather than a single-market solution

As infrastructure and energy systems increasingly converge, early alignment with platform technologies such as Project Everest becomes a strategic rather than speculative decision.



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SECTION X — VISION, RESPONSIBILITY & NEXT STEPS

A SHIFT IN HOW WE THINK ABOUT ENERGY

Project Everest represents a fundamental shift in how energy is conceptualized and integrated into the modern world.

Instead of treating energy generation as something separate from infrastructure, Everest reframes it as an embedded function of infrastructure itself. Roads, bridges, and transport corridors are no longer viewed solely as passive conduits, but as active participants in energy systems.

This shift moves the conversation:

- From expansion to intelligence
- From extraction to utilization
- From isolated generation to integrated ecosystems

It is not about building more in new places, but about unlocking more from what already exists.

COMMITMENT TO RESPONSIBLE DEVELOPMENT

Project Everest is being developed with a clear commitment to responsibility at every stage.

Safety, transparency, environmental integrity, and regulatory compliance are not afterthoughts – they are foundational principles



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An Ambient Energy Harvesting Infrastructure Platform

guiding design decisions, testing protocols, and deployment strategies. The platform is intended to enhance public infrastructure value without introducing new risks, disruptions, or externalities.

Long-term success depends on trust, and trust is built through disciplined development and accountable execution.

HONEST DISCLOSURE

Project Everest has not yet been deployed at full commercial scale. Further engineering refinement, field validation, and infrastructure-grade testing are required.

Progression follows a disciplined path from validation to performance to permanence. Confidence in the platform is grounded in methodical development and intellectual property protection, not premature claims or overstated readiness.

This transparency is intentional and essential for building durable partnerships with governments, institutions, and long-term investors.

CALL TO ACTION

This is a call to participate.

Governments, institutions, investors, and engineers are invited to engage in shaping a new energy layer embedded within the infrastructure the world already relies upon.

The opportunity exists now – to transform infrastructure from a passive necessity into an active contributor to the global energy future.



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CLOSING STATEMENT

The future of energy does not belong only to what we build next, but to what we finally learn to harness from what already exists.

Across the world, infrastructure moves, vibrates, resonates, and responds with constant activity. For decades, this energy has been accepted as background noise – present, measurable, and ignored. Project Everest challenges that assumption.

This is a shift from expansion to intelligence. From consumption to utilization. From passive infrastructure to productive ecosystems.

Project Everest is not an endpoint; it is a beginning – a framework for reimagining how energy, infrastructure, and human ingenuity intersect. As energy demand accelerates and resilient solutions become essential, the most powerful opportunities may already be in motion around us.

The path forward is clear.
The opportunity is present.
The responsibility is shared.

What we decide now will determine whether the infrastructure of tomorrow merely carries the world forward – or helps power it.