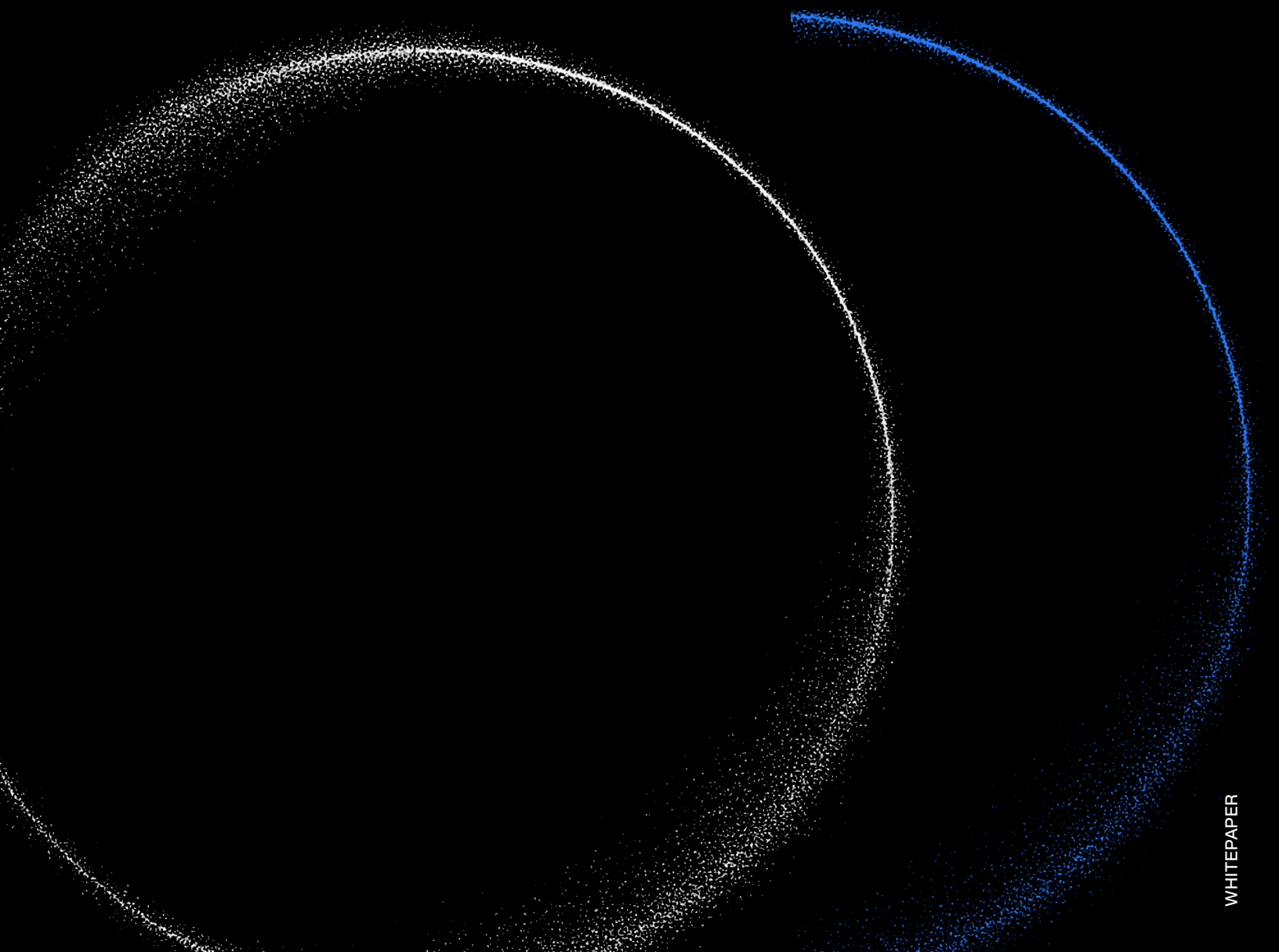
ARMADA

WHITEPAPER

U.S. AI Dominance



WHITEPAPER

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Executive Summary

The United States must lead the world in artificial intelligence and energy dominance. If our nation fails to win this moment, China will fill the void by flooding the market with technology that puts American security and prosperity at risk – the benefits of winning the AI race are as consequential as the price of losing. Winning will define American growth and security for a generation, including:

01

Being the undisputed global market leader, unlocking significant GDP growth for decades

02

Controlling the global AI stack that the rest of the world depends on for commercial and military success

03

Maintaining future military dominance where warfighting is led by autonomous systems and distributed computing

ECONOMIC PROSPERITY

The U.S. stands to gain conservatively at least ~$400B of additional annual GDP in the near term, and a 15% GDP increase by 2030 ($31T). Levers that drive this outcome include:

1. U.S. enterprises' increased output led by AI productivity
2. Increased energy production from America's massive domestic resources
3. Rapid deployment of advanced automation and robotics for the country's reindustrialization
4. Large export revenue of U.S. AI technology abroad

To realize this level of growth, America must build a massive computing infrastructure capable of processing the next generation of AI capabilities, and the equally massive energy resources required to power that compute architecture. Distributed edge computing is the only solution that has the power to do both at once at a cost the country can afford, and on a timeline that keeps America ahead of our competitors.

NATIONAL SECURITY

The winning strategy requires the U.S. to convert its significant energy resources and those of its key Gulf State partners (Saudi Arabia, Qatar, UAE) into a decisive advantage. By developing a vast network of modular data centers strategically co-located to leverage the global reach of the U.S. energy ecosystem, America will create a distributed artificial intelligence system,[1] which is the strategic deployment of computing power and AI capabilities directly where data is generated, creating a global web of immediate, connected intelligence. By processing raw data on-site rather than relying solely on centralized processing, distributed artificial intelligence enables real-time decision-making that increases output, improves operational resilience, and creates robust data security. This in turn creates material upward gains for heavy industries that operate in remote, disconnected, or bandwidth constrained environments.

The winning strategy requires America and our Gulf State partners to turn our significant energy resources – combined with industry-leading edge compute capability – into a

decisive advantage. By deploying a vast network of modular data centers to energy resources at the remote edge we can create a mutually supportive system that simultaneously expands our access to energy and secures America's AI dominance.

The distributed artificial intelligence approach creates a global web of immediate, connected information. By processing the raw data on site, rather than relying on centralized processing, distributed artificial intelligence enables real-time decision making that increases output, improves operational resilience, and creates robust data security – all powered by the gas flaring of the remote energy resources the data center is managing. This creates material upward gains for heavy industries that operate in remote, disconnected, or bandwidth constrained environments.

We believe that by executing the above strategy successfully, the U.S. will:

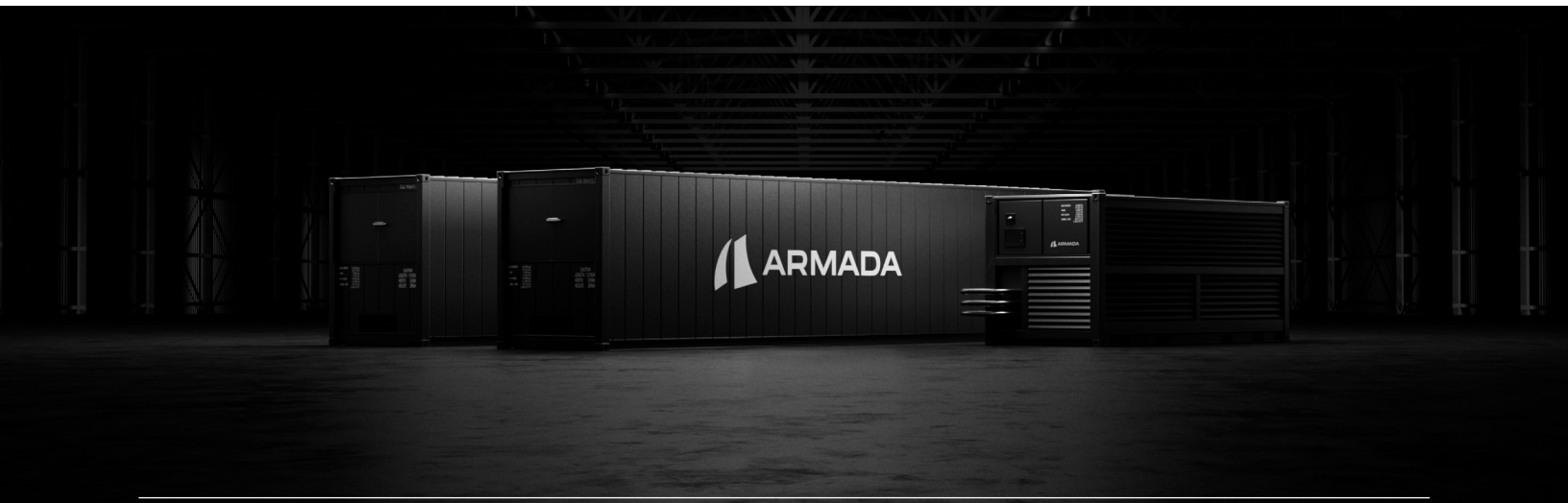
1. Remain the undisputed global market leader in AI and energy, unlocking an additional $400B in annual GDP output
2. Contain China's attempts to sell a cheaper AI stack through superior U.S. quality at competitive pricing
3. Maintain military dominance in a future where warfare is increasingly defined by drones, intelligent systems, and distributed decision-making

CHINA THREAT

Failing to act quickly will risk Chinese AI capabilities surpassing that of America. This would lead to the loss of American technology being the global standard, compromised market leadership, and a weakened military position. As China's energy costs fall relative to the U.S., its AI training and inference progress will continue to grow. This has a downstream effect on the global marketplace as well as on national security issues, effectively challenging both U.S. soft and hard power. If we lose:

1. America will no longer be the technology standard as a China-led AI stack becomes de-facto winner, risking permanent market leadership shifts.
2. China will be increasingly emboldened to press its advantages against the U.S. on its soil and abroad.
3. As the future of warfare increasingly hinges on a country's compute power, U.S. military dominance is at risk if it does not possess the most advanced AI technology and compute capacity.

Leviathan – Armada's megawatt-scale AEP powered modular data center



HOW AMERICA WINS

As a leader in edge computing in contested environments, Armada recommends that the White House prioritize and designate key U.S. domestic and international partnership regions as Centers of Optimized Resources and Edge-intelligence (CORE) Zones.

These are zones that have stranded or excess energy and will benefit from prioritized private and public funding, greater financial incentives, as well as regulatory support to fast-track the development of next-generation edge infrastructure. Without tapping into the massive amounts of data in these areas, our nation loses out on data that can inform economic and national security strategies. CORE Zones represent the future of the U.S. energy ecosystem powered with locally distributed artificial intelligence to achieve higher performance. Our policy recommendations consist of three key focus areas:

1. Offer financial incentives to accelerate private investments
2. Lend regulatory support to speed deployment
3. Promote cross-border partnerships to extend U.S. dominance

To accomplish these goals, Armada sees three immediate, actionable use cases across the Oil & Gas, Utilities, and Transmission sectors to help the U.S. realize the benefits of distributed artificial intelligence. There are great opportunities to:

1. Generate more valuable compute using flare gas to reduce financial losses and waste
2. Increase existing transmission capacity without relying solely on new builds
3. Accelerate natural disaster response and mitigate damage to utilities' asset base

Triton – Armada's 40-foot AEP powered modular data center

02

Distributed Artificial Intelligence for the U.S. Energy Ecosystem

Distributed Artificial Intelligence for the U.S. Energy Ecosystem

The U.S. will continue to lead globally if the country can successfully embark on a strategic transition from relying solely on traditional centralized computing to a robust distributed computing network. There are several primary drivers that support this direction:

01

MORE COMPUTE AT THE EDGE

Over the past decade, sensor and camera technology costs have fallen dramatically. As a result, there has been an explosion of endpoints at the edge. IoT Analytics predicted in their State of IoT Summer 2024 report[2] that the number of globally connected IoT devices is estimated to grow to 40 billion by 2030, reflecting a 100% growth from 2024. With more raw data generated at the edge, greater local processing is needed to distill important signals across factories, cities, mines, rigs, and battlefields. The next generation of computing will consist of deeply distributed networks that power real-time knowledge directly on the operational systems that run vital U.S. infrastructure.

This also means the U.S. power grid must rapidly expand capacity while maintaining high operational resilience. This can be achieved with advanced edge computing that regulates critical energy production and power transmission in real-time, onsite. With ultra-low latency, distributed artificial intelligence is capable of real-time analytics and can preserve grid performance by dynamically adjusting energy distribution as demand changes throughout the day. Key benefits include:

- **Deliver higher operational performance:** Improve operational performance by automating inspection, maintenance, safety, and capacity management for the U.S. power grid.
- **Maintain more accurate system balance:** Enable more precise prediction of system load needs and imbalance risks to ensure continuity.
- **Unlock federated learning:** As intelligence deployed at the edge scales, this enables federated learning, where models are trained locally and collaboratively improved globally across key networks deployed across different zones. The benefit is independent power producers and utilities gain compounding power operation improvements over time.

02

THE ADVANTAGES OF A MODULAR DATA CENTER

The legacy cloud is built across large, centralized data centers. The build out of a new hyperscale data center is a multi-year process from planning to operation. Once permitting and power are secured, development for a 10-50 MW data center can take up to 36 months. Recent projects ranging from DC Blox's Georgia Campus ($1.2B for 180 MW) to new builds from hyperscalers illustrated the large capital outlays required, as well as the 2–3-year timelines to deliver 100-300 MW sites. In contrast, a modular data center approach offers advantages in several key areas:

1. **Expanded deployment reach:** Their compact size and extreme mobility allow modular data centers to be deployed across a broader

range of environments, including remote areas with stranded or excess energy that cannot support traditional infrastructure.

2. **Speed to value:** They can be fully deployed within weeks or months. Avoiding permitting restrictions and local disruptions, operators can quickly start running local and cloud-enabled AI apps to process operations more effectively.

3. **Lower upfront cost with scalable technology:** Modular data centers cost a small fraction of the upfront capital cost relative to traditional data centers. As workloads grow, operators can deploy additional nodes to meet tighter timelines and be more capital efficient.

4. **Security:** Modular data centers fully comply with data residency by ensuring sensitive data does not move off premise. They enable AI workloads to run in fully disconnected environments, ensuring connectivity is not a blocker.

These benefits highlight how modular data centers will be the key vehicle for unlocking distributed artificial intelligence. Quick to deploy, Armada's Galleon, mobile, modular data centers, can capture large pools of operational data in real-time and empower operators to gain critical knowledge and insights that unlock higher performance. Placing the next generation of distributed compute directly next to abundant energy sources will be critical to ensuring U.S. dominance in artificial intelligence.

03

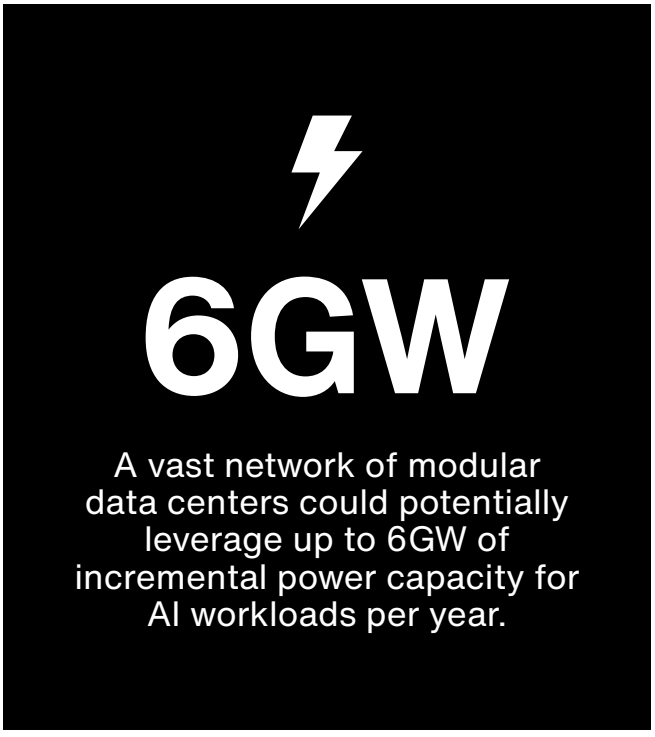
TURNING STRANDED ENERGY INTO INTELLIGENCE

U.S. Possesses Significant Stranded Energy

The U.S. possesses the largest proven reserves of natural gas. With rich plays in the Permian, Bakken, Haynesville, and the Utica, America can convert these gas reserves into abundant power that supplies the country's leading AI capabilities.

There is a large opportunity to monetize gas flares that are produced from wellheads. Gas flaring causes environmental damage as well as financial loss. In the past 6 years the U.S. saw gas flaring range from 0.6 bcf/d to 1.5 bcf/d (2019 peak) with Texas, North Dakota, and Wyoming accounting for almost 80% of U.S. flaring. Many of these wellheads are in remote locations where it is technically infeasible to build the traditional infrastructure necessary to collect the gas and convert it into electricity to power hyperscale data centers. Instead, deploying modular data centers that are mobile and containerized can solve the harvesting challenges.

Considering a range of assumptions regarding the amount of flaring captured, power efficiency, and utilization rates, a vast network of modular data centers could potentially leverage up to 6GW of incremental power capacity for AI workloads per year.



Leverage Gulf State Relations

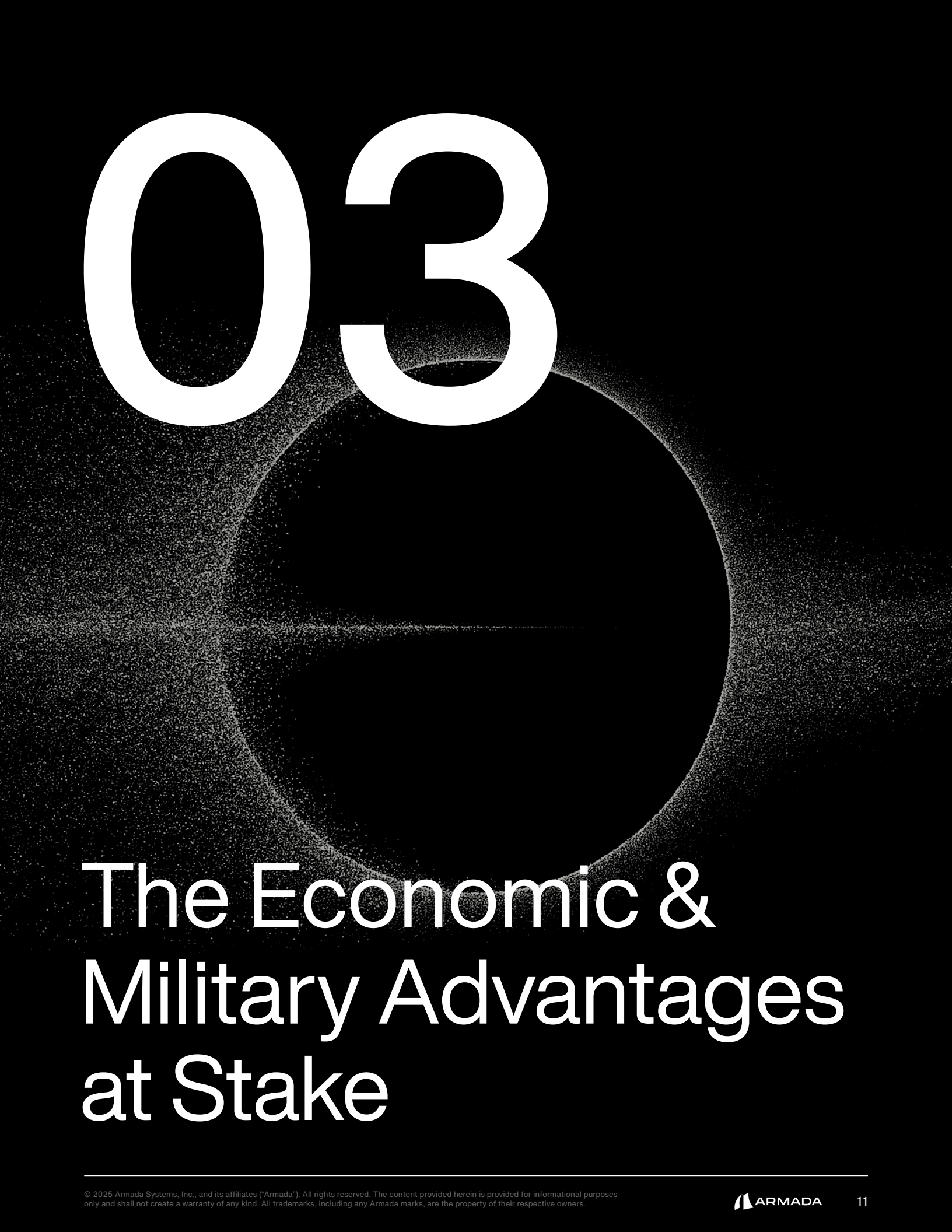
The U.S. benefits by extending its energy and AI dominance in partnership with its key partners in the Middle East. The Trump Administration has prioritized U.S.-Middle East relations, lifting restrictions on advanced semiconductor exports to Gulf partners and securing multi-trillion-dollar investments aligning with U.S. strategic interests in AI and energy.

Saudi Arabia and the UAE enjoy some of the world's highest solar irradiance (~2,000+ kWh/m^2/year), leading to low solar electricity costs around ~1¢/kWh. Qatar and Saudi Arabia also produce natural gas at ultra-low cost. Analysts estimate Qatar's LNG production cost at only ~$0.30 per MMBtu (versus $3–$5 globally), reflecting its giant North Field and efficient infrastructure. Through partnerships with the Gulf States, the U.S. can extend its dominance by engaging in strategic resource sharing across energy and AI technology. Recent examples include the UAE agreeing to establish the largest AI campus outside the U.S. with substantial data center capacities operated by American companies. Also, Saudi Arabia's Public Investment Fund is investing heavily in AI infrastructure, buying hundreds of thousands of Nvidia GPUs, directly benefiting U.S. tech companies.

The U.S. and its Gulf State partners can continue to press the momentum by deploying modular data centers that can be leveraged flexibly and scale quickly. Modular data centers provide unique benefits in their speed to deploy and reduced upfront cost to harness AI quickly and efficiently.

Land and Energy Availability/Cost in the U.S. & Gulf Allies[3]

	United States	Saudi Arabia	Qatar	UAE
Land Area (sq. km)	~9,833,000	~2,150,000	~11,600	~83,600
Avg. Industrial Electricity Price (USD/kWh)	$0.147 (U.S. avg.)	$0.068 (heavily subsidized)	$0.036	$0.110
Solar Energy Potential	High in Southwest (1,800–2,200 kWh/m^2/yr)	Very high (≥2,000 kWh/m^2/yr)	Very high	Very high (≥2,000 kWh/m^2/yr)
Natural Gas Production Cost	~$3–$5 per MMBtu (shale gas boom)	Low (large associated gas; ~$1–$2 per MMBtu)	Ultra-low (~$0.3 per MMBtu)	Low–Med (domestic gas + imports)
Proven Hydrocarbon Reserves	Large (e.g. #1 in natural gas, #9 in oil)	Very large (2nd in oil; significant gas)	Large (3rd in gas globally)	Moderate (6th in oil in OPEC; gas fields)



03

The Economic & Military Advantages at Stake

The Economic & Military Advantages at Stake

Failing to achieve this transition toward distributed artificial intelligence for its energy system could impose severe costs for America's economic and military leadership. The country may lose its best chance to re-industrialize[4] and ensure American economic and military dominance, jeopardizing its ability to scale critical capabilities, a challenge acutely seen in the shipbuilding sector. All of these objectives depend heavily on automation, advanced AI, and robotics.

U.S. GDP OPPORTUNITY

When considering the sizable impacts across AI and energy investments on the U.S. economy, the U.S. could either stand to gain or miss out conservatively on ~$400B of additional value per year ($300B in AI Productivity, $92B in Improved Energy Infrastructure). If American firms and the U.S. government make the necessary investments that unlock the country's vast energy production base and enable distributed artificial intelligence, this can translate into a compounded ~2% gain in yearly GDP growth. This growth by 2030 can be assessed in the following two categories:

AI Productivity ($300-$600B annual contribution)

According to a PwC study[5], AI could boost U.S. GDP by 14.5% by 2030, equivalent to ~$4.7T of incremental value based on a projected 2030 GDP of $31T. McKinsey reported[6] that AI could add an additional 1.2% to annual GDP growth, or about $336B per year for a $28T economy. Failure to unlock AI could result in missing this growth, leading to significant economic opportunity costs.

Improved Energy Infrastructure ($92B annual contribution)

The ASCE 2025 Infrastructure Report Card[7] estimates a $578B investment gap in the U.S. energy sector, likely over 10 years, equating to $57.8B annually. Factoring a multiplier of 1.6 from an EPI study[8] on infrastructure impact on the U.S. economy, this investment could generate $92.5B in annual GDP growth. Underinvestment or inefficient utilization could mean forgoing this economic benefit.

HOW CHINA WILL PRESS ITS ECONOMIC ADVANTAGE

Backed by a massive compute base powered by lower cost energy, Chinese companies will realize greater productivity and innovation, translating their advantage into higher global market share. If the U.S. does not secure AI dominance, America will no longer be the dominant technology standard as a China-led AI stack takes more wallet share. The following trends are predicted:

1. Faster R&D Loops from Years to Months

Facing chip export controls, Chinese companies have relied on their access to abundant, cheap power to make up for their lack of access to the latest state-of-the-art GPUs. They use more power on less powerful, less efficient chips. In the long term, they stand to benefit from the CCP's investment into local manufacturing of 7nm chips, which will allow them to boost R&D performance. Expect higher tempo of quarterly and eventually monthly releases from leading Chinese technology firms that range across AI applications to hardware. As a recent

example, Huawei's announcement of its latest Ascend chips seeks to give lower quality chips for the Chinese market but compensates by allowing customers to utilize them at higher power capacities to drive performance. Other advancements in model training (DeepSeek) and AI applications releases (Manus AI) demonstrate that while export controls in the near-term constrain China's innovation rate, it will not completely block their ability to create a local ecosystem that can rival that of the U.S. technology stack.

The conservative view is not to overvalue America's GPU premium but instead compete by growing the compute stack, boosting the energy supply, and unlocking massive productivity from distributed artificial intelligence that ultimately leapfrogs Chinese progress.

2. Pass Cost Savings to Win Customers

As China continues to reduce its unit power cost and manufacture local hardware and accelerators, Chinese firms will increasingly benefit from economies of scale. Specifically in two key areas:

- Lower compute cost (50-75% of data center operating cost is electricity)
- Reduced capital expenditure (discounted hardware & chips driven by government subsidies as well as improving cost structure over time)

As Chinese companies gain more cost advantages, they will pass on these realized savings to win global business. We see this recently with meaningful trends & implications:

Trend	Implications for US Companies
China's big cloud players are converting cheaper compute into aggressive price cuts. In 2024, Alibaba Cloud reduced prices on 100+ products, some by up to 55% to lure AI developers. Tencent and Huawei Cloud are forced to follow.	AWS, Google, and Azure expect to face more fierce price competition in Asia. They may need to discount or provide value add services to justify premium. Expect cloud growth revenue to be increasingly challenged.
SenseTime, Baidu, and other prominent Chinese AI companies are training large models at lower cost with government grants covering AI infrastructure. They offer AI APIs at lower cost.	U.S. AI firms like OpenAI and Google can maintain an edge in quality, but Enterprise AI pricing pressure will likely grow in developing markets that are sensitive to costs
SMIC and other state-backed fabs price foundry services below market. Huawei's Ascend AI chips gain domestic market share in China as NVIDIA alternatives.	NVIDA, AMD and Intel may see global volume challenges as Chinese options emerge for older chip retirement with China pitching the value of cheaper solutions.
Chinese autonomous tech led by players such as Baidu Apollo and Pony.ai benefit from government provided data and cheap testing environments. This is compounded with cheaper LiDAR and AI chips to enable more miles of testing for less. Robotaxi pilots in Chinese cities are partially funded by city governments.	If a Chinese AV solution reaches sufficiently low-cost, they likely may export globally and pressure pricing before US players like Waymo and Tesla can scale. Whereas U.S. firms rely on superior technology currently, cost efficiency will ultimately matter for wide commercial rollout.

Chinese enterprises benefit from state funding and are further compressing their cost structures. The future challenge for American enterprise will be higher customer acquisition costs, depressed sales forecasts, and reduced margins from global accounts when forced to increasingly compete on cost.

Long-term leadership requires American firms to work in partnership with the U.S. government to develop world class quality in key technology areas while also reducing our own position on the cost curve so that Chinese competition is mitigated.

3. Slow U.S. Compute Growth

Consider that a single AI server rack embeds 328 kg of copper and at least 14 other critical minerals. A recent $500M Chicago data center illustrates the scale: 2,177 tons of Copper, 6.4 tons of Silver, 61 tons of Barium, and multi-ton loads of Gallium, Indium, Titanium, Antimony, Tantalum, Rare Earth ("REEs"), and more. Each mineral is essential for power delivery, high-bandwidth memory, or heat-resistant alloys. To give Chinese firms an advantage, China will attempt to slow down American companies' ability to access key minerals that feed into the energy and technology sector, increasing supply chain costs and pushing out delivery timelines by months, if not years.

For example, in 2023 China started regulating Gallium which saw 135% price increase as China supplies ~98% of the world's refined gallium. Because Gallium is used across many modern technologies, there is an expanded economic cost from China's export restrictions. The United States Geological Survey estimates[9] that a one-year suspension of Chinese gallium exports would translate into a $3.1B hit to the U.S. economy.

Thus, the U.S. will need to fast-track domestic mining, friend-shored refining, and coordinated public-private investment across key conductive metals (Copper, Silver, Barium, Titanium) and strategic "minor" metals (Gallium, Indium, REEs, Niobium, Tantalum) in order to supply the digital infrastructure required to win the AI arms race.

HOW CHINA WILL PRESS ITS SECURITY ADVANTAGE

The Chinese Communist Party's (CCP) rapid expansion of its own AI capabilities will seek to bolster China's military, intelligence, and cyber warfare effectiveness. Enhanced inference capabilities allow more sophisticated autonomous weapons systems, precision cyber-attacks targeting U.S. critical infrastructure, and greater operational capability to disrupt American military and diplomatic activities globally. The CCP's policy of technology-sharing with strategic partners like Iran, North Korea, and Russia amplifies threats to U.S. geopolitical interests and military security, substantially increasing the complexity of maintaining American dominance and stability internationally.

Key targets include the U.S. power grid and data center industry. The grid[10] consists of more than 22K generators, 55K substations, 642K miles of high-voltage lines, and 6.3M miles of distribution lines to service the nation. There are reportedly 5.4K data centers[11] in the U.S. that are critical for the processing of the world's internet activities. Interconnects from power generation assets to data centers are vulnerable. The U.S. power system will need localized AI security to detect and thwart intrusion attempts. Any successful interference will adversely impact the global market and U.S. military operations. Thus, distributed artificial intelligence that powers locally hosted AI applications will reduce the dependency on cloud operations, increasing workload security, and ensuring a secure foundation for deterring next-generation cyber-attacks.

In summary, if the U.S. fails to develop an extensive distributed computing infrastructure backed by an extensive energy system, not only will it miss out on an incremental $2T in GDP growth, but Chinese firms will also capitalize on their cost advantage in energy and compute infrastructure. This would result in their ability to rapidly iterate innovation cycles, scale production efficiently, and undercut American enterprises on pricing. The resulting shift could see critical American industries—such as technology, telecommunications, and advanced manufacturing—dominated by China. Moreover, the U.S. would face increasing strategic vulnerabilities due to reliance on offshore critical mineral resources, inflating production and R&D costs, and accelerating risk timelines.

Triton – Armada's 40-foot AEP powered modular data center

04

Policy Recommendation: Establish CORE Zones

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Armada recommends that the White House prioritize and designate key U.S. domestic and international alliance regions as **Centers of Optimized Resources and Edge-intelligence (CORE) Zones**. These zones with stranded or excess energy will benefit from prioritized private and public funding, greater financial incentives, as well as regulatory support to fast-track development of next generation edge infrastructure. In order to compete with China and maintain economic and military dominance, it is imperative the U.S. create these zones to fully harness distributed artificial intelligence and utilize it to accomplish our own national security goals. They represent the future of the U.S. energy network that is powered with locally distributed artificial intelligence to achieve higher performance.

Key parts of this plan include:

1

Offer Financial Incentives to Accelerate Private Investments

Distributed Artificial Intelligence Tax Credit (DITC) – Tax credits for rural/remote compute aligned with national priorities.

Accelerated Depreciation for Modular Compute – 100% first-year depreciation for strategic deployments.

Energy Co-Location Incentives – Financial incentives for co-locating compute with stranded or excess energy.

Treasury-Backed Loan Guarantees – Leverage existing federal loan programs to fund long-term infrastructure.

2

Lend Regulatory Support to Quicken Deployment

Put Underutilized Federal Lands to Work – Federally designated hubs on underutilized land with special incentives.

"Buy American AI Infrastructure" Executive Order – Federal mandate to use domestic, ruggedized AI compute.

DOE/DoD Public-Private Edge Compute Partnerships – Joint infrastructure for energy, defense, and rural AI use cases.

3

Promote Cross-Border Partnership to Extend U.S. Dominance

Allied Innovation Credit – Bonus credit for co-deployments in allied Sovereign Energy Zones.

Export Credit Acceleration – EXIM/DFC-backed support for American-built exports to strategic zones.

Global Deployment Facility – Fund to de-risk international builds using U.S. technologies.

Prosperity Grids – Cross-border compute-energy corridors with allies.

Energy-to-Compute Diplomacy Initiative – Bilateral programs to monetize stranded energy via AI deployments.

Five Eyes Distributed Mesh Network – Interoperable edge compute for defense/logistics missions.

Allied AI Security Accord – Trust standards for shared allied infrastructure.

Allied Compute Readiness Council (ACRC) – Joint governance, threat intel, and standards coordination.

Cruiser – Armada's 20-foot AEP powered modular data center

05

Detailed Use Cases

Detailed Use Cases

To support policy recommendations, Armada sees three immediate, actionable use cases across the Oil & Gas, Utilities, and Transmission sectors to help the U.S. realize the benefits of distributed artificial intelligence. There are great opportunities to:

1. Generate more valuable compute using flare gas while reducing climate damage
2. Increase existing transmission capacity without relying solely on new build
3. Accelerate natural disaster response and mitigate damage to utilities' asset base

OIL & GAS

Use Case
Utilize Flare Gas for Compute

Policy Alignment
Energy Co-Location Incentives, Distributed Artificial Intelligence Tax Credit, Accelerated Depreciation

Current Problem
Every year, billions of cubic feet of excess natural gas are flared at oil well sites due to lack of takeaway infrastructure. This contributes to emissions, wastes energy, and attracts regulatory scrutiny.

Solution
Deploy modular, ruggedized data centers directly at wellheads to convert flare gas into electricity and power on-site AI and simulation workloads. Workloads could include:

- Seismic modeling
- AI-enabled drilling optimization
- Remote equipment diagnostics
- Energy trading analytics

Benefit
- Environmental: Reduces methane and CO_2 emissions without waiting for pipeline infrastructure.
- Operational: Converts a waste byproduct into digital value.
- Strategic: Enhances domestic energy resilience and reduces reliance on foreign cloud infrastructure in mission-critical operations.
- Incentive Fit: Eligible for tax credits, loan guarantees, and accelerated depreciation under proposed policies.

TRANSMISSION

Use Case
Maximize Transmission Line Capacity

Policy Alignment
DOE/DoD Public-Private Partnerships, Energy Co-Location Incentives, Put Underutilized Federal Lands to Work

Current Problem
Transmission lines are often underutilized because static thermal ratings do not account for real-time environmental factors, like wind cooling or ambient temperature. This leads to artificial bottlenecks and overbuilt infrastructure.

Solution
Install modular AI compute nodes at substations to process high-frequency sensor and weather data, enabling Dynamic Line Rating (DLR) and predictive maintenance analytics.

Benefit

- **Infrastructure Efficiency:** Increases grid throughput by 10–30% without new lines.
- **Cost Avoidance:** Delays or eliminates need for billions in capital expenditure.
- **Resilience:** Real-time fault detection and load balancing improve stability under stress.
- **Public-Private Alignment:** Easily integrated into DOE pilot programs and private utility deployments.

UTILITIES

Use Case
Accelerate Disaster Response

Policy Alignment
Treasury Loan Guarantees, Accelerated Depreciation for Modular Compute, Energy Co-Location Incentives

Current Problem
After hurricanes, wildfires, or cyberattacks, utility teams struggle to assess damage and restore power quickly. Centralized systems are often offline or too slow to process drone, lidar, or SCADA data.

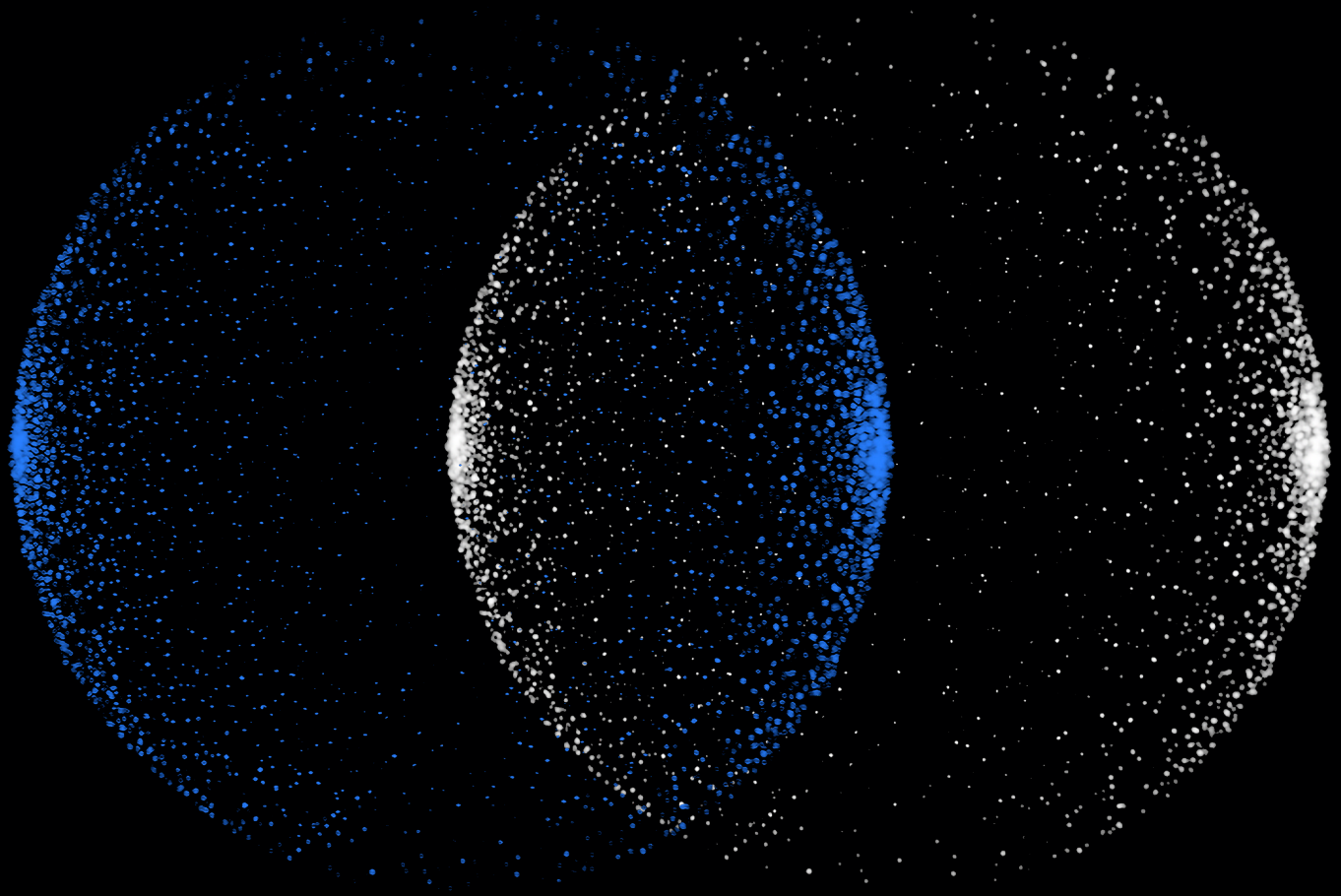
Solution
Deploy ruggedized edge compute units pre-positioned in high-risk zones or mobile command centers to:

- Process imagery and sensor data in real time
- Restore SCADA control locally if cloud systems go down
- Coordinate automated dispatch of crews and grid reclosers

Benefit

- **Speed:** Power restored hours or days faster.
- **Safety:** Faster risk assessment reduces exposure to live wires or unstable assets.
- **Compliance:** Reduces penalties for prolonged outages under regulatory regimes (e.g., CAISO, FERC, NERC).
- **Security:** Decentralized systems offer greater resilience to cyber and EMP attacks.

Cruiser – Armada's 20-foot AEP powered modular data center



Conclusion

America's victory in the AI arms race hinges on harnessing abundant and stranded energy resources to build a nationwide web of modular, edge data centers. We should designate specific regions throughout the country that have stranded or excess energy as CORE Zones. With targeted financial incentives, streamlined regulations, and strategic cross-border partnerships, we can unlock distributed artificial intelligence that delivers $2T in incremental GDP growth, outflanks China's AI stack on quality and cost, and ensures our military remains unbeatable in a future defined by AI and compute power. The time to act is now: the White House, industry leaders, and allied governments must unite to designate CORE Zones, fund pilot deployments across oil & gas, utilities, and transmission, and fast-track the next-generation edge infrastructure that will cement American leadership in the AI era.

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