



semana
de la
ingeniería
2022

| El poder de la ingeniería
en la innovación

6 | 7 | 8 | 9 JUNIO
presencial + streaming



splight

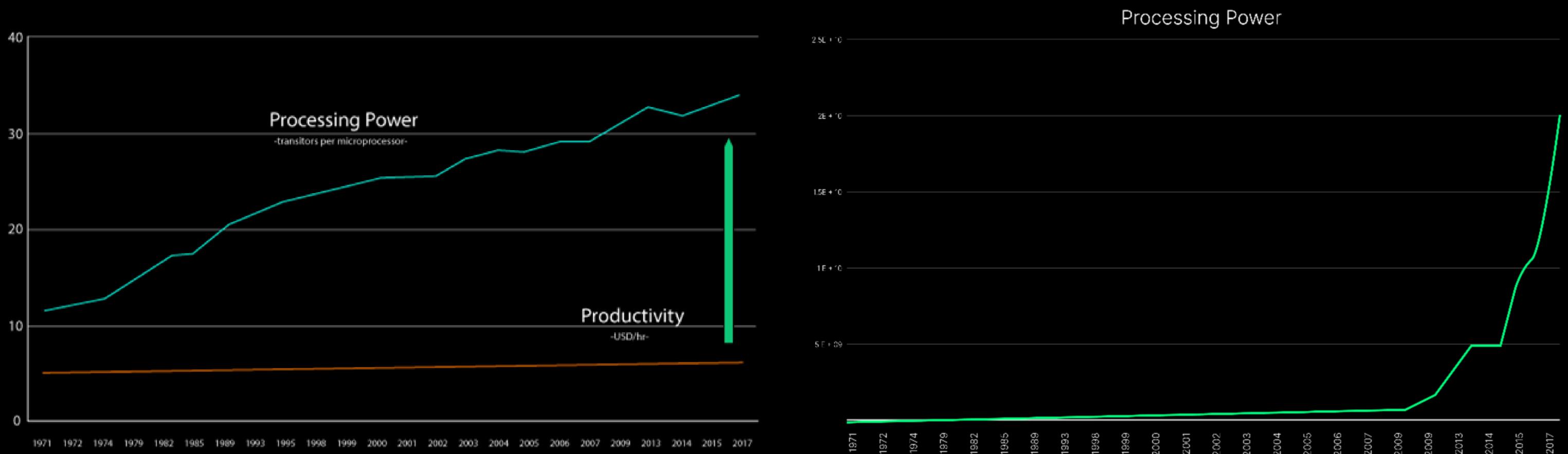
ARTIFICIAL ENERGY



Our Neural Network Framework deploys
Artificial Intelligence outcomes to any device without human intervention.

Value is delivered **instantaneously,**
directly and automatically to the physical world.

Unleashing the Power of Artificial Intelligence



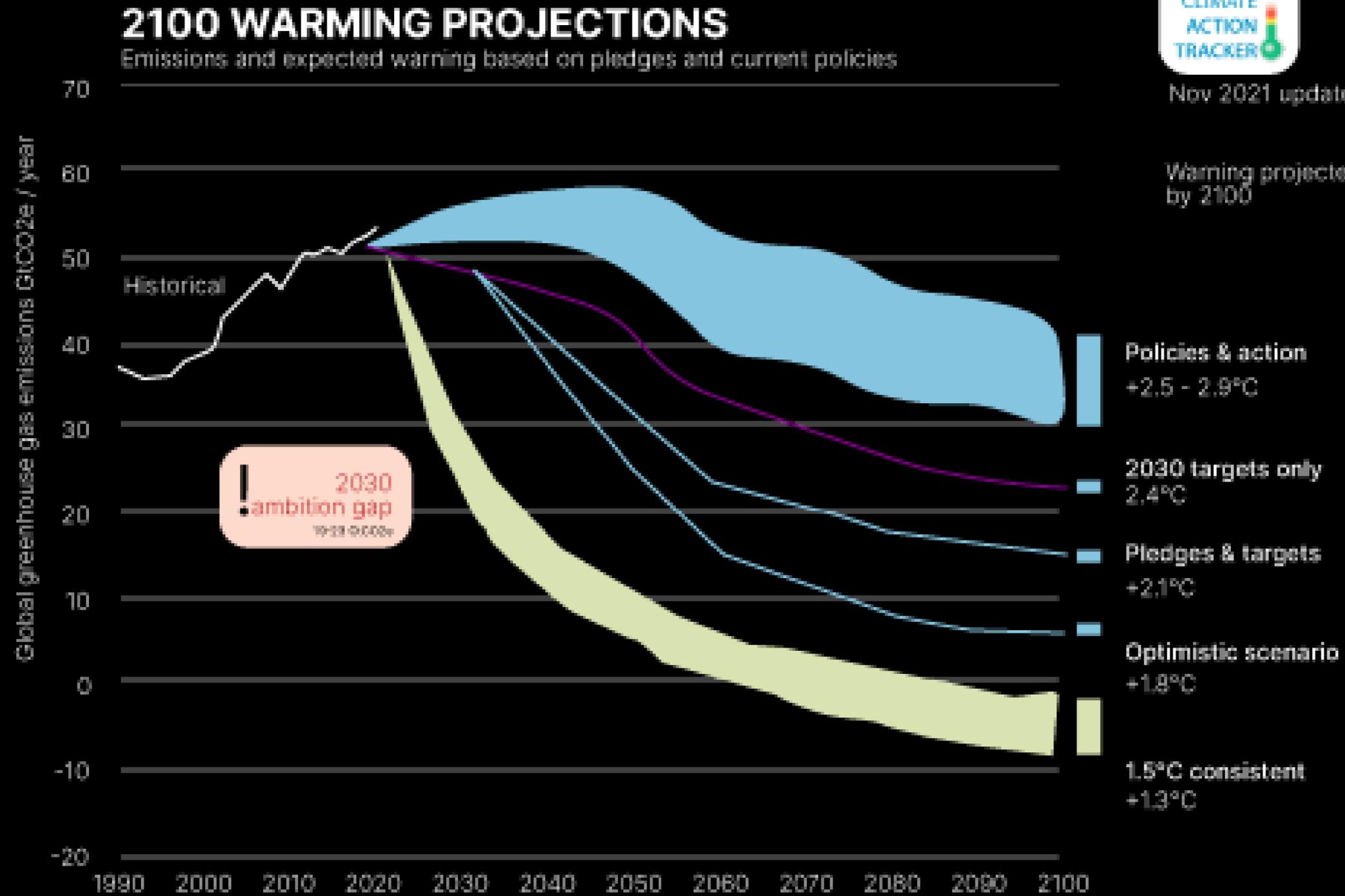
Splight's engine close the gap between **Productivity** and **Processing Power**

How we measure impact: TIME!



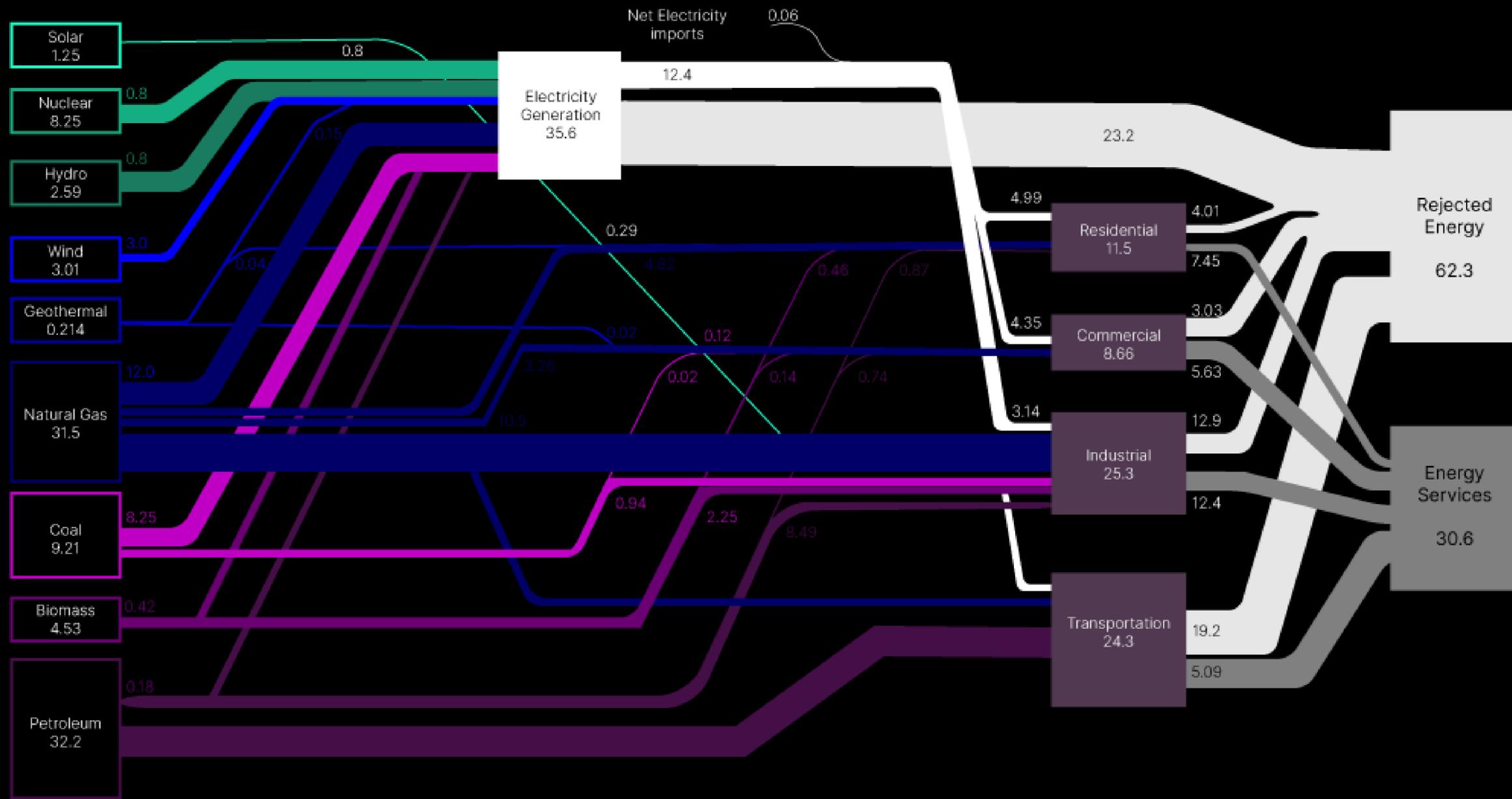
Nov 2021 update

Warming projected by 2100



How we measure impact: Energy!

Estimated US energy consumption in 2022: 92.9 Quads



Managing complexity with AI Engine

Traditional

 Few large power plants

 Based on large power lines and pipelines

 Top to bottom

 Passive, only paying

Production

Transmission

Distribution

Consumer

New

 Many small power producers

 Including small-scale transmission and regional supply compensation

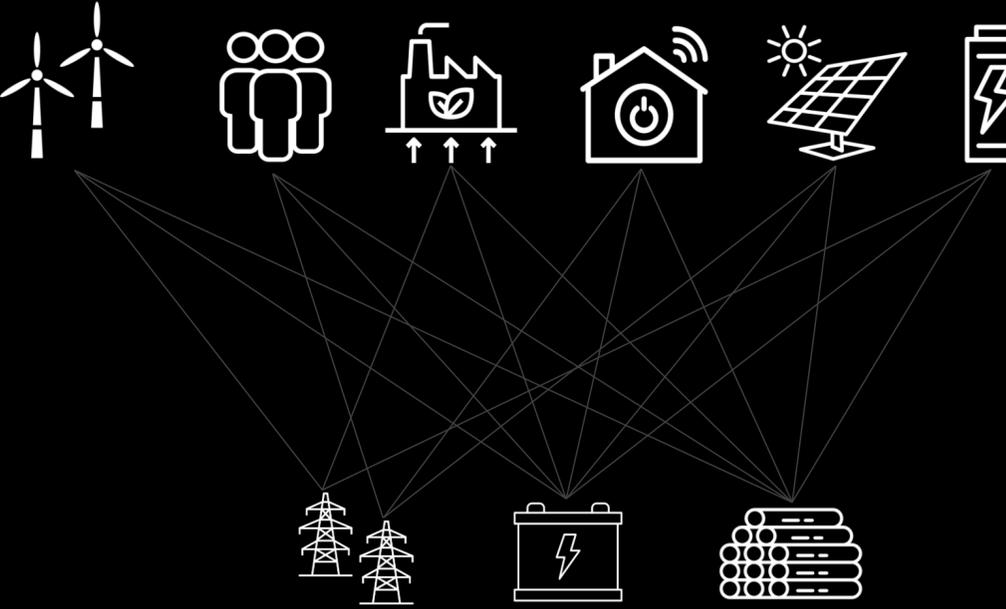
 Both directions

 Active, participating in the system

Decentralized, ignoring boundaries

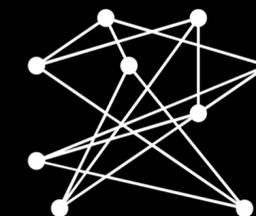
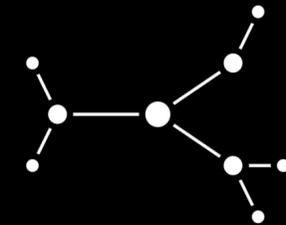
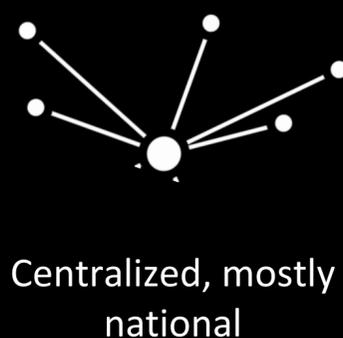
AI Driven

Production + Consumers



Transmission + Distribution

Decentralized, powered with blockchain technology. Transparency and accountability.



Accelerating Energy Transitions

Impacts on pathways to net-zero

	<u>Traditional Solution</u>	<u>Digital Solution</u>
Lowering Costs	Millions	Thousands
Accelerating timelines	Years	Months
Maximizing Capacity	KWh	GWh
Maximizing Complexity	Hundreds units	Millions units
Maximizing Use of Capital	Large Capital Expenditures	As a Service

How do we create value

A new Value Proposition with each Iteration

1 **PHYSICAL WORLD**



Analysis of business and physical problems

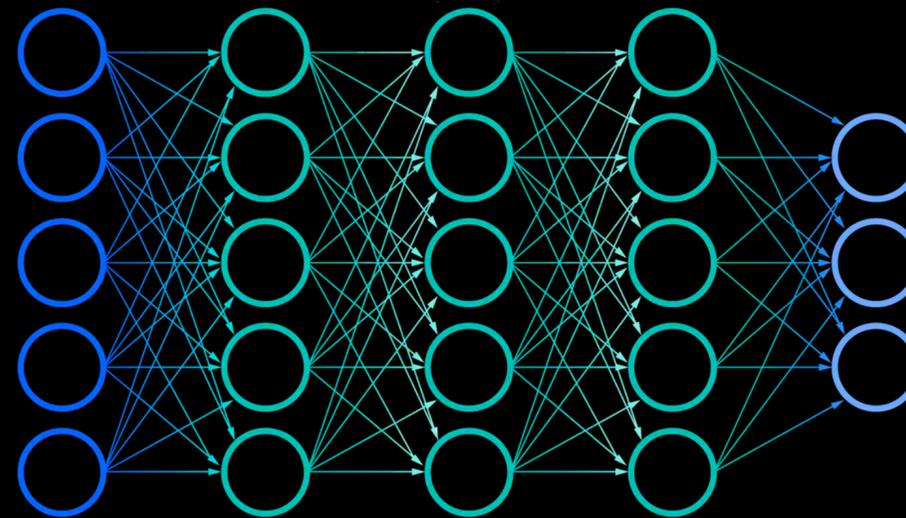
2 **LAB**



Components design and deployment:

- Replicable
- Reusable

3 **AI ENGINE -OUR CORE-**

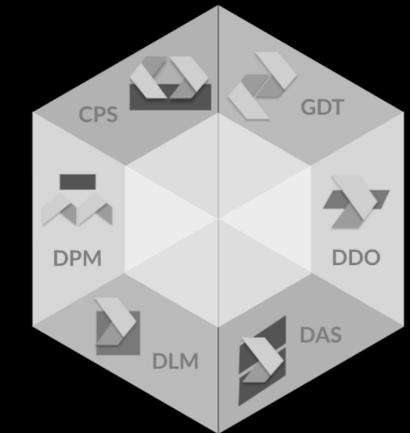


INPUT = Digital Representation of an Asset

Instantaneously* tailored solution design

Select components to solve a problem

4 **PHYGITAL WORLD**



OUTPUTS=

- **DIGITAL SOLUTIONS**
Unique digital solutions for each client
- **NEW BUSINESS INSIGHTS**
New correlations and insights
Prescriptive analytics

*Once a component is displayed in the AI Engine there is no need for human intervention in the solution deployment

No 2030 for us...

Splight: accelerating energy transitions at a fraction of the time and cost

- 50% to 75% of the distribution and transmission systems installed capacity (power) is not being used.
- Up to 40% of the renewable energy around the world is being curtailed.
- Up to 20% of the energy generated is lost within the system
- Almost U\$S 14T CAPEX is needed within the next 10 years if we run electrical grids the way we are doing it today
- Massive adoption of EV and DER are not possible with the current operational mindset and technical practices.
- There's not enough time or raw materials to achieve this decade's sustainability pledges. Capital-heavy investments or immature technologies are needed to achieve those goals.

Splight unlocks this potential.
We call it AE.

Splight drastically reduces these
financial needs

Through complexity management
enabled by AI, Splight makes it possible

Splight drastically reduces the time and
material needs

Infrastructure

Existing wind farm = 232 MW

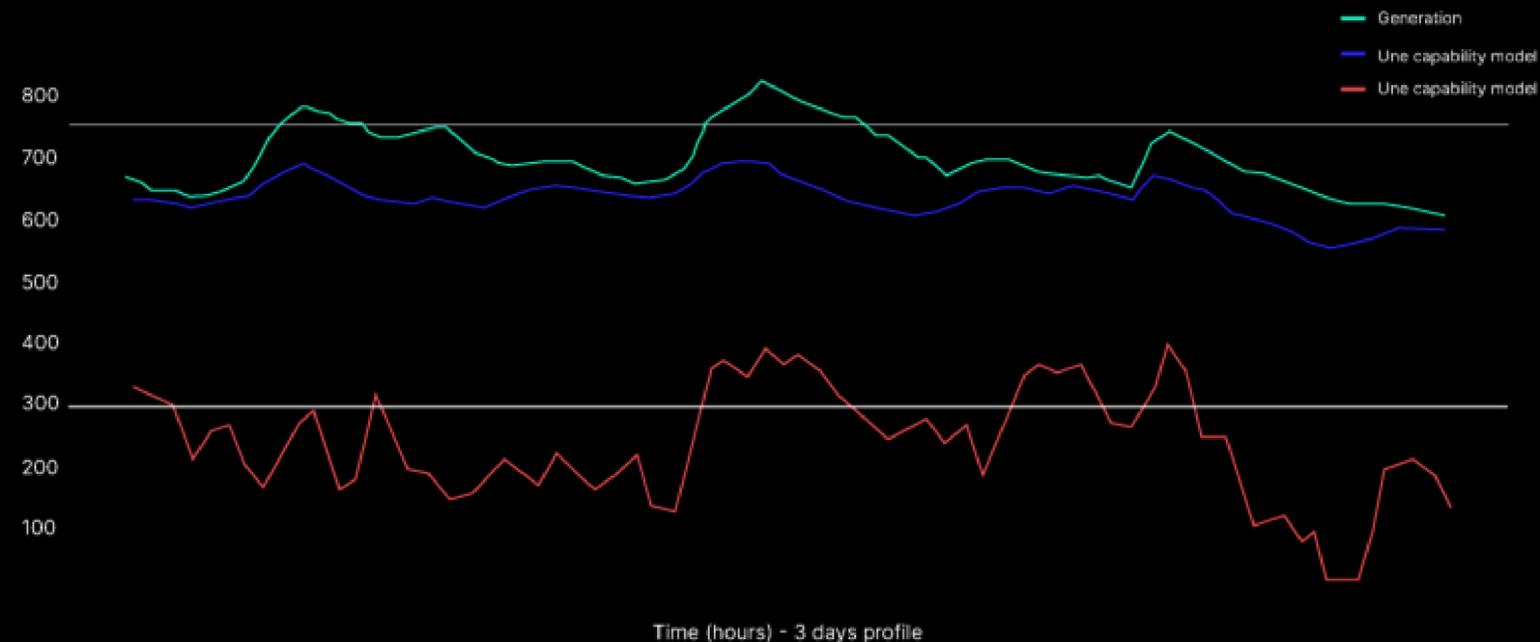
New wind farm = 158 MW

Existing transmission line = 220 KV
(33 km long)

DDO = no additional transmission infrastructure

+40% Line capacity

Generation (MWh)



Operation Outcomes

Transmission capacity increased by up to 40%, which eliminates the need to build an additional transmission line (i.e. traditional solution).

Enhanced reliability and safety of existing infrastructure.

Data and forecasting of the system delivered in real time.

Artificial Energy

553 GWh/year

Artificial Energy Impact

- USD 13 m

+ 16.6 M USD

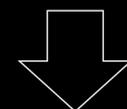
+ 90 Ha forest

(estimate based on market values of USD/Km t-line)

(estimate based on PPA of USD 30)

price

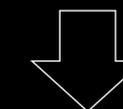
(estimate based on technical studies)



CAPEX



Revenue



Deforestation

Infrastructure

7 wind farms = 872 MW

3 transmission lines (220 KV each)

7 substations

Actual status = security operational

GDT = curtailment elimination

Artificial Energy

+ 567 GWh/year

Energy Dispatch

+ 567 GWh/year



Artificial Energy Impact

Operation Outcomes

GDT managing seven wind farms and over 872 MW of renewable wind power.

GDT enhances N-1 operating condition by anticipating the system's behavior. When GDT foresees a disruption, it reconfigures the grid to avoid a blackout.

GDT will increase resilience and reliability up to the point of avoiding failures and practically eliminate the possibility of overload and instability events in the monitored transmission system.

+ 567 GWh/year

(estimate based on technical studies)



Renewable Energy

+ USD 17 M

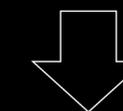
(estimate based on PPA price of USD 30)



Revenue

- 400 ton CO₂

(estimate based on technical studies)



Greenhouse Gas Emissions

Artificial Energy is energy that would have not been generated, stored, transported, traded or distributed but for the application of our Artificial Intelligence (AI) solutions to existing power infrastructure.

Darío Febré

Growth Owner

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