

Data Centers:

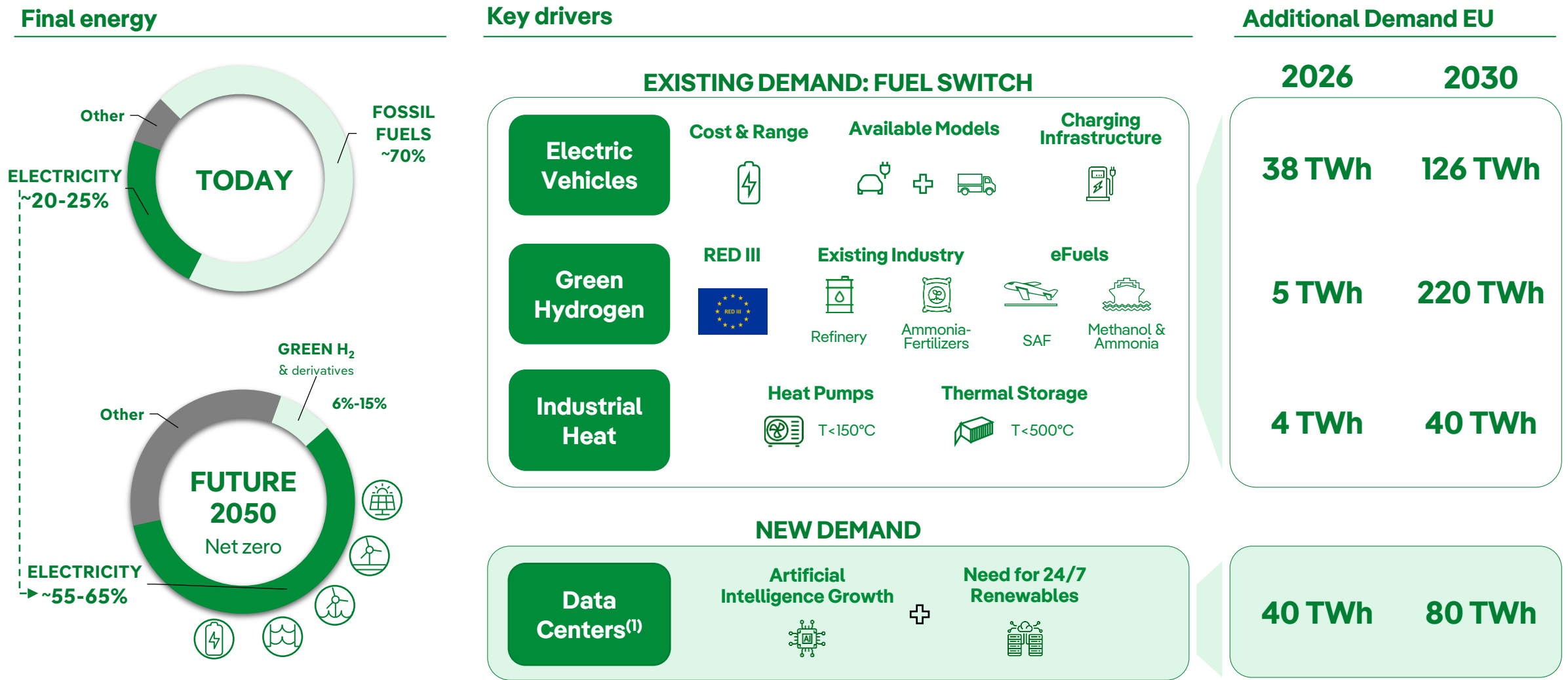
Key driver of demand growth. What's next?



Agenda

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| 1. Key driver of demand growth | 2 |
| 2. Partnership model strategy | 10 |
| 3. Iberdrola “South Madrid” data center project | 19 |

Advancements in technology and market adoption are fueling a rise in electricity demand



(1) See Annex I for more detail on what is a data center
 Sources: IEA, ETC, BloombergNEF, Mckinsey, Morgan Stanley, Spain DC and internal calculations

Data Center Market: Key Figures

Economy digitalization is growing exponentially and, consequently the number and size of Data Centers are growing too. Today worldwide data center electricity demand already matches the whole demand of economies like Spain or California.

2023	Energy Demand ⁽¹⁾	IT Power
Global	240 TWh <i>~1% global demand</i>	~20 GW
United States	~100 TWh <i>2.5% US demand</i>	~10-11 GW <i>27 MW per million people</i>
Europe	~32 TWh <i>1.2% Europe demand</i>	~4.2 GW <i>8 MW per million people</i>
Spain	~1.4 TWh <i>0.6% Europe demand</i>	190 MW <i>8 MW per million people</i>
Madrid	~1.1 TWh	155 MW
Iberdrola	> 7 TWh	

Snapshot: Virginia, USA

Virginia has become **the world's technological backbone**, as a result, energy demand has boosted

- **Virginia hosts ~20% of the Data Center global capacity:**
 - ✓ **70% of the World's Internet traffic flow**
 - ✓ Over 300 DCs →
 - >150 hyperscale DCs
 - >100 colocation DCs

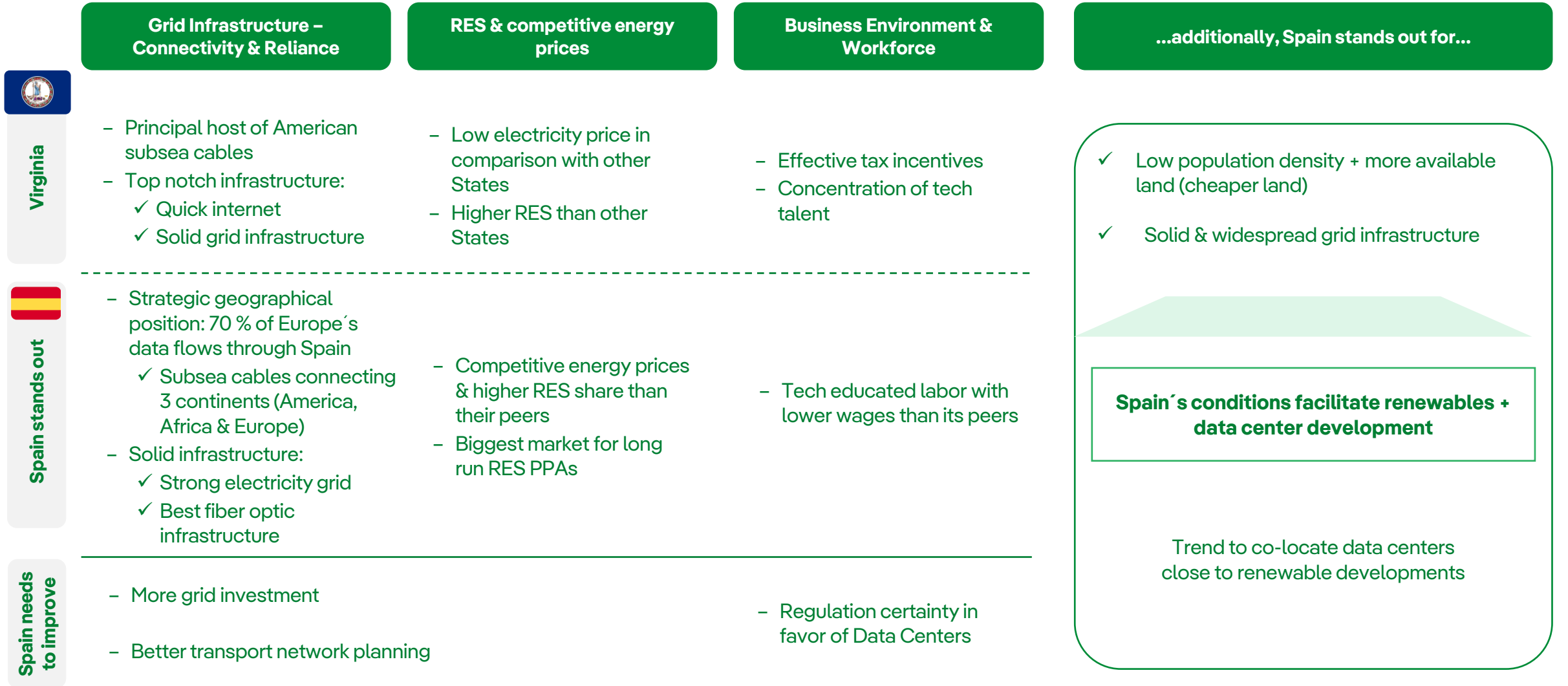
>4.5 GW IT

~40 TWh

- ✓ The data center industry has a global footprint; **US is the key market and Virginia is the main hub**
- ✓ **EU is still behind US** → Expected to grow 20% YoY to reduce the gap
- ✓ **Can Spain replicate Virginia's success and can Iberdrola be the key partner for this growth?**
 - ✓ **Spoiler, YES. Here is why** (please refer to the following slide)

⁽¹⁾ Hypothesis: Power Usage Effectiveness, PUE (Facility Power/IT Power) between 1,3 and 1,5, and a utilization rate of 60 - 80%
Sources: IEA; Morgan Stanley, SpainDC, Cushman and Wakefield. 2023 Global Data Center Market Comparison

Data Center Market: Spain, a strategic geography to deploy Data Centers



Spain gathers all the ingredients to become the “Virginia” of Europe

Data Center Market: Spain, a strategic geography to deploy Data Centers



Spain stands out from all other European peers

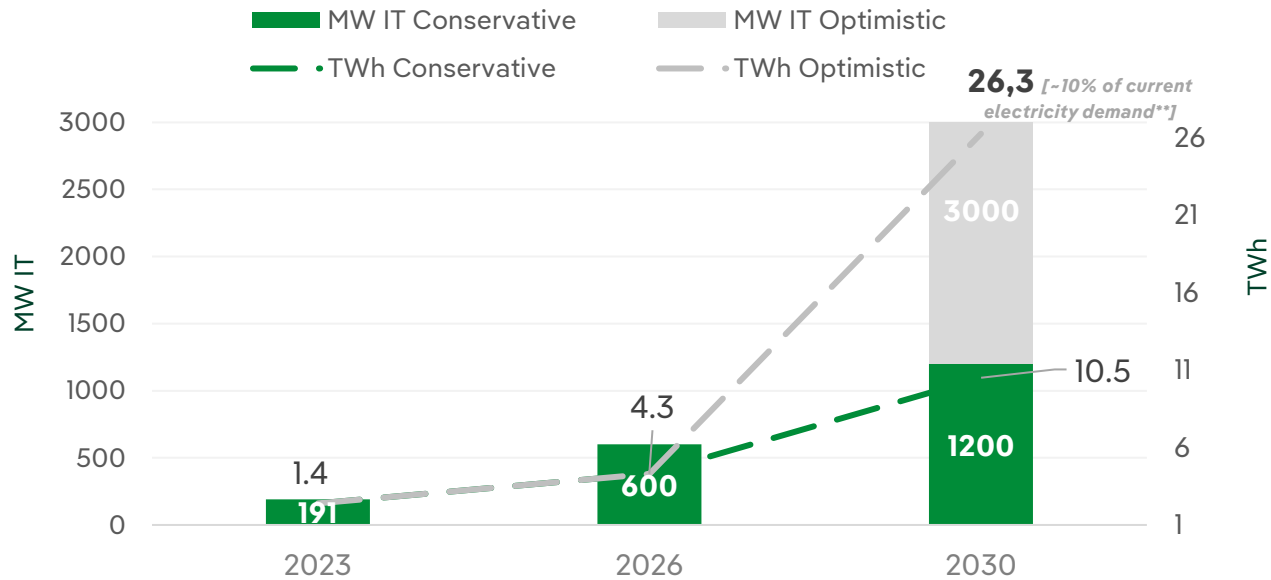
	<u>RES 24x7</u>	<u>Available Land [inhabitants/km2]</u>	<u>International Fiber Connectivity</u>	<u>Grid availability and complexity</u>	<u>Cost competitiveness (**)</u>
Spain	●	● 95	●	●	●
Continental Europe (i.e. - Germany)	●	● 237	●	●	●
Nordics (avg. Sweden, Norway & Denmark)	●	● 61	●	●	●
UK	●	● 278	●*	●	●

* UK has more submarine interconnections however Spain has a wider range of countries and a more sophisticated FTTH network

** Civil works, operational costs, transportation costs, human capital...

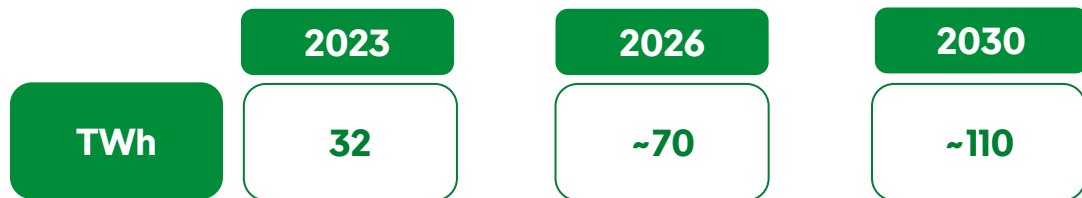
FLAP* markets are expected to grow 20% YoY, whilst in Spain the growth is expected to be over a 40% YoY

Spain outlook



- **Conservative - Cloud to EU levels :**
 - ✓ 1.2 GW IT by 2030
 - ✓ ~10 TWh new demand
- **Optimistic - Cloud to EU levels + AI:**
 - ✓ 3 GW IT by 2030
 - ✓ ~26 TWh new demand

Europe



Evolution of AI could make growth forecasts to be even higher, particularly in areas that are far from the big cities as AI computing does not need to be close to the point of interconnection

ECONOMIC IMPACT

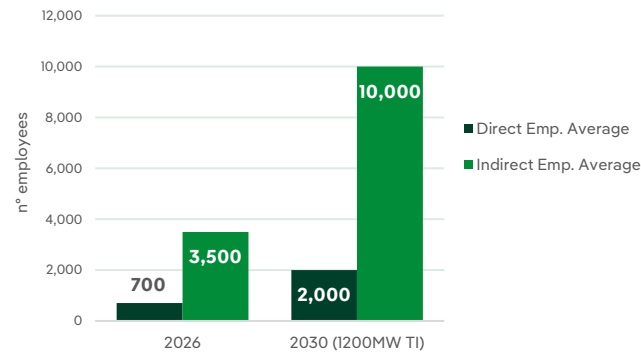
Investment until 2030

- >10.000M€

Impact until 2030

- 40.000M€ + important fiscal impact in income tax
- 11% of actual GDP

SOCIAL AND ENVIRONMENTAL IMPACT



Conservative case

Employment generation *

- 1-2,5 direct jobs / MW IT
- 5 – 12,5 indirect jobs/ MW IT

Environmental Impact

- More renewables
- Zero Water usage

Data center has already proven to bring social value creation in the form of higher GPD per capita, lower unemployment, more STEM workers and higher wages (see Detail for Virginia in Annex 2)

Key energy supplier with ability to provide 24x7 Renewables

- Ability to firm PV + Wind with hydro and storage
- Already contracted: **+7 TWh global Renewable PPA + supply contracts**
 - Hyperscalers
 - Co-locators
 - Telcos

Associated product offering beyond energy

- Co-located solar PV
- Energy efficiency (existing DCs): CAEs (certificates for energy efficiency)
- Waste heat re-use (heat networks)
- Carbon foot-print offsetting

...additionally, Iberdrola's regulated business will benefit from the growth of grids required for data center expansion

Iberdrola is already a key energy player in the data center industry...
what else can we do to capture the forecasted exponential growth? (please refer to the following slides)

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Iberdrola carried out successfully partnerships with tier 1 global partners which provided additional opportunities...

Financial investors



Main investment and infrastructure funds in the world.
Most of them not subject to financing (equity investment)

Industrial Investors



With a strong ambition to play a relevant role in the energy transition



... and is currently working to develop a partnership for Data Center developments, to boost and expand this energy intensive sector in Spain, and other geographies

Iberdrola historical presence in the data center industry was based in the energy supply through PPAs, however, Iberdrola through its JV aims to become into a real data center integrated player



Global

PPAs signed across the world, especially in Spain, UK, USA, Mexico, Italy, Brazil and Australia



Vast Experience

Only in Europe more than 1 GW contracted in 2023 (over 7% of the European Market)



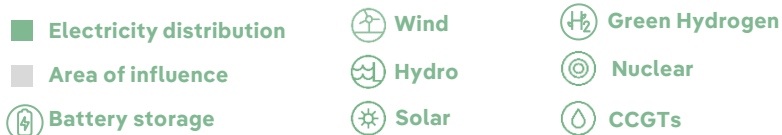
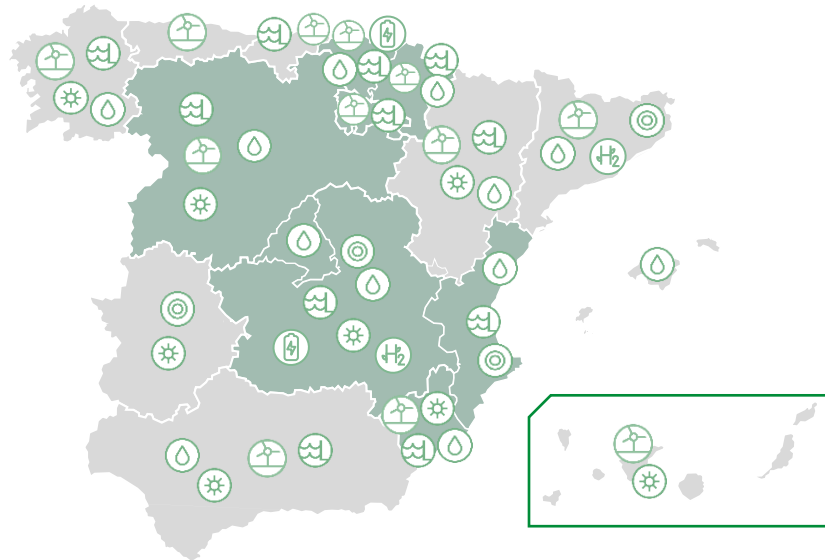
Alliances with Strategic Tier 1 partners



Iberdrola future data center presence

- **Becoming an integrated data center player**
- **Energy supply exclusivity for the JV data centers**
- **Develop Spain as a 24/7 renewable DC hub**

Leading the transition in Spain for more than 20 years, having invested ~35bn EUR in this period



Energy Production & Customers

- Total Installed capacity in Spain 31 GW (top integrated utility)
- 1st Renewable player with c.22 GW of installed capacity
- Net production of 61 TWh
- Over 11 Million customers⁽¹⁾

Networks

- RAB of c. 10 Eur Bn
- 270,000 km of lines
- 11.4 Million points of supply servicing more than 20 million people
- 88 TWh of energy distributed

Iberdrola also aims to lead the investment in Iberia through new technologies and business lines related to the energy industry as battery storage, Hydrogen and Data Centers among others

(1) Total number of electricity and gas customers

Iberdrola is the unique player that can provide 24/7 renewable PPAs from wind, solar PV and hydro assets in Iberia, including efficient pumped storage (gigabatteries)

#1 Iberian renewable player ✓

Onshore wind: 6.6 GW

Solar PV: 4.5 GW

Hydro: 11.0 GW

Batteries: 0.02 GW

>22 GW of renewable capacity in Spain

Leader in Energy Storage

Technology for power market to increase supply and demand modulation:

- 100 M kWh of efficient pumped storage in operation (+5,000 MW) equivalent to more than 6 million domestic batteries
- Additional 20 M kWh under construction and 150 M kWh in development

La Muela II
Largest pumping facility in Europe



Tâmega
Largest hydroelectric facility in Portugal



Future: from PPA provider to one stop shop from Hyperscalers to become the main data center developer in Spain through a partnership model

Outstanding market interest in the partnership process

Creating an in-house joint management team to convert powered lands into operating data centers 24/7 renewable energy consumers. Launched a dedicated company - CPD4Green

Iberdrola value added (Minority shareholder c.20%)

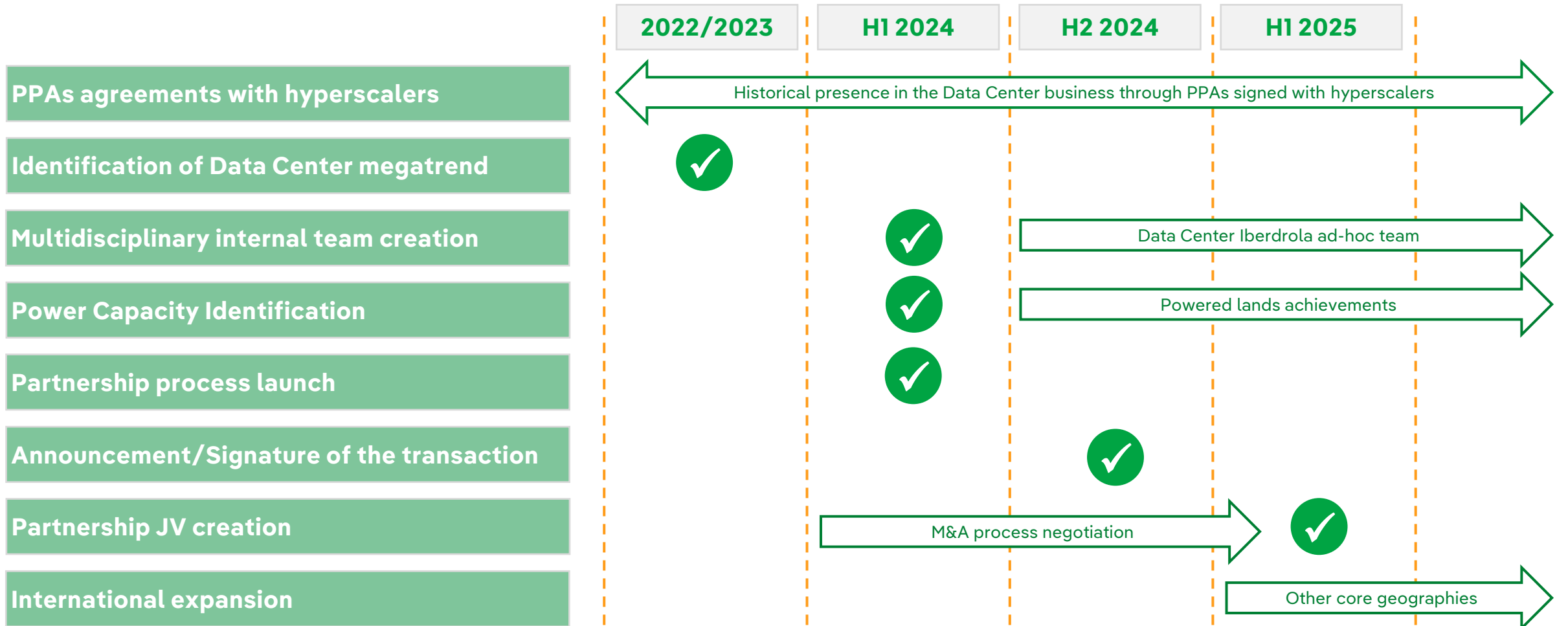
- Powered lands (Plots with granted power capacity)
- PPAs and Renewable energy supply
- Renewable assets (PV plants)
- Opex for development
- Temporary Services Agreements (TSAs)

Partner value added (Majority shareholder c.80%)

- Design, Permitting and construction of the data center
- Commercialization of the data center capacity
- Operation of the data center
- Capex
- TSAs

Partnership to develop projects leveraging on Iberdrola's energy capabilities and partner's know-how of the data center industry

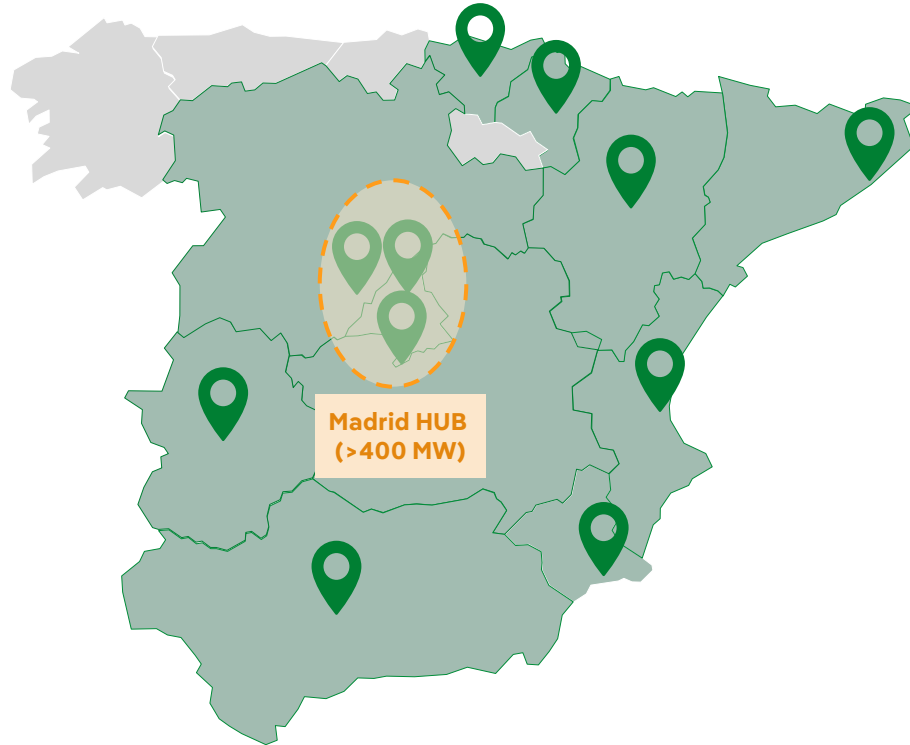
Identification of the opportunity with a quick reaction to create an in-house team and develop internal capabilities



Iberdrola is aiming to secure ~400MW⁽¹⁾ in the next few months with an objective of having 200 MW⁽¹⁾ in operation by 2030 as conservative case

Iberdrola/CPD4Green has a diverse range of potential data centers projects across Spain

Potential Data Center projects



Iberdrola portfolio

Iberdrola pipeline portfolio contains:

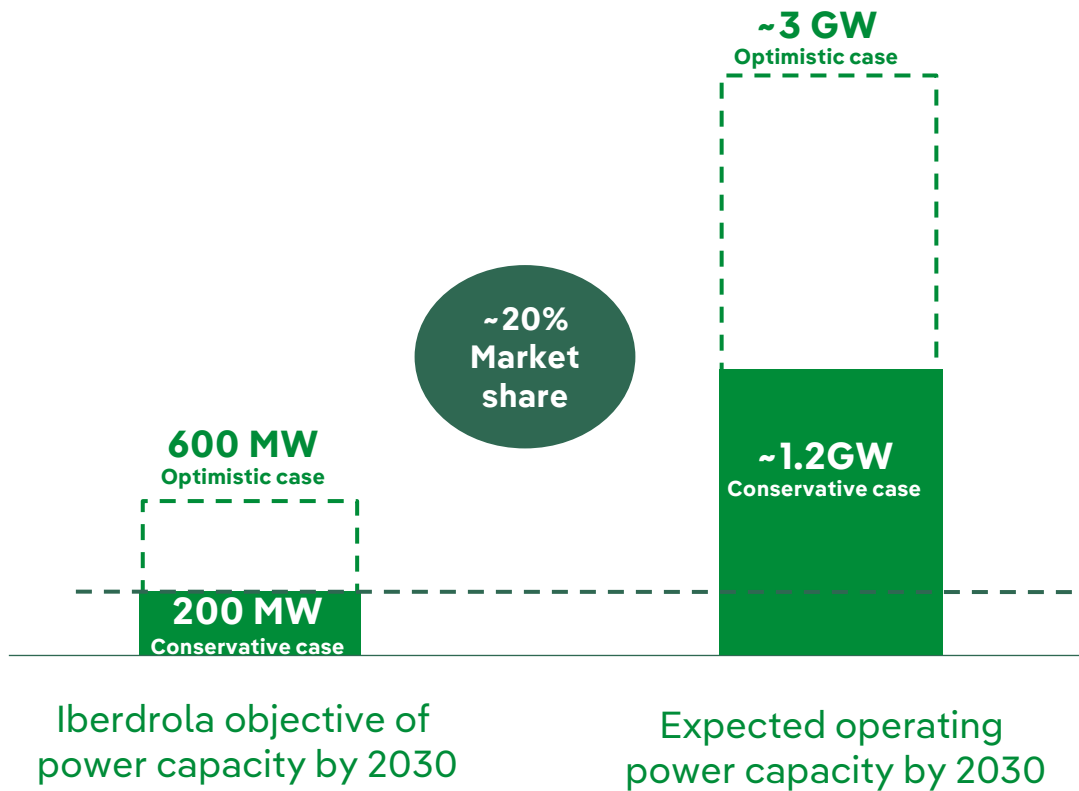
- Power connections requested to the TSO
- Power connections requested in the DSO
- Unique company to provide 24/7 green PPAs

Potential pipeline of >5GW with more than 1 GW advanced⁽²⁾ and +200 MW with connection already secured (Madrid and Aragon)

(1) MW gross
(2) Expected to secure by 1H2025

Iberdrola aims to reach a ~20% of market share in Spain by 2030 as a result of having at least 200 MW in operation through the future JV in our conservative case

Iberdrola view in the Spanish data center market



Iberdrola benefits

1. JV main highlights

- 1 Run rate EBITDA €150-250M
- 2 Total capex to be incurred by the JV >€2,000m (no initial capex cash-outs will be incurred by Iberdrola)
- 3 Adjacent PV solar assets

2. Iberdrola impacts

- 1 Margin through PPA agreements
- 2 Consolidation 20% through equity method (Powered land and PV plants in exchange of shares in the JV and cash)
- 3 No capex cash-outs expected

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Iberdrola “South Madrid” data center project (~200 MW) at a glance

Iberdrola has already secured ~200 MW of power connection in South of Madrid with more than 16ha of land plots suitable for the development and construction of data center projects

Project key features



~200 MW power connection secured



~400 MW adjacent PV plant

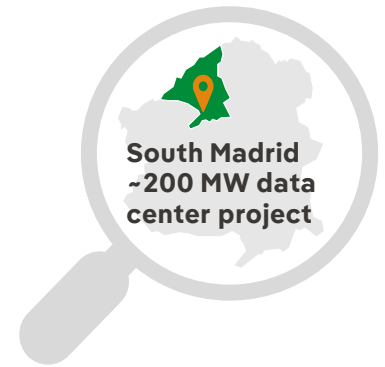


Industrial land already secured



Expected COD: 2028

Site location



~70 km from Madrid city center (40 min from Barajas Airport)

Project description

Iberdrola already secured a power connection of ~200 MW from the TSO, with back-up generation due to an on-site solar PV plant of ~400 MW. This project is one of the most attractive of the Iberdrola portfolio project due to:

- Location: South Madrid Hub (Tier 1 location)
- Land: More than 16ha of industrial land secured with different options to develop and scale-up the project
- Expected COD: to be reached in ~2028

Iberdrola will contribute to the JV a unique conditions project in the Spanish market

- 1** Data centers are and will be a certain key driver of demand growth at a global scale adding 80 TWh of demand in EU by 2030 (10 TWh in Spain)
- 2** Spain has the opportunity to become a major hub in Southern Europe due to strategic location, competitive energy prices, leadership in renewable energy and favorable macro-economic conditions
- 3** Iberdrola's exceptional track record in the energy sector, is the best positioned company for data center development in the country with a potential pipeline of >5GW
- 4** Iberdrola will benefit from this opportunity through the increase in demand together with the PPA margins and the JV proceeds
- 5** Iberdrola's data center strategic vision for 2030: partnership model and focused investments in the data center market to be a key player in the transition towards a more electrified, sustainable and technological energy future

Iberdrola's strategy based in networks, renewable and energy storage matches perfectly with the data center business being able to cover the large demands of 24/7 renewable energy required

Annex

Annex 1: What is a Data Center ?

A ***data center*** is a facility which is specifically designed and equipped to host under adequate security conditions: data servers, communication systems and other IT critical infrastructure. They are prepared to operate without service interruptions.

Main critical “areas” concerning a Data Center

- 1 IT Room
- 2 Security Systems
- 3 Redundancy
- 4 Refrigeration

Types of data Centers

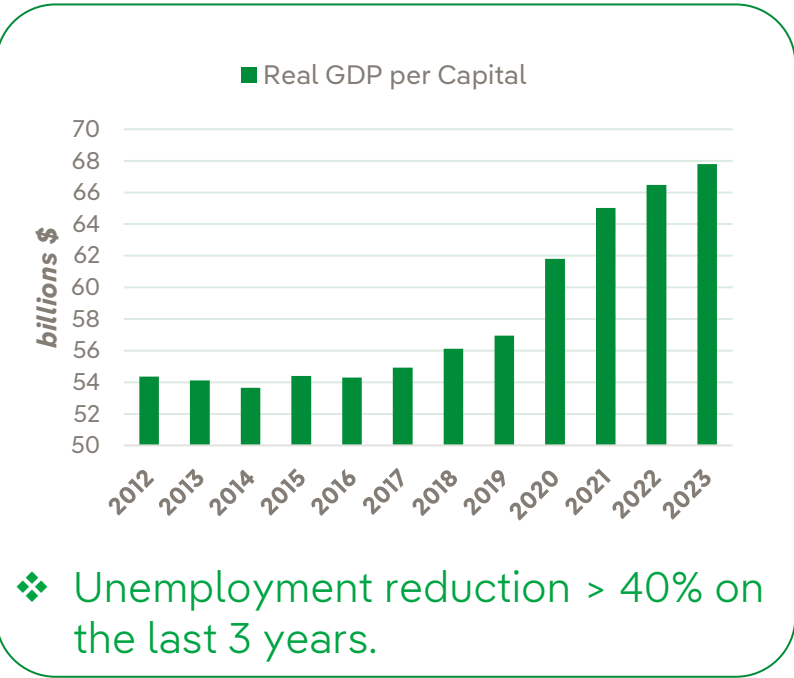
- 1 Hyperscalers
- 2 Colocation
- 3 Private

Data centers operate 24 x 7 x 365, ensuring supply availability. Electrical power is so crucial that the size of data centers is measured in MW according to their energy needs.

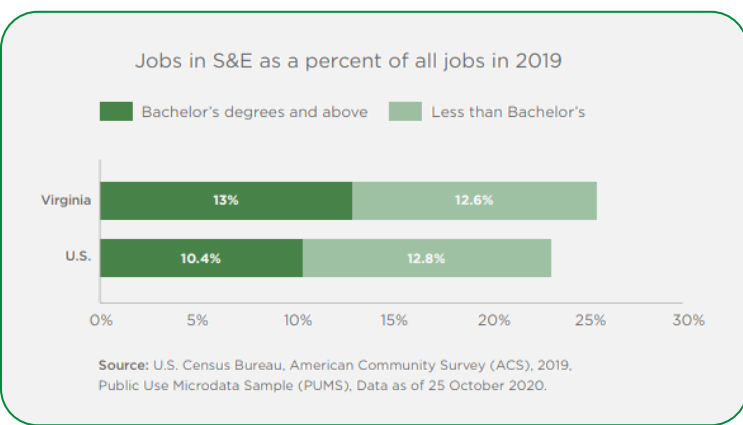
Annex 2: Virginia, a thriving economy and a powerful workforce

- Data Centre industry has proven to bring higher GDP per capita and a lower rate of unemployment.
- Northern Virginia captivated the best quality workforce, due to their cutting-edge technological industry. Data Centers require high productive labour with high average wages.
- The DC industry supported +45 thousand direct & indirect jobs (~0,5% of Virginia’s population) and an economic output of \$15.3 billion in 2021 and \$424 million in tax revenue.*

Lower unemployment & higher GDP as Data Centres increase

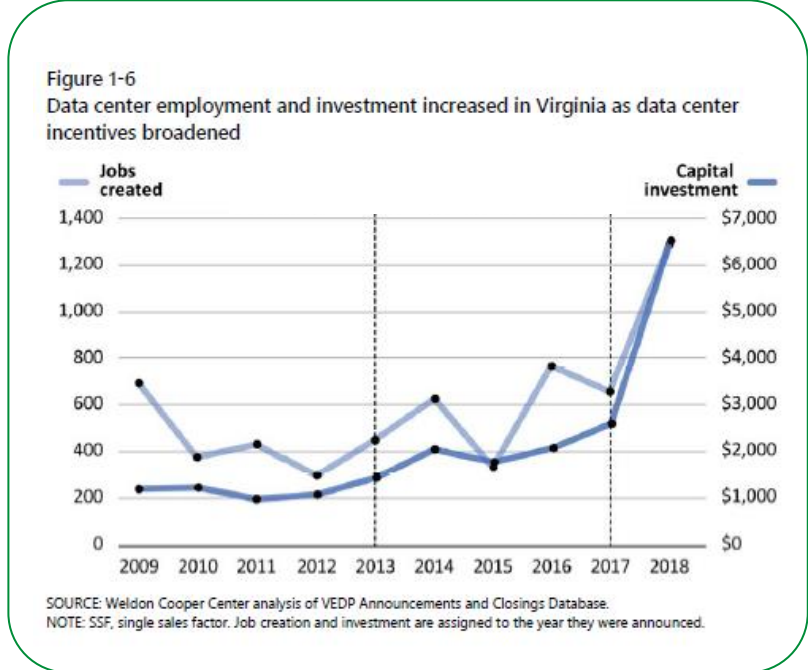


Higher quality workforce. More Science & Engineering (S&E) education.



- ✓ Wages of + \$ 110.000 /yr*
- ✓ Higher GDP per capita
- ✓ Lower unemployment
- ✓ More STEM workers

As investment in DCs grows, job creation increase



*Federal Reserve Bank of Richmond: *Virginias Data Center economic development.*, Jhon Mullin, Q2 2023.

** Virginia population on 2021: 8.642 million.