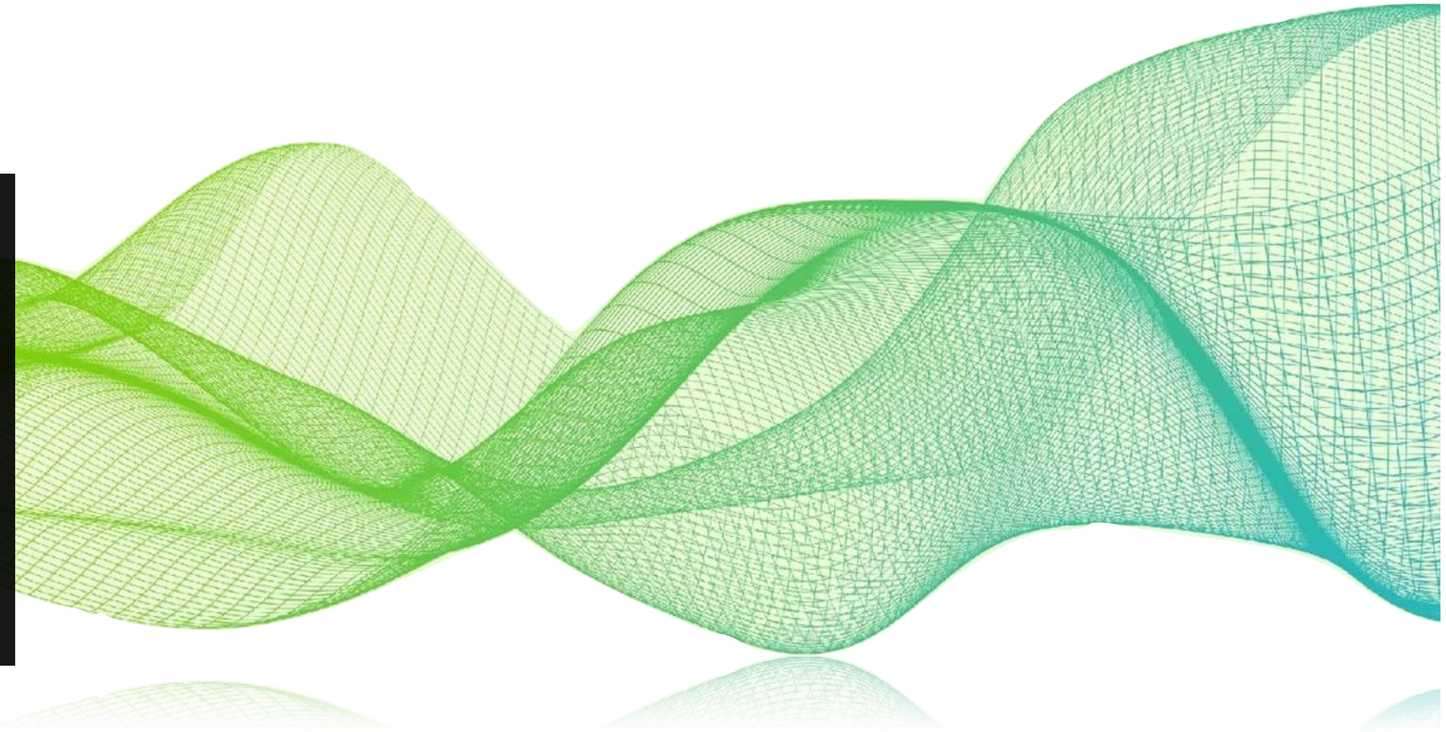
VESPER INFRASTRUCTURE PARTNERS

VALUE-ADD STRATEGIES FOR NEXT GENERATION INFRASTRUCTURE

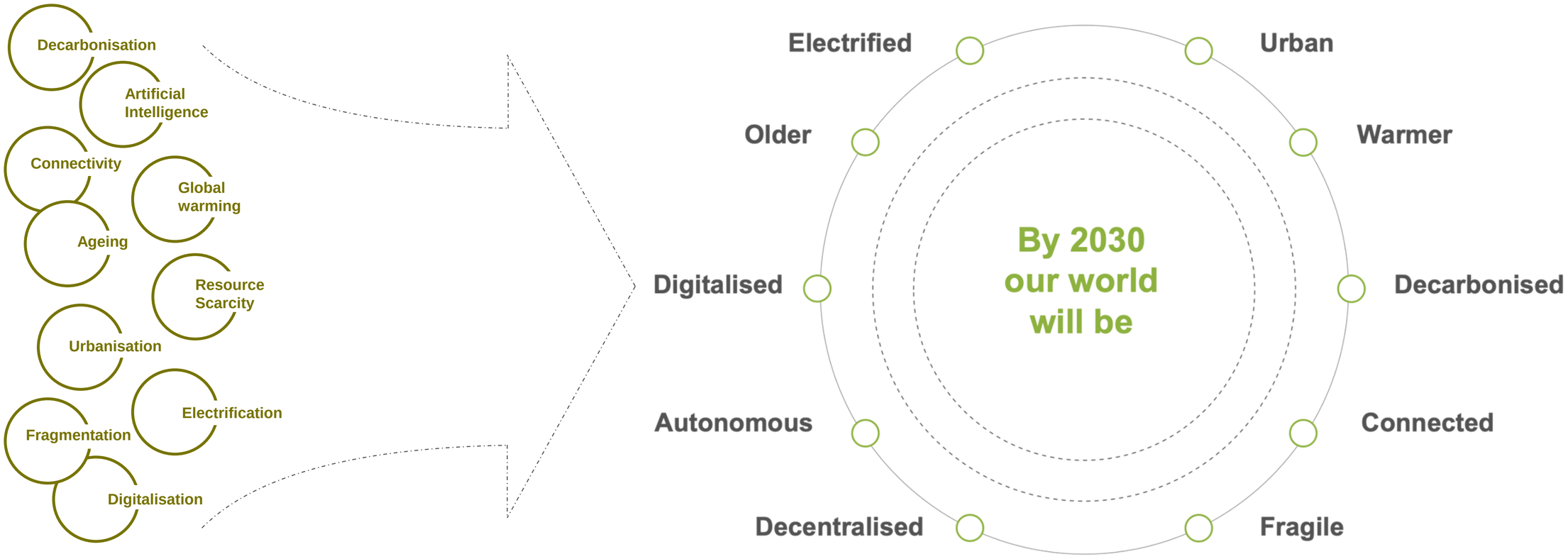
2023



VESPER
INFRASTRUCTURE

OVER THE NEXT 10 YEARS, GLOBAL MEGATRENDS WILL MATERIALLY RESHAPE OUR FUTURE LIVES

LARGE SCALE DYNAMICS ALREADY UNDERWAY WILL TRANSFORM OUR SOCIETY AND ECONOMY



THESE TRANSFORMATIVE FORCES WILL TRIGGER DISRUPTION RISKS ACROSS EXISTING INFRASTRUCTURES …

CHALLENGES AND DISRUPTION RISKS FACED BY EXISTING INFRASTRUCTURE BUSINESS MODELS

Urbanisation Challenges

By 2030, cities will be home of 70% of the Earth's population, consume 60-80% of energy resource and generate 70% of global emissions. The build out of "Smart Cities" will be the main way to address these urban challenges and turn cities into cleaner, more efficient and sustainable places

High speed connectivity, telematics, low latency data solutions, shared mobility edge computing, biometrics, and circular waste management will be among the key new infrastructure platforms required to support the development of "smart cities"

Instability of Energy Systems

By 2030, renewables are expected to provide c. 60% of the generation capacity in Europe. Decarbonisation through **electrification and large scale increase in renewables is posing increasing challenges to the stability of the energy systems** To address the unavoidable variability of renewables, **massive investments in new and "technology enabled" infrastructures, capable of providing different forms of flexibility to the energy system, are needed:** Smart Meters, Virtual Power Plants, Demand Side Flexibility Systems, Vehicles to Grid, Power to Gas or Battery Systems

Water & Food Supply Chain Security

By 2030, the world will be 1.5 degrees warmer, even if all emissions should cease today

Further warming will increase frequency and severity of acute climate events (hurricanes, drought and rising sea levels), **with knock on effects on resources and infrastructure**

The annual **risk of a >15% global harvest decline is projected to double by 2030** (and quadruple by 2050), **exacerbating water and food supply chains security issues**

Increasing Ageing & LT Care Needs

In 2030, the global population will be much older than today. EU will lead this trend, with 25% of its population that will be over 65 (up from 19% today).

EU spending on age related "long term care" infrastructures and services is forecast to constantly outgrow GDP and reach over EUR 1.5 Tn by 2030

Resilience of Physical Infrastructure

Some **Mediterranean and US regions will see a decrease in mean annual surface water supply of more than 70%** by 2050

Conventional power plants are vulnerable to drought (>40% EU fresh water is used to cool thermal plants, only 24% for irrigation) **and mobile networks are vulnerable to storms** (in 2012 80mph winds in NYC downed 25% of TLC towers)

Impact of Pervasive Digitalisation

Over 10 billion of smart, distributed, connected devices are expected to be embedded in the energy system, by 2040

Digitalisation is one of the key transformative trends of the power sector, with global **investment in digital energy infrastructure and software reaching nearly $50 billion**

VESPER INFRASTRUCTURE

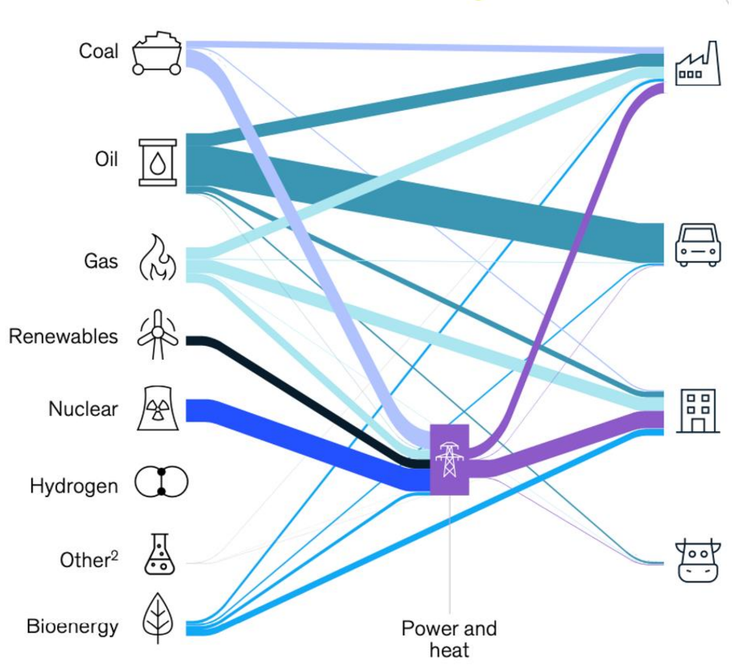
… BUT WILL ALSO CREATE EXTRAORDINARY GROWTH POTENTIAL AND ATTRACTIVE NEW INFRASTRUCTURE INVESTMENT OPPORTUNITIES

1. DECARBONISATION AND ELECTRIFICATION MEGATRENDS

Mn TJ
Total primary energy demand to final energy consumption

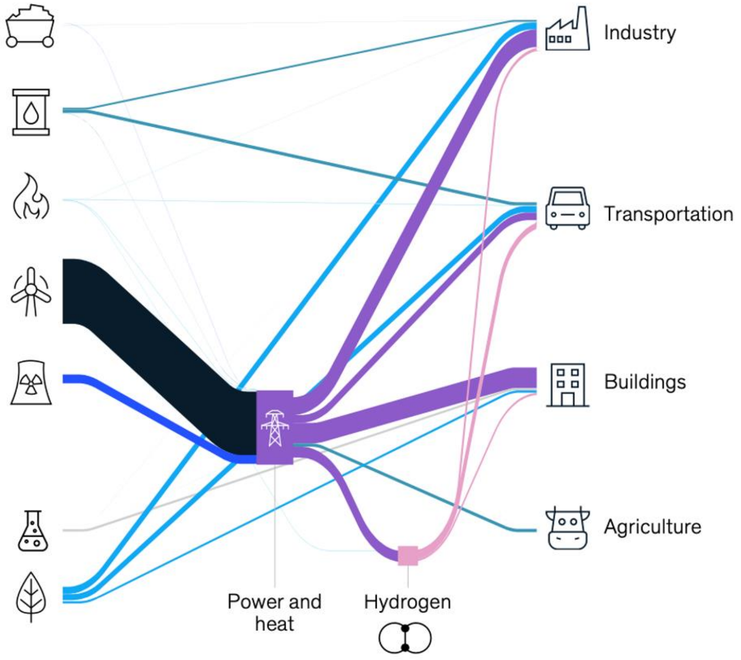
2020:

From a fossil fuels centric system …



2050:

…To renewables, electrification, P-to-Gas

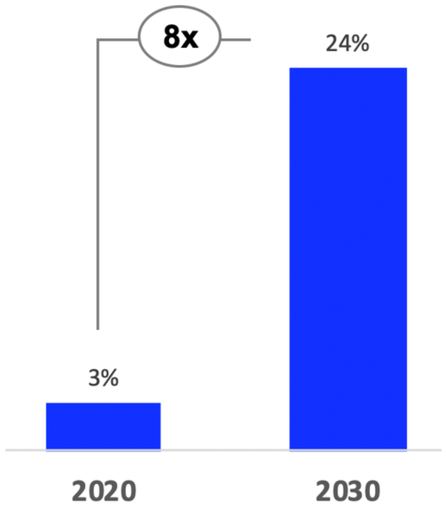


… BUT WILL ALSO CREATE EXTRAORDINARY GROWTH POTENTIAL AND ATTRACTIVE NEW INFRASTRUCTURE INVESTMENT OPPORTUNITIES

2. MOBILITY DECARBONISATION AND INTERCONNECTION MEGATREND

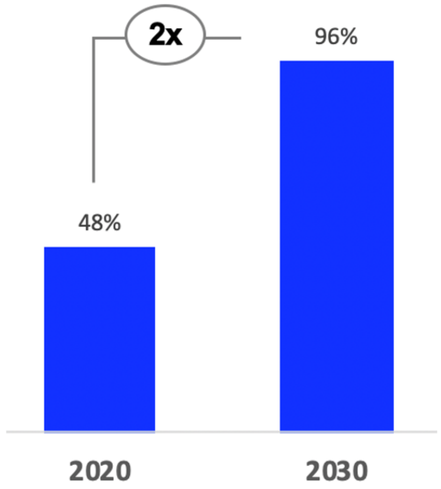
Decarbonised

New cars sold that are EVs (%)



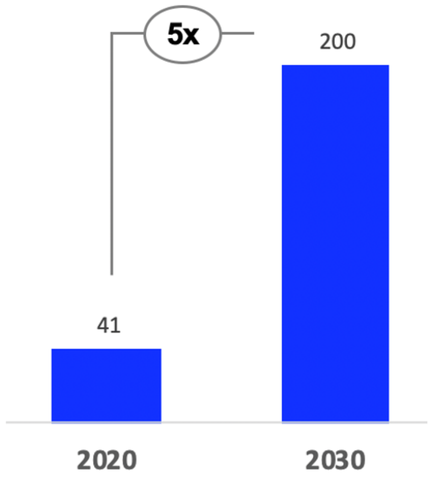
Connected

Vehicles with built in connectivity (%)



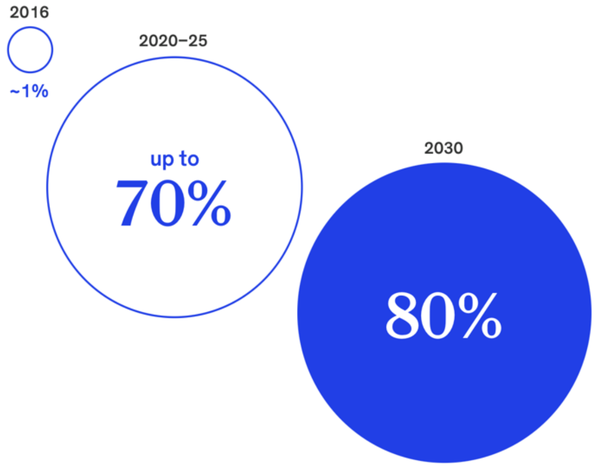
Shared

Global Shared micro-mobility market (USD Bn)



Autonomous

Share of miles driven by fully autonomous vehicles

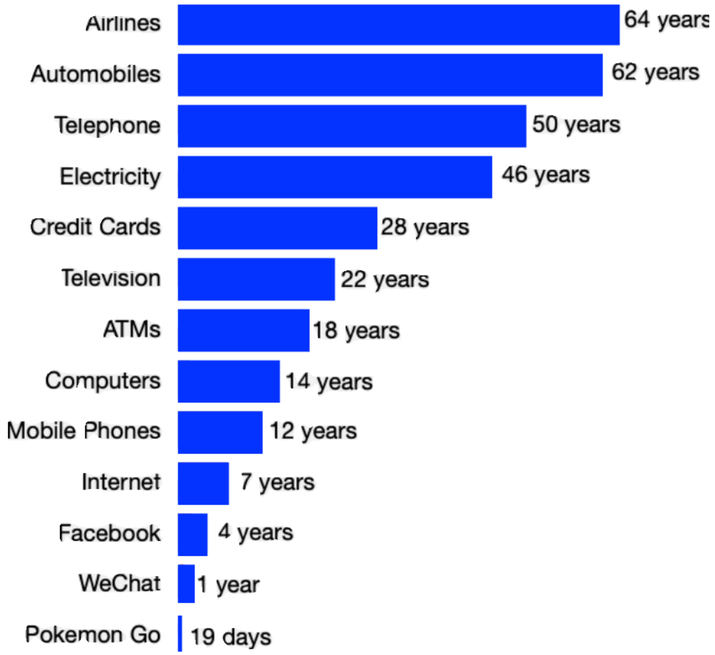


… BUT WILL ALSO CREATE EXTRAORDINARY GROWTH POTENTIAL AND ATTRACTIVE NEW INFRASTRUCTURE INVESTMENT OPPORTUNITIES

3. DIGITALISATION AND CONNECTIVITY MEGATREND

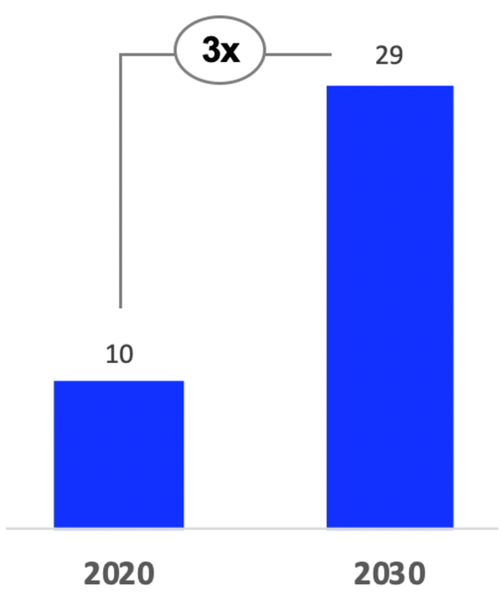
Technological acceleration

Time it took to hit 50m users (years)



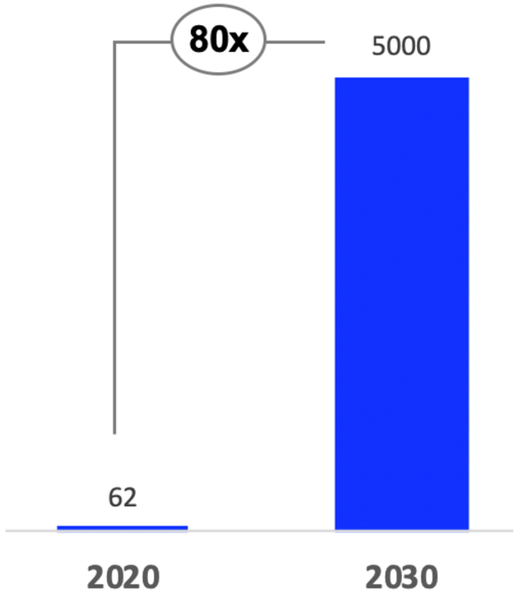
Total IoT connected devices

(Bn)



Global Mobile Data Traffic

(Exabye/ Month – Including M2M)

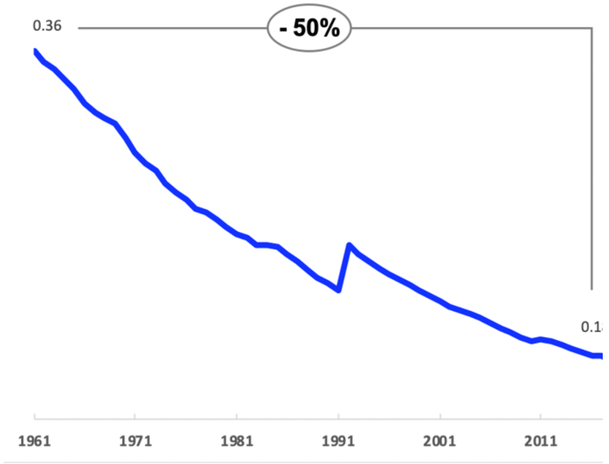


… BUT WILL ALSO CREATE EXTRAORDINARY GROWTH POTENTIAL AND ATTRACTIVE NEW INFRASTRUCTURE INVESTMENT OPPORTUNITIES

4. RESOURCE SCARCITY, SUSTAINABILITY AND AGEING POPULATION MEGATREND (1/2)

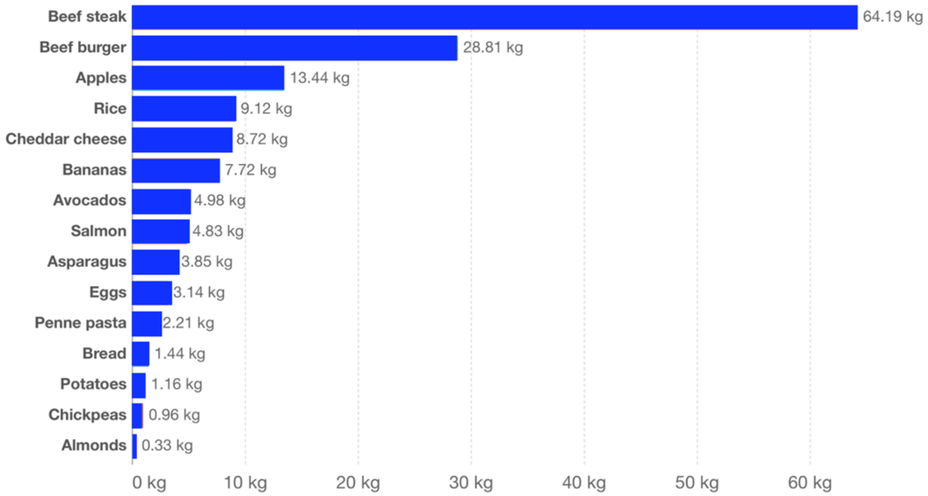
50% decrease in global arable land per person since the 60s…

(Hectares per person)



… Coupled with unsustainable consumption practices …

(Kg of GHG emission per 100 grams of protein)



… Has led an unsustainable global food system

Global food production currently accounts for

1/3 of total greenhouse gases emissions

80% of deforestation

70% of terrestrial biodiversity loss

70% of all freshwater use

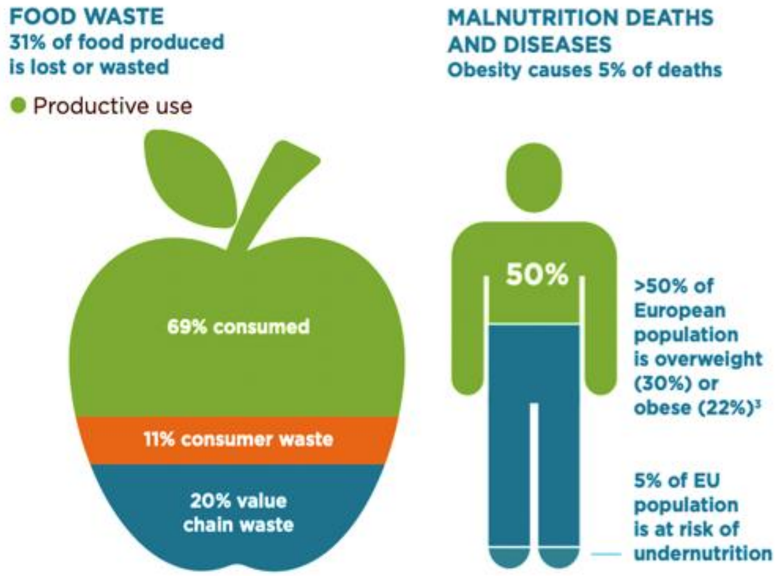
78% of global ocean & water eutrophication

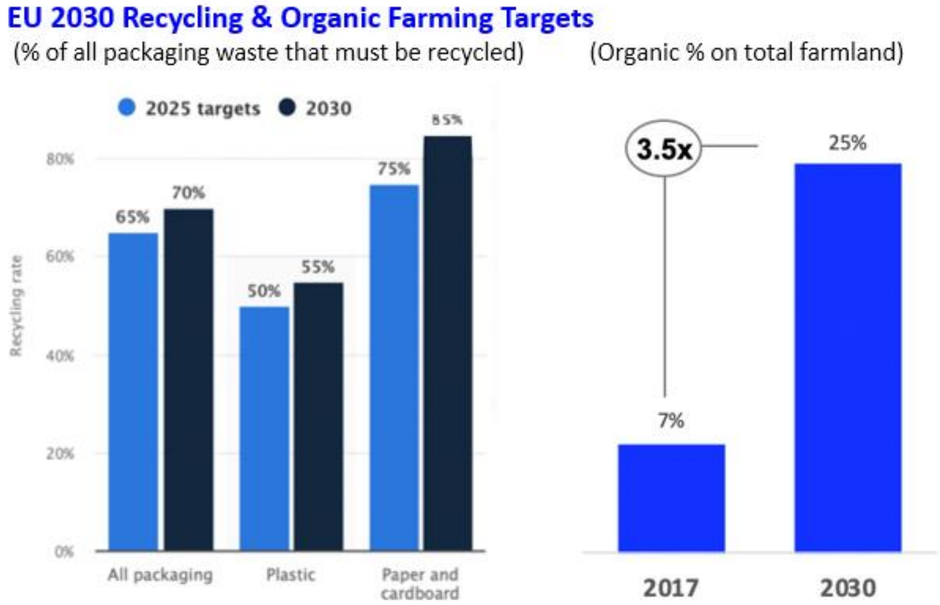
… BUT WILL ALSO CREATE EXTRAORDINARY GROWTH POTENTIAL AND ATTRACTIVE NEW INFRASTRUCTURE INVESTMENT OPPORTUNITIES

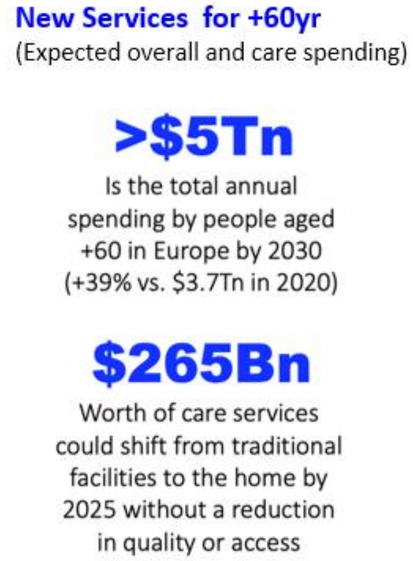
4. RESOURCE SCARCITY, SUSTAINABILITY AND AGEING POPULATION MEGATREND (2/2)

Producers and consumers are increasingly aware of the importance to adopting sustainable & healty practices

In the food system and the industrial sector to live not just “Longer, but Healthier” lives







THESE NEW INFRASTRUCTURE INVESTMENT OPPORTUNITIES CAN BE TARGETED USING A “THEMATIC” APPROACH

LINKING ATTRACTIVE MEGATRENDS AND REAL-LIFE INVESTMENT OPPORTUNITIES

- Decarbonisation
- Artificial Intelligence
- Connectivity
- Global warming
- Ageing
- Resource Scarcity
- Urbanisation
- Fragmentation
- Electrification
- Digitalisation

1	2	3	4
Clean, Digital & Decentralized Energy	**Decarbonized Mobility & Connected Logistic**	**Data Centric, Low Latency Digital Infrastructure**	**Sustainable, Circular & Healthy Living**
> Renewables platforms	> EV & Hydrogen Charging Hubs	> FTTH, FWA networks and 5G Densification	> Waste to Energy & Products
> Smart meters & energy efficiency services	> Fleets Telematics & energy management	> Digital Twins	> Sustainable habitative solutions
> Energy storage	> Ports & Shipping decarbonization	> Fintech platforms & Infrastructure	> Long term health care & Diagnostic services
> Green Hydrogen	> Specialty logistic	> Datacenter Infrastructure	> Sustainable food value chain & Reverse Logistic
> Carbon Capture			

An investment universe of “value-add” Clean, Connected and Sustainable opportunities triggered by new business models and the need to repurpose existing infrastructure

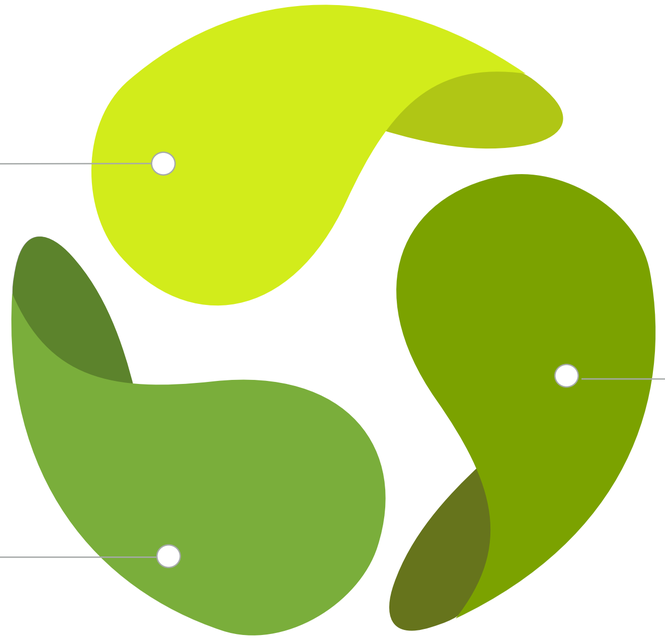
VESPER INFRASTRUCTURE

WHICH LEVERAGES ON A DISTINCTIVE PHILOSOPHY

A SPECIALISED THEMATIC "VALUE ADD" PHILOSOPHY BUILT OVER DECADES OF INFRASTRUCTURE INVESTING

01 **WE SEARCH TARGETS EXPOSED TO TRANSFORMATIVE MACRO TRENDS AND WITH STRONG RETURN POTENTIAL**

02 **WE FOCUS ON COMPANIES THAT SHOW ROBUST "CAPITAL PROTECTION" FEATURES**



03 **WE BUILD VALUE THROUGH OUR INDUSTRIAL - HIGH PERFORMANCE GOVERNANCE FRAMEWORK**

TO ENSURE THE COMPATIBILITY OF THE TARGET'S BUSINESS MODEL WITH THE TRADITIONAL "DESIRED" INFRASTRUCTURE CHARACTERISTICS …

THE FUNDAMENTAL INFRASTRUCTURE CHARACTERISTICS ARE STILL REQUIRED TO MAINTAIN ROBUST CAPITAL PROTECTION

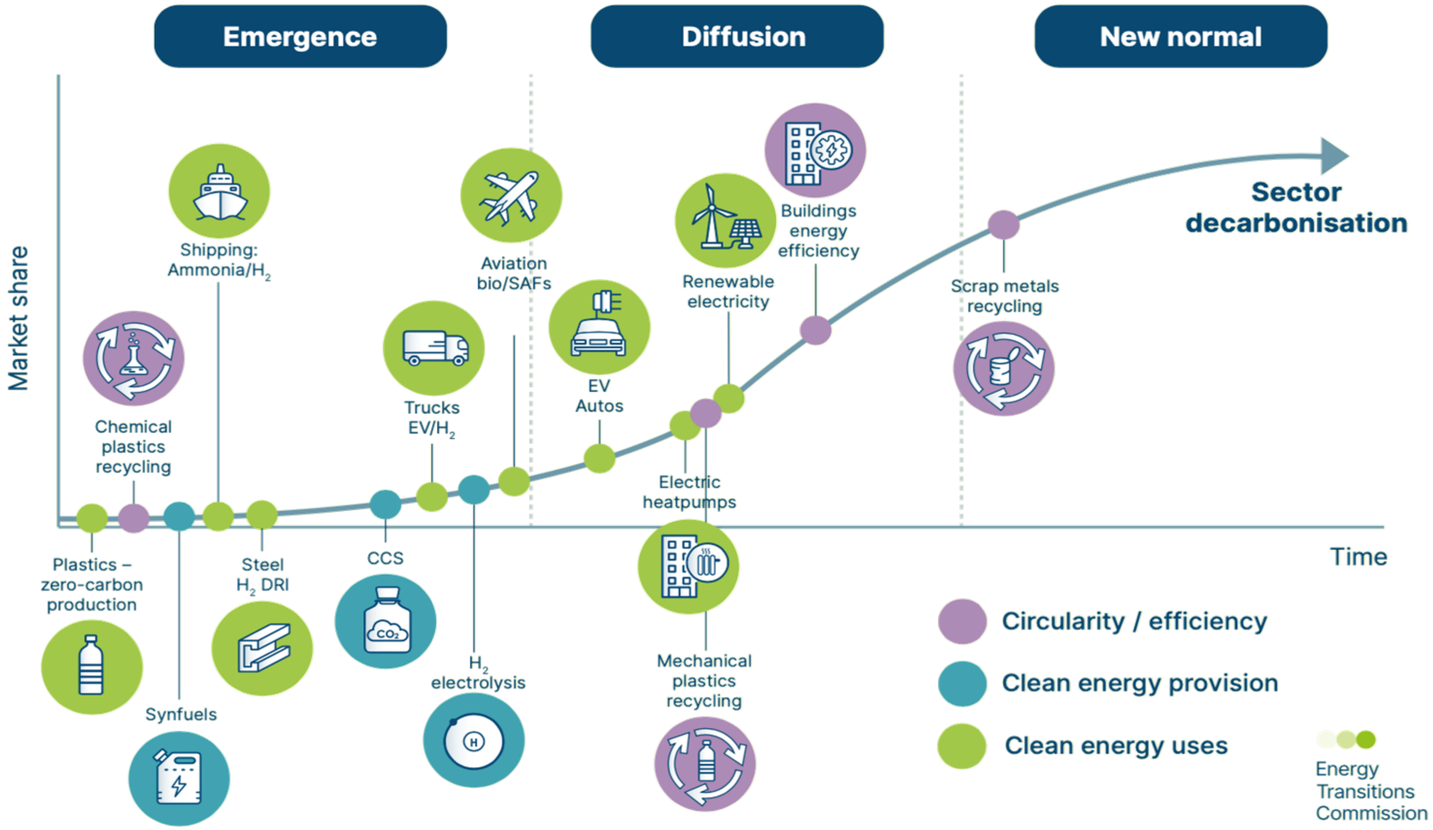
1. **Stable and visible medium-term cash flows:** through subscription-based service revenues model with strong lock-in or contracted /PPA like revenues;

2. **Significant downside protection/ Partial De-coupling form GDP:** driven by the essential nature of the service provided, the unique customer base and/or the exclusive technology used by the company;

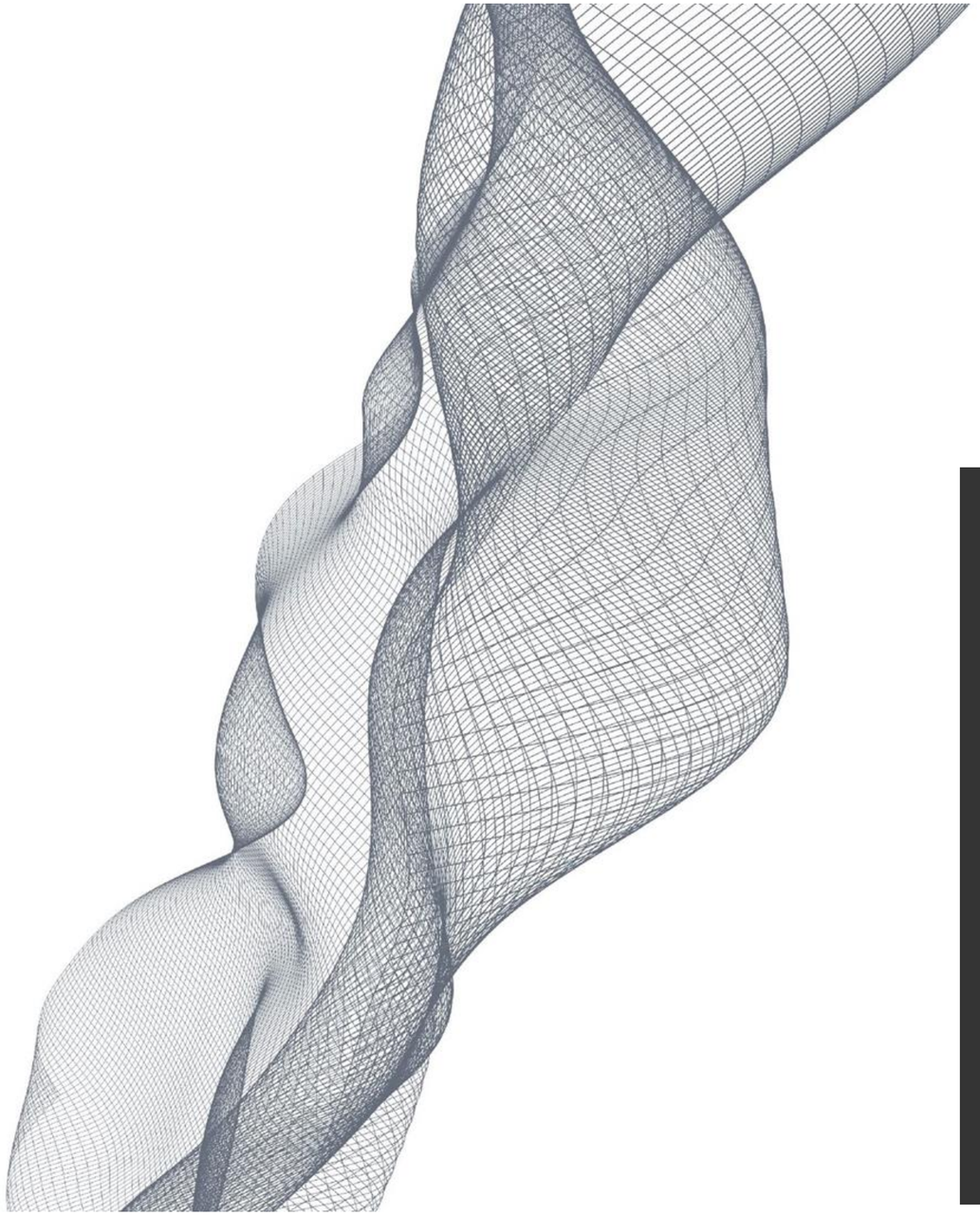
3. **Inflation protection:** through the ability to implement commercial re-pricing of services and/or largely pass-through of COGS / SG&A increases;

… AND MANAGES THE NEW “EMBEDDED” TECHNOLOGY RISK

TO AVOID EXPOSURE TO UNPROVEN OR TOO EARLY-STAGE TECHNOLOGIES FOR INFRASTRUCTURE INVESTORS



VESPER INFRASTRUCTURE PARTNERS



Value Add Strategies for Decarbonised, Connected and Sustainable Infrastructures

VESPER INFRASTRUCTURE