

INTELLIGENT POWER GENERATION

Daniel Henbest
CEO

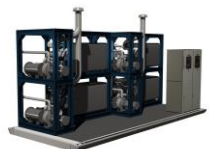
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INTELLIGENT
POWER
GENERATION

Founded in 2016
c.£4m funding to develop
Ceramic Turbine System



IPG Ceramic Turbine System:
Zero NOx, Multi-Fuel
High-Efficiency, Ultra-Low Emission
replacement for the Internal Combustion Engine



Commercialisation in >\$50bn kit market
EV Charging and Distributed Power
Revenues in 2021



Deliver Investor Value – Target 10x in 5-7 years
Positive EBITDA in 2022 growing to >£30m by 2025
Multiple application channels
Early value capture potential

In 2040, 50% of global energy demand will still be fuelled by gas and oil



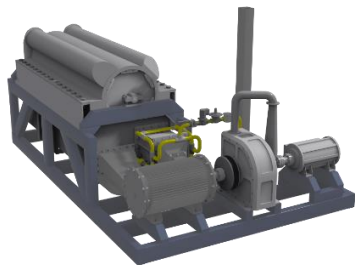
Source: BP Energy Outlook 2018

According to the UN,
we have 12 years to reduce
Environmental Impact of this energy demand

Need Rapidly Deployable Solutions that Improve Efficiency;
Lowering Fuel Costs and Emissions

Cost savings will Drive Business & Industry to Make Real Change

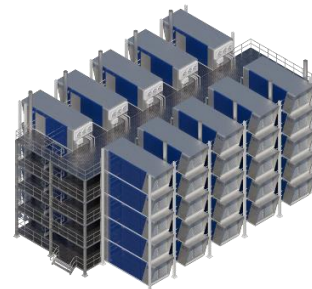
IPG Turbine Unit



IPG Turbine System



IPG Turbine Complex



IPG Turbine System

High
Efficiency

51%
Electrical Efficiency

Low
Cost

up to
76%
Lower Fuel Cost

CO₂
Reduction

up to
57%
Lower CO₂

Zero
Pollutants

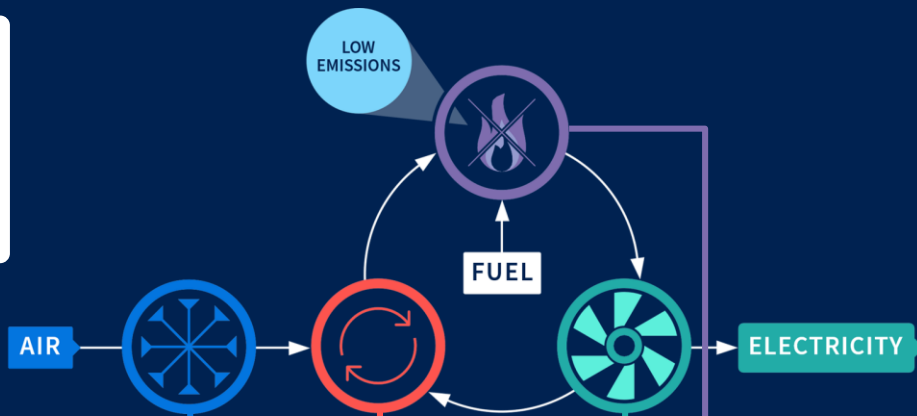
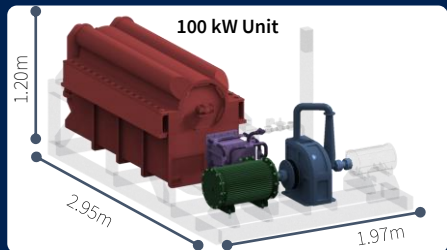
as low as
0%
NO_x

Multi-Fuel

runs on
Existing & Future
fuels

Mass
Manufacturable

designed for
Injection Moulding
process



COMPRESSOR

Low speed, directly shaft-driven to reduce parasitic energy requirement to increase air pressure ready for system

HEAT REGENERATOR

Patented mechanically robust ceramics exchange heat from exhaust with incoming compressed air

FLAMELESS COMBUSTOR

Multi-fuel reactor prevents formation of harmful pollutants by controlling peak combustion temperature

CERAMIC TURBINE

Light-weight, high temperature ceramics extracts energy from hot gas (1250 C) to generate electricity

Distributed Power

Global Addressable Market

\$32 bn



EV Charging

Global Addressable Market

\$54 bn

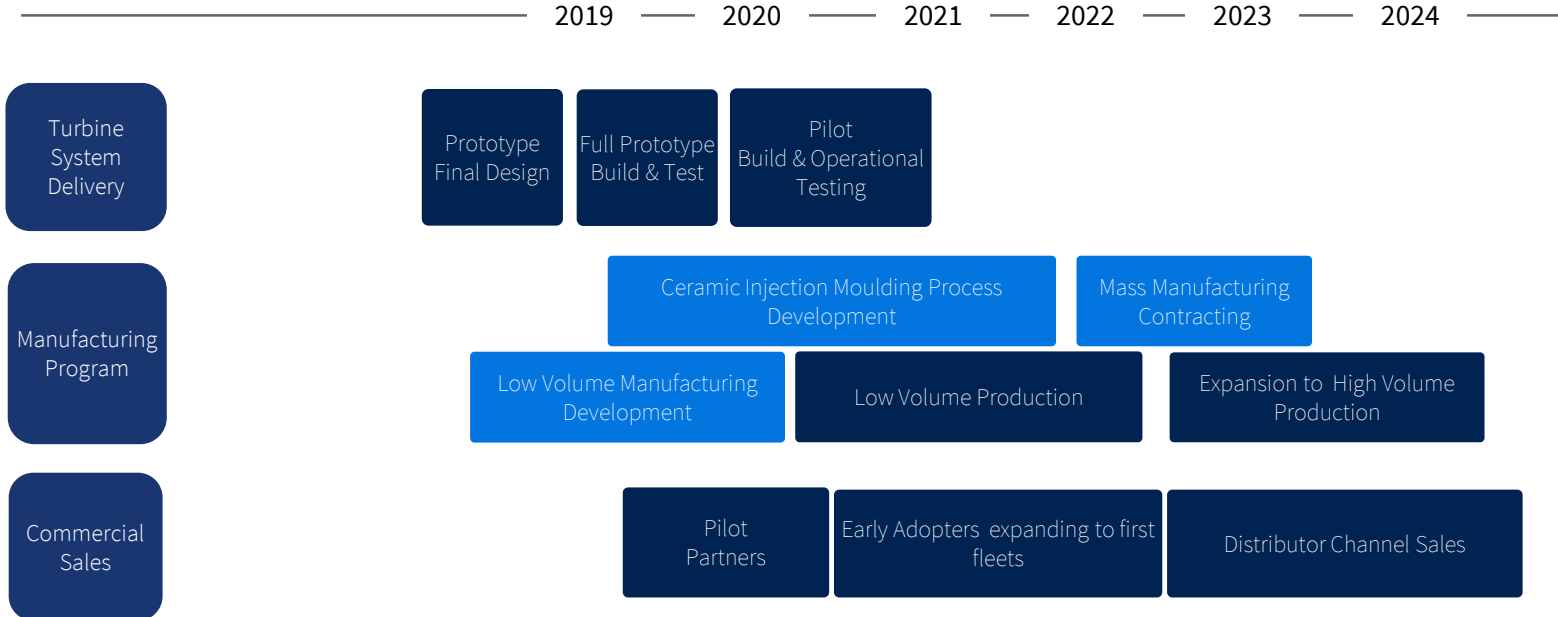


Mercedes-Benz



Milestones
Delivered

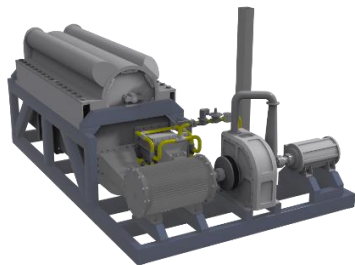
Team Built – Materials Selection & Testing – Full Designs and Modelling - Patents
Manufacturing Partners – Market Analysis – End User Engagements





Team of 15 including 8 post-graduate/PhD qualified engineers, and senior corporate finance and risk expertise

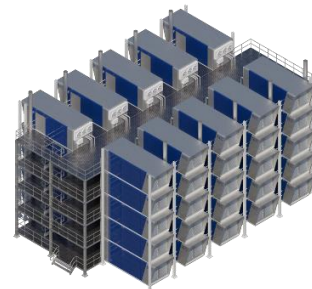
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