

# Generators Market Growth is Driven by the growing need for New Energy Sources



## 1 Major Trends Influencing Generators Market

### Smart Power Generation

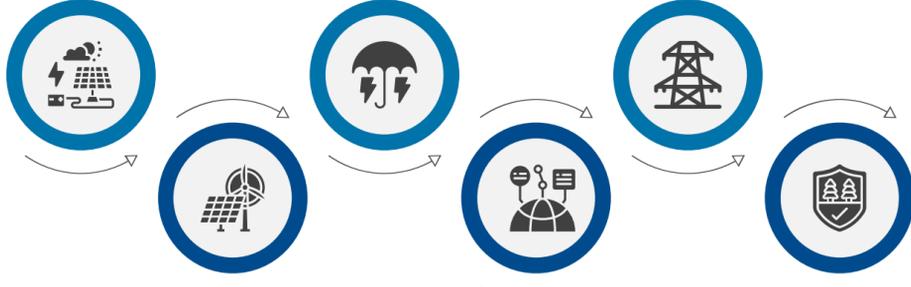
- Increasing installation of Hybrid Power Energy
- Increasing installation of Renewable Energy
- Energy Storage

### Power Security

- Growing demand for temporary and rental Power to ensure sustainable power supply

### Need for Grid Upgrades

- Current grid in most parts of the world needs to be upgraded to handle additional loading from the new sources of power



### Decentralized Power Generation

- Increasing installation of Microgrid
- Increasing installation of Distributed generation

### Need for higher Monitor and control

- Distributed Energy Resources Management
- Virtual Power Plant

### Environmental Regulations

- Strict regulations on emissions are downplaying on the growth of diesel generators
- Natural gas generators are gaining in their market share as they are more cleaner

- Power generation through reciprocating engines has gained strongly over the recent years. Ageing of large thermal plants and the ever increasing power demand together with the stronger need to reduce greenhouse gases have increased the emphasis to add newer energy sources.
- Substantial renewable energy capacities are being added across the world, however these additions are not without challenges. Intermittency associated with the renewable energy sources has given rise to opportunities for plant level backup power and energy storage etc.
- Decentralized generation, Microgrids and effective load control and generation have evolved separately addressing the new smart generation needs. Industrial scale generators find strong scope in addressing such opportunities.

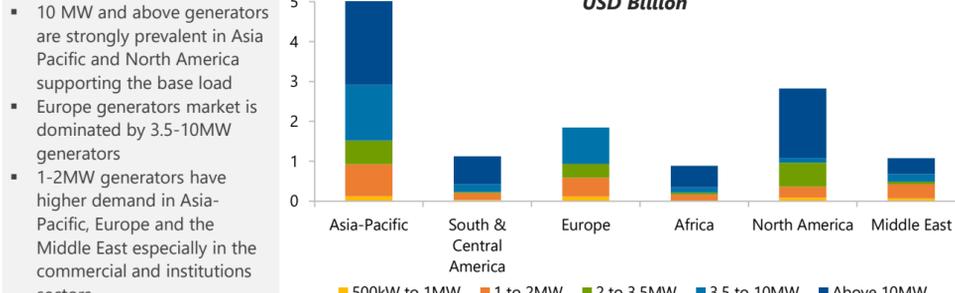
## 2 Global Generators Market

...With APAC being the largest market dominated by higher capacity engines



Bubble size represents the relative size of the market

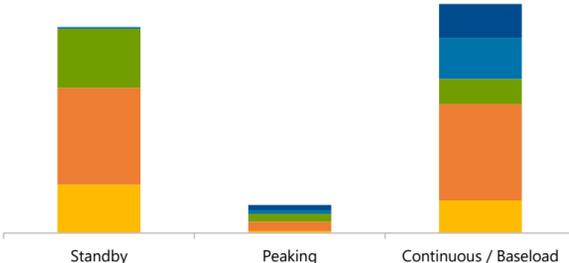
- Global energy demand is expected grow at under 2% over the next few years. With new capacities being added under new generation sources the growth of generator market is likely to exceed a CAGR of 4% till 2022
- Asia-Pacific dominates the global generators market; it is majorly contributed by the increased demand for sustainable power supply in the region
- North America and Europe are other stronger markets



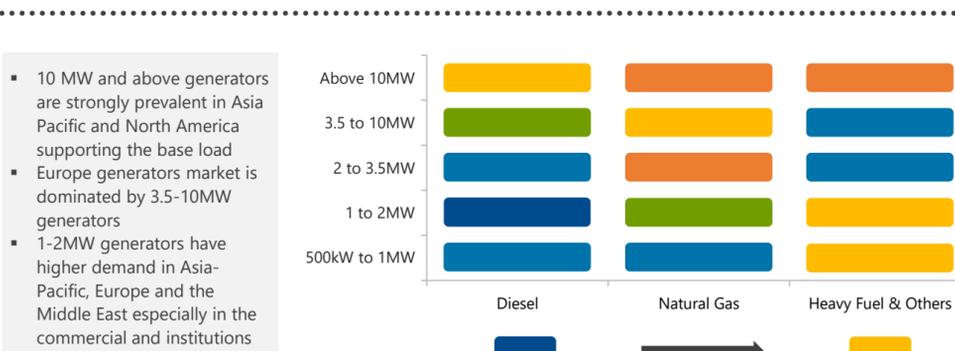
- 10 MW and above generators are strongly prevalent in Asia Pacific and North America supporting the base load
- Europe generators market is dominated by 3.5-10MW generators
- 1-2MW generators have higher demand in Asia-Pacific, Europe and the Middle East especially in the commercial and institutions sectors

## 3 Nearly 30GW of new generators are installed

Although diesel generators form the largest chunk of the market, regulations are expected to drive up the demand for LNG based generators...



- Base load and Standby are the key applications that demand diesel and gas generators
- 1-2MW range generators have significant market demand across industrial and commercial sectors
- 2 to 3.5MW generators witnessed higher installations mostly for the backup power/standby applications
- Above 3.5MW generators have stronger demand for continuous power applications



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## 4 Few New Product Launches – 2018-2019

...With majority of the recent new products launched by the major players belonging to these categories

Category	500kW – 1MW	1MW – 3.5MW
Natural Gas	CAT® Cat® CG132B GENERAC® SG750 MG750	
Diesel	Cummins® QSG12 Diesel Series C70D2RE HIMOINSA® Baudouin Series Stage V generator sets onsite energy® DS750, DS800, DS1000 and DS1250	HTW 2555 MTU 20V 4000 DS3600 MTU 20V 4000 DS 4000
Dual		CAT® CG 170B Cat® CG 170B Integrated Gas Blending for Diesel Genset

- There were many new product launches made by key companies in the generators market
- More product launches were made within the under 1MW capacity category
- Himoinsa launched its Baudouin Series diesel generators with power ranges from 109kVA to 1280kVA
- It launched another 2120kW diesel generator for continuous power un data centers
- Caterpillar launched natural gas and dual fuel generators
- Dual fuel CG170B series have output power ranging from 1.3 to 2.3MW and are meant for CHP applications
- CG132B series are natural gas fired generators have power outputs of 400kW, 600kW and 800kW supporting continuous power for industrial and commercial sectors
- Caterpillar also has launched integrated gas blending kits that aid its Cat 3516B diesel generator sets to burn dual fuel mixture

## 5 Key Stakeholders - Generators Market

Datamatics has rich experience of working within the global generators ecosystem...



## 6 Value Delivered from Datamatics

Converting data into decisive market intelligence

