



How to ensure EV charging is future ready

Energy Solutions Show

Phil Best – Total Gas & Power

Martin Hale – ChargePoint



5th June 2019

GRP (Gas, Renewables & Power)



World's
second-largest
LNG operator



A major player
in renewable
energies with **~2 GW**
of capacity developed



Nearly
13,000
employees



Present in
more than
30 countries



~5 million
sites and customers,
of which ~80%
are B2C sites



5 combined-cycle
gas-fired power plants in
Europe, including
one in development



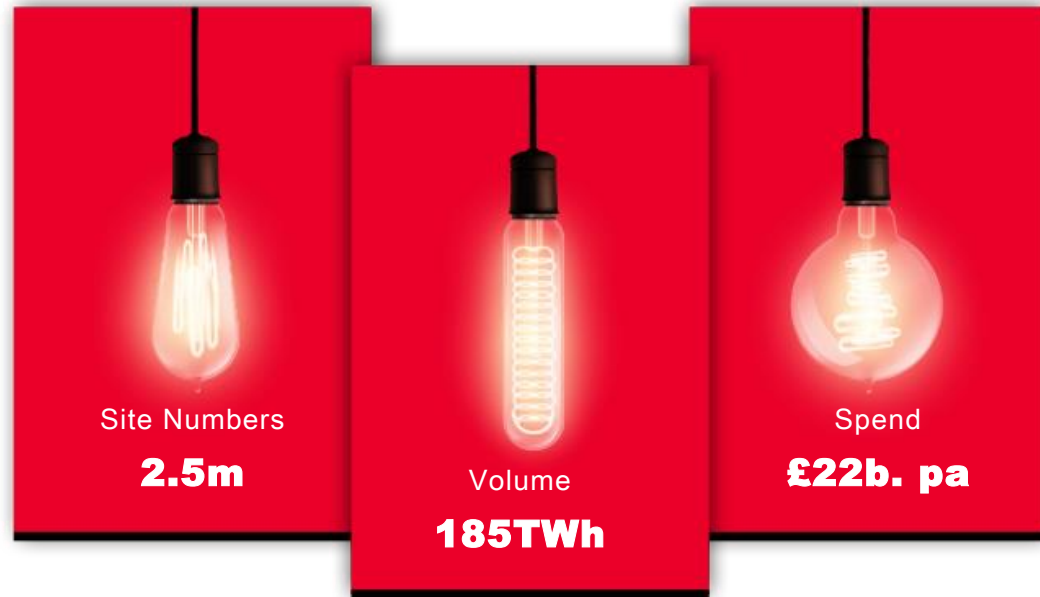
~12 million
people reached
by our Access
to Energy program



OBJECTIVE

Invest **\$1 billion to \$2 billion**
each year in low-carbon
businesses

Market Site Numbers & Volumes



Total have partnered with Chargepoint to provide end to end EV charging solutions

Search jobs Dating Sign in Search UK edition

The Guardian


Oil companies have shown an increasing appetite to move into the electric car market. Shell has also bought the Dutch charging firm New Motion, BP bought the UK's biggest network for £130m and on Thursday the French firm Total went into partnership with the US company ChargePoint to sell chargers to UK businesses.

<https://www.theguardian.com/environment/2018/oct/25/s hell-starts-rollout-of-ultrafast-electric-car-chargers-in-europe>

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Total Gas & Power Will Partner With ChargePoint In The UK



OCT 28 2018 BY MARK KANE 2

Total feels it's time to prepare for changes.

Total Gas & Power has entered into a partnership with ChargePoint to expand its gas and electricity to charging stations in the UK as forecasts say that the mass adoption of electric mobility is coming.

According to the press release, it's a reseller partnership, which means that Total intends to offer its business customers a comprehensive EV charging solutions and services, including both AC charging and DC charging, as well as a network connecting all the charging points, drivers and stations owners.

ChargePoint - The Unrivaled Open Fueling Network

Largest EV fueling network in North America

62% of Fortune Top 50 companies use ChargePoint

60% of 2019 Fortune 100 Best Companies to Work For® use ChargePoint



30,000+

Home / Multi-Family Ports

80,000+

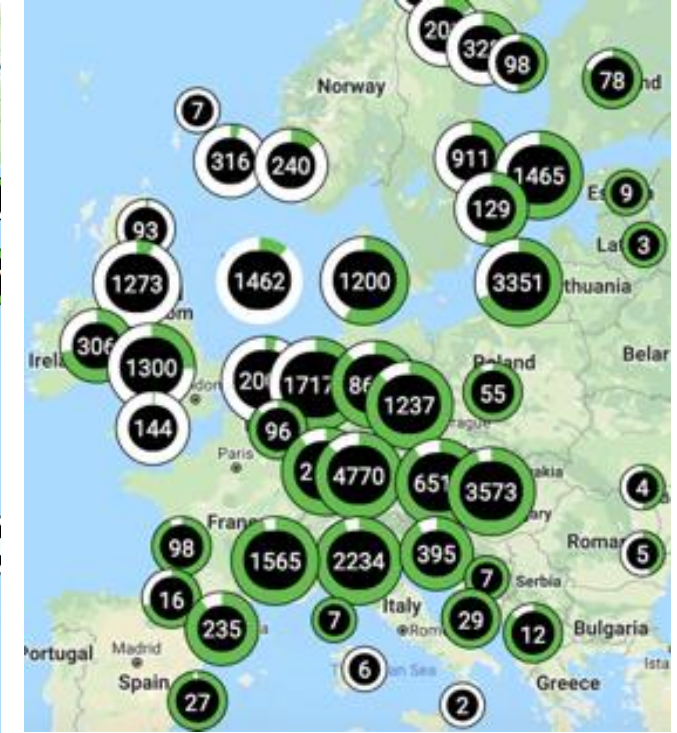
Public / Semi-Public / Commercial Ports

1031+

DC Ports

www.fortune.com/fortune500/list/

www.greatplacetowork.com/best-workplaces/100-best/2019



30,000+

Charging Spots EU

The Future of Mobility is Electric

Governments are enacting
aggressive policies to curb
emissions

Automakers are investing
billions in new EV models

... leading to
mass EV adoption

Consumers
and fleets are
shifting to electric...

The Future of Mobility is Electric



No major industry will change more over the next two decades than transportation.



The Future of Mobility is Electric





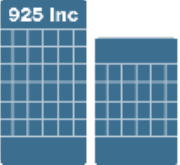




“In 2040, 60 million EVs are projected to be sold, equivalent to 55% of the global light-duty vehicle market.”

—Electric Vehicle Outlook 2018, Bloomberg New Energy Finance



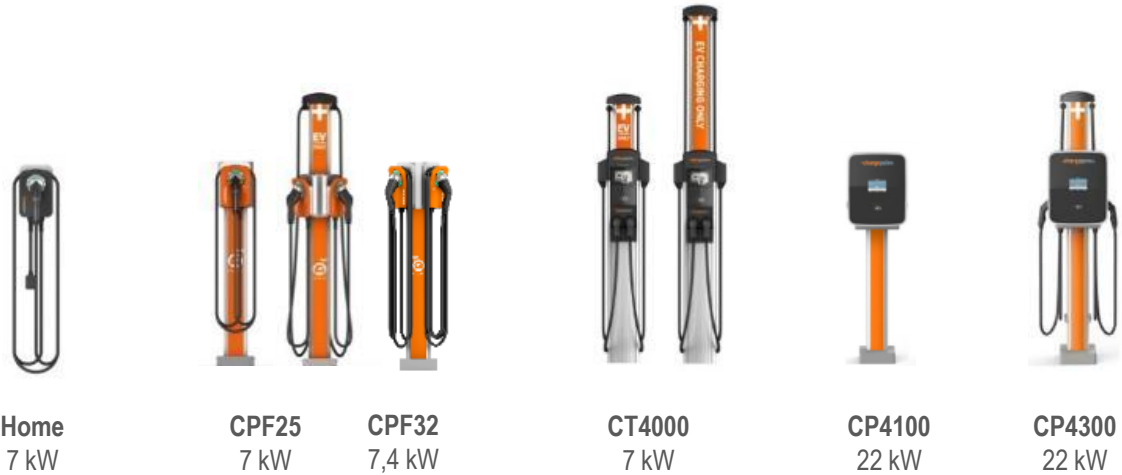
Value Proposition

Reduce Expenses and Generate Direct & Indirect Income

Home	Fleet	Workplaces	Multi-Family Homes	Commercial Property	Parking	Retail & Hospitality
						
GAIN GREATER CONTROL & VISIBILITY	LOWER COST OF TRANSPORTATION	ATTRACT & RETAIN TALENT	ATTRACT & RETAIN RESIDENTS & TENANTS		ATTRACT NEW CUSTOMERS	INCREASE SALES
<ul style="list-style-type: none"> + Track usage and expenses + Charge during off-peak hours + Achieve sustainability goals 	<ul style="list-style-type: none"> + Meet government mandates and regulations + Reduce operating expenses with lower fueling and maintenance costs + Achieve sustainability goals + Proactively manage expenses + Grid friendly power management 	<ul style="list-style-type: none"> + Increase employee satisfaction + Improve productivity + Achieve sustainability goals + Provide pricing controls to support your business goals 	<ul style="list-style-type: none"> + Increase average rent and property value + Provide valued amenity + Meet emerging state and city regulations + Achieve sustainability goals 		<ul style="list-style-type: none"> + Drive revenue + Provide differentiating amenity 	<ul style="list-style-type: none"> + Attract new and repeat customers + Increase shopping time + Boost customer satisfaction + Achieve sustainability goals + Integration with loyalty programs

Best-in-class & Global Hardware Portfolio

Residential and Commercial – AC



Commercial – DC



First EV charging stations to be
ENERGY STAR certified

Modular Approach: Simplifies service and repairs,
minimising down-time

Future Ready Charging Software and Services



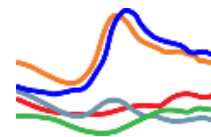
Dashboard & Analytics

Station owners see how stations are being used and when it's time to add capacity.



Waitlist

Drivers can get in line and get notified when the station is available – improves utilization.



Energy Management

Efficiently and automatically utilize power available for charging vehicles. Save money on costly upgrades and avoid demand charges.



Flexible Pricing

By hour, by kWh, by time of day, by customer type, or by any combination.



Access Control

Limit who can use the charging stations and when. Station owners can disable charging during “closed” times.



Fleet Services

Fleet Managers can track vehicle charging and pay for fuel if the vehicles need to charge at other stations.



Driver Services

Automatically notify drivers when: fully charged, a station becomes available, power outage or decrease, and more.



APIs

Most functions are also available through SOAP/XML and REST APIs that follow the same data access rules as the UI.

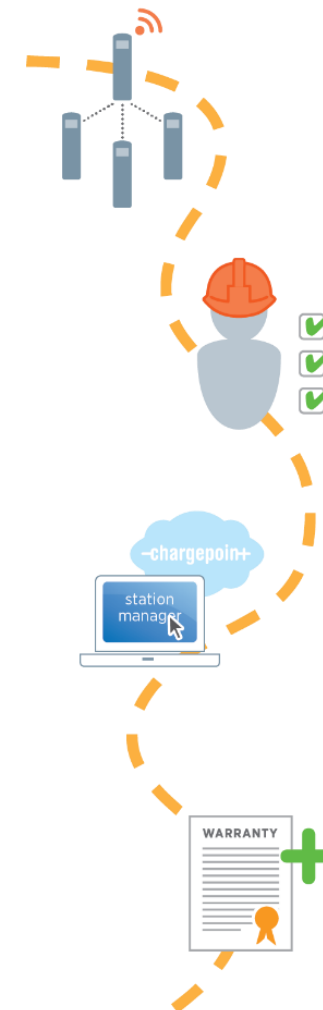
Future Ready Installation, Service and Support

- Site Assessment, Scoping and Project Management

- Future Proof the installation ready for future Upgrade
- Accurate site qualification, quality site preparation and professional installation
- Partnered with nationwide network of O&M professionals to provide setup services
- Initial Activation and Configuration service provides a specialist to consult directly with set-up and activation of station

- Ongoing Service Support

- Standard warranty coverage for one year parts only when installed by ChargePoint dealer
- ChargePoint Assure – most comprehensive EV station maintenance and management program
- 24/7 driver support in multiple languages



THANK YOU

For further information,
please contact Phil Best:
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