

The SAGA of simple EV charging

PETER FROST : Environment Strategy Officer for Suffolk County Council
Wednesday 5th June 2019

WE'RE TALKING ABOUT BUYING ABOUT £4 OF ELECTRICITY ?

PLEASE LOOK AT IT FROM THE ELECTRIC VEHICLE DRIVER'S POINT OF VIEW



EASY – JUST JOIN THE CLUB...

PICK AN ACCESS CARD... OR APP... OR KEY FOB ?

BARRIERS TO CHARGING – IT SHOULD BE AS EASY AS FUELLING A PETROL/DIESEL CAR !

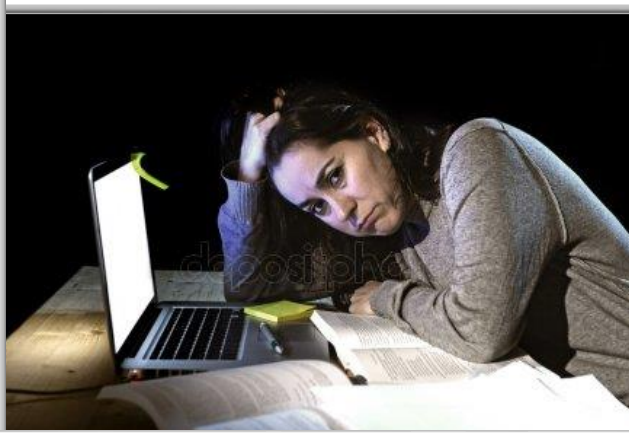
- PODPOINT
- CHARGEMASTER
- CHARGE-YOUR-CAR (CYC)
- GENIEPOINT
- SOURCE LONDON
- E-CARNI
- INSTAVOLT
- ECOTRICITY
- NATIONAL GRID?
- SWARCO E.CONNECT
- ALFAPOWER
- IONITY
- TESLA
- ESB
- SHELL RECHARGE
- ZERO CARBON WORLD
- E CARS
- CHARGEPLACE
- ENGENIE
- UBITRICITY
- CHAR.GY
- ENSTO, LIFE, NEWMOTION, ETC. ETC. ETC...



FOR EXAMPLE...

CHARGERS GALORE !!! AT BURY ST EDMUNDS

- POLAR NETWORKS
- PODPOINT
- GENIEPOINT
- SWARCO E CONNECT
- INSTAVOLT
- HUBSTA
- SOURCE EAST (JUST KIDDING)



SO... THE WEEK BEFORE YOU SET OFF ANYWHERE NEW, YOU NEED TO DO A BIT OF **RESEARCH** !

REMEMBER

This is to buy £4 of electricity



I must begin revision.
I must begin revision.
I must begin revision.
I must begin revision.



The
**Finding an EV
Charge point
STRATEGY**
That Actually
Works

IF ONLY THERE WAS A BETTER WAY ?

- WOULDN'T IT BE GREAT IF **EVERYONE** ALREADY CARRIED AROUND SOME KIND OF ACCESS CARD WHICH COULD BE USED TO PAY FOR CHARGING THEIR ELECTRIC CAR WHILE THEY WERE OUT AND ABOUT ?



MasterCard

EASY... YOU'RE ALREADY IN THE CLUB

- WOULDN'T IT BE GREAT IF **EVERYONE** ALREADY CARRIED AROUND SOME KIND OF ACCESS CARD WHICH COULD BE USED TO PAY FOR CHARGING THEIR ELECTRIC CAR WHILE THEY WERE OUT AND ABOUT ?
- NOT ONLY THAT BUT (AND THIS CONCEPT IS GONNA BLOW YOUR MIND) IT'S SO VERSATILE THAT IT CAN... WAIT FOR IT... **BE USED TO BUY OTHER STUFF AS WELL...!!!**



SO... HOW ARE YOU GOING TO CHARGE YOUR *ELECTRIC CAR* ?

- MORE RANGE ALONE DOES NOT CURE RANGE ANXIETY
- **ACCESS** TO CHARGING, EVERYWHERE IS WHAT WILL FINALLY REMOVE RANGE ANXIETY
- THE ROLLOUT OF THE INFRASTRUCTURE NEEDS TO BE WORKED OUT AND ACCELERATED NOW!
- THIS WILL ENCOURAGE A FASTER ADOPTION OF ELECTRIC CARS







The UK's first fully open fast charge



PUBLIC DEMAND ELECTRIC...
PLUG IN SUFFOLK – 1ST IN THE UK.
ACCELERATED ROLLOUT OF OPEN
ACCESS PUBLIC CHARGING
INFRASTRUCTURE COUNTYWIDE.



WWW.PLUGINSUFFOLK.ORG

Pay to charge here

-  1. PLUG IN
-  2. TAP CARD TO VERIFY
-  3. SELECT CHARGER
-  4. TAP CARD TO PAY

eo
Need Help?
Call: +44 (0) 333 77 20383
Email: hello@eocharging.com



		
No more memberships	No more RFID cards	No more Apps

Open, easy access is the key...



CONCEPT LOCAL MANUFACTURER. LOCAL INSTALLER. TEAM SUFFOLK LEADING THE WAY... NO COST TO TAXPAYER

- ALL E.V.'S CAN CHARGE AT A TYPE 2 – ALL DRIVERS CAN ACCESS
- RAPID CHARGER NETWORK IS GREAT...
- FAST CHARGERS WORK IN SUPPORT OF A DIFFERENT REQUIREMENT 2 – 4 HRS PARKING.
- INFRASTRUCTURE IS A LOT EASIER TO INSTALL
- PAYMENT USING CONTACTLESS CREDIT CARD.
- MODULAR SO CAN BE UPGRADED OVER TIME.
- CAN BE OPEX OR CAPEX (UPFRONT) MODEL
- INSTALLER/CPO PROFIT SHARE OPTION
- DYNAMIC LOAD MANAGEMENT
- SERVICE LEVEL AGREEMENT INCLUDED

OWNERSHIP EXPERIENCE

BETTER THAN OWNING A PETROL OR DIESEL CAR IN EVERY WAY

- QUICKER
- QUIETER
- SMOOTHER
- CLEANER
- AND OVERALL CHEAPER TO RUN



EVERY PEER-REVIEWED STUDY SHOWS EV'S ARE BETTER FOR THE ENVIRONMENT

- IN A FULL LIFE CYCLE, ELECTRIC VEHICLES EMIT TWO TIMES LESS CARBON DIOXIDE (CO₂) IN COMPARISON TO DIESEL ENGINES IF WE TAKE THE EUROPEAN ELECTRICITY MIX. THIS CAN BE EVEN FOUR TIMES LESS IS WE TAKE, FOR EXAMPLE, THE BELGIAN ELECTRICITY MIX. IF CARS ARE DRIVING ON SUSTAINABLE ELECTRICITY, CARBON DIOXIDE EMISSIONS COULD BE FURTHER REDUCED BY MORE THAN 10 TIMES.
- IN 2018 THE *WORLD ELECTRIC VEHICLE JOURNAL* WAS THE FIRST PEER-REVIEWED INTERNATIONAL SCIENTIFIC JOURNAL THAT COVERED ALL STUDIES RELATED TO BATTERY, HYBRID, AND FUEL CELL ELECTRIC VEHICLES COMPREHENSIVELY.

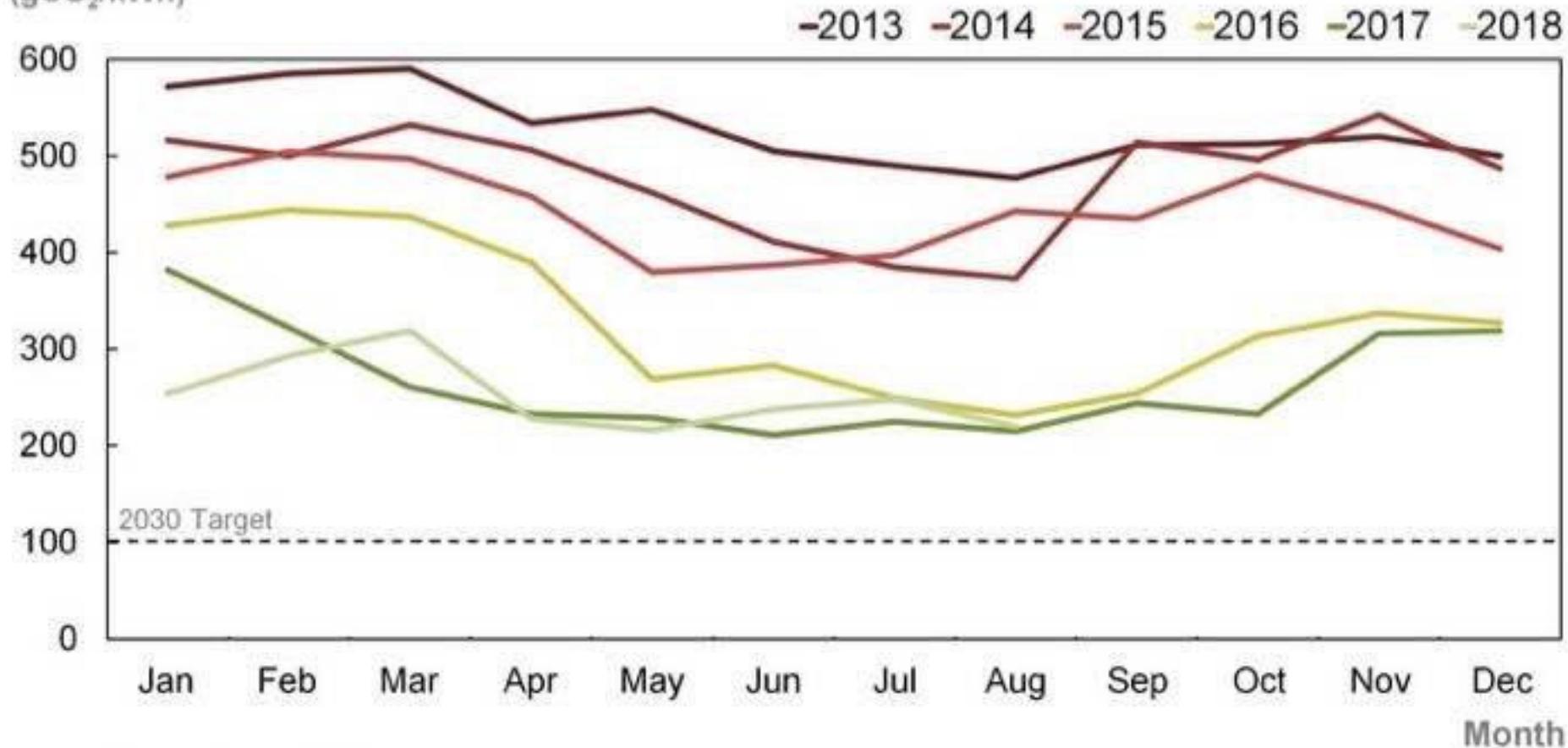


ELECTRIC CARS GET CLEANER AS THE GRID GETS GREENER

The Decarbonisation of British Electricity

2018 has so far been the 'greenest' year on record in Great Britain

Carbon Intensity
(gCO₂/kWh)



↓ **49.7% decrease**
from 2013 to 2017

2013 **529** gCO₂/kWh

2014 **477** gCO₂/kWh

2015 **443** gCO₂/kWh

2016 **330** gCO₂/kWh

2017 **266** gCO₂/kWh

2018 **252** gCO₂/kWh*
year to date

STILL MORE PUBLIC CHARGING REQUIRED

- ALL E.V.'S CAN CHARGE AT A TYPE 2
- CHARGING WHEN OUT AND ABOUT IS A BARRIER TO EV UPTAKE
- PROMOTING SUFFOLK AS AN EASY PLACE FOR AN ELECTRIC CAR DRIVER TO VISIT
- WIN WIN - ADDITIONAL CHARGE POINTS WILL SUPPORT THE OTHER NETWORKS BEING ROLLED OUT
- CHARGERS EVERYWHERE – EITHER **CREDIT CARD** OR **ONE APP TO RULE THEM ALL**
- THEN PEOPLE WILL BE CONFIDENT TO SWITCH TO ELECTRIC MOTORING



FIND WHICH CHARGERS
CONNECT WITH YOUR EV



3-pin



Commando Type 1



Type 2



JEVS



CCS



Tesla



Unknown

2019 –THE YEAR GREEN CONSUMERISM TAKES OVER. DON'T MISS OUT ON THE TREND

PEOPLE ARE WILLING TO PAY A LITTLE MORE TO HELP THE ENVIRONMENT

% who agree that they would pay more
for eco-friendly products

58%

Gen Z
(16-21)

61%

Millennials
(22-35)

55%

Gen X
(36-54)

46%

Baby Boomers
(55-64)

Source: GlobalWebIndex Q2 2018 Base: 111,899 Internet Users aged 16-64

**WE HAVE 12 YEARS TO
SAVE THE PLANET FROM
CLIMATE CHANGE
CATASTROPHE!**



CNN Home Live TV

12 years to stop climate catastrophe



Humans must make rapid, unprecedented changes to end global warming, experts say

**IPCC REPORT – 12 YEARS
BEFORE IT'S TOO LATE...**

**CLIMATE EMERGENCY DECLARED
IF WE DON'T CHANGE,
WE'RE HISTORY !!!**

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WE'RE TALKING ABOUT BUYING ABOUT £4 OF ELECTRICITY ?

PLEASE LOOK AT IT FROM THE ELECTRIC VEHICLE DRIVER'S POINT OF VIEW



Drive electric – the downsides are easily overcome and the upsides get better over time