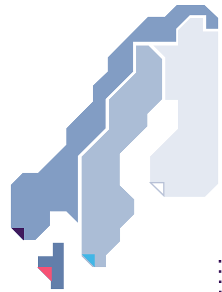
INSERO QUARTERLY, Q2 2017

- Nordic electric vehicle market overview with the latest sales figures, infrastructure overview and the main market tendencies

INSERO

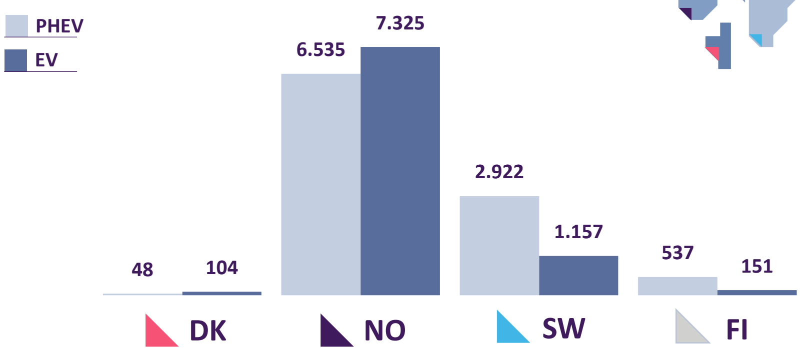
INSERO QUARTERLY, Q2 2017

Q2 OUTLINE



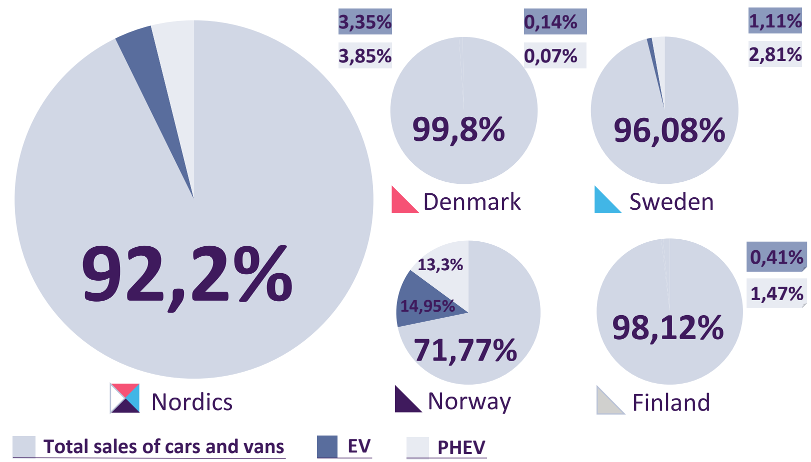
CAR SALES

PHEVs and EVs sold in the Nordics:



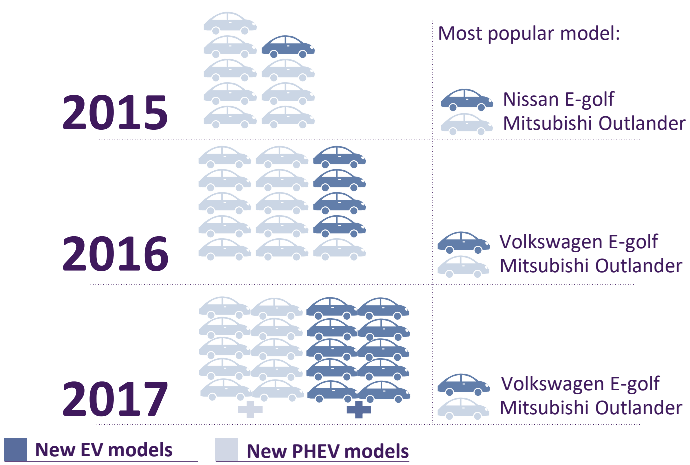
CAR SALES IN TOTAL

Percentages of cars sold across the Nordics:



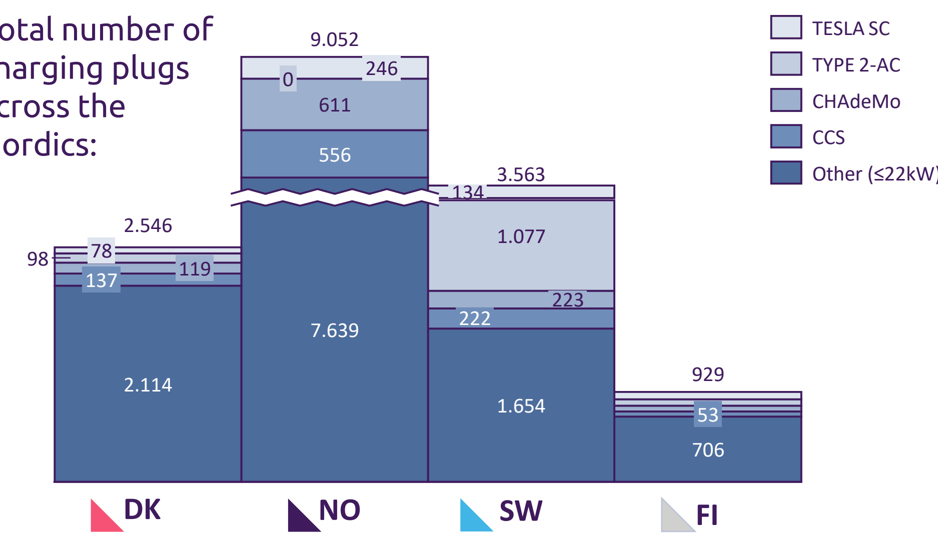
CAR MODELS

New EV and PHEV models each year:



NUMBER OF CHARGING PLUGS

Total number of charging plugs across the Nordics:



ABBREVIATIONS AND TERMINOLOGY

Charging plug – Plugs to be inserted in electric vehicles to charge them

Charging point – Unit/location, which may have one or more charging plugs

EV – Electric Vehicle (car or van)

PHEV – Plug-in Hybrid Electric Vehicle

BEV – Battery Electric Vehicle

YTD – Year-To-Date

Car segments used in Insero Quarterly:

A-segment = Mini cars (e.g. Fiat 500)

B-segment = Small cars (e.g. Renault Clio)

C-segment = Medium cars (e.g. VW Golf)

D-segment = Large cars (e.g. BMW 3 series)

E-segment = Executive cars (e.g. Mercedes E Class)

J-segment = SUV cars (e.g. BMW X5)

Van-segment = Vans (e.g. VW Transporter)

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NORDIC | WHAT THE LATEST NORDIC FIGURES TELL US

- **Total number of electric vehicles stock:** 199.815 Check out the figures

- **Q2 sales:** 18.777 vehicles (record) Check out the figures
- **Sales development in Q2:** +2,72% (18.280 – 18.777)
- **YTD sales:** 37.057 vehicles

- **Best selling EV class**: BEV C-class with 5.601 in total sales Check out the figures

- **Infrastructure roll out:** Positive growth across the Nordics Check out the figures

- **EV Incentives**: Danish politicians decided to freeze the tax regulations to kick start the dead market. Check out more

- **Best selling car model**: VW E-Golf (1.793)

DENMARK | THE MAIN TENDENCIES FROM DENMARK

- **Q2 sales:** 150 vehicles Check out the figures
- **Sales development in Q2:** + 41,51 % (106 – 150)
- **YTD sales:** 256 vehicles Check out the figures

- **Infrastructure roll out:** Increased by 0,6% (2.546 chargers in total) Check out the figures

- **Incentives for electric vehicles**: Politicians are trying to re-establish EV uptake by freezing upcoming tax regulations until 2018 (or until sales reach 5.000 EV's) Check out more

- **Most popular BEV:** Renault Zoe (previously Nissan e-NV200) Check out more
- **Most popular PHEV**: Mercedes GLC

- **Other highlights:** Q2 2017 managed to increase the total sales of EVs by 46 vehicles (compared to Q1 2017 which was the worst quarter since Q2 2013) mainly because of large orders of Renault Zoe in June (51 in total). The new tax incentives have not yet made an impact on the sales.

NORWAY | THE MAIN TENDENCIES FROM NORWAY

- **Q2 sales**: 13.860 vehicles (record) Check out the figures
- **Sales development in Q2:** + 1,36 % (13.674 – 13.869)
- **YTD sales**: 27.534 vehicles Check out the figures
- **Infrastructure roll-out:** Increased by 4,4% (9.052 chargers in total) Check out the figures
- **Incentives for electric vehicles:** No significant changes were observed in Q2 Check out the figures
- **Most popular BEV:** VW E-Golf (previously BMW i3) Check out more
- **Most popular PHEV:** Mitsubishi Outlander (previously VW Passat GTE)
- **Other highlights:** The VW E-Golf managed to increase its market share by 7,39 % (12,55 % in total and 1.740 new registrations) compared to Q1 2017 and is now the best-selling BEV model in Norway. The new Opel Ampera successfully penetrated the Norwegian market with 634 new registrations.

SWEDEN | THE MAIN TENDENCIES FROM SWEDEN

- **Q2 sales:** 4.079 vehicles (record) Check out the figures
- **Sales development in Q2:** + 5,16 % (3.879 – 4.079)
- **YTD sales:** 7.958 vehicles Check out the figures

- **Infrastructure roll-out**: Increased by 24,9% (3.563 chargers in total) Check out the figures

- **Incentives for electric vehicles**: No significant changes were observed in Q2 Check out the figures

- **Most popular BEV:** Nissan Leaf Check out more
- **Most popular PHEV:** Mitsubishi Outlander (previously VW Passat GTE)

- **Other highlights:** PHEVs continue to dominate. The VW Passat GTE lost its dominating market share of 30,47 % (Q1 2017) and is down to 14,83 % in Q2. Mitsubishi Outlander is now the market leader of EVs with a total market share of 17,11 %.

FINLAND | THE MAIN TENDENCIES FROM FINLAND

Q2 sales: 688 vehicles (record) Check out the figures

Sales development in Q2: + 10,79 % (621 – 688)

YTD sales: 1.309 vehicles Check out the figures

Infrastructure roll-out: Infrastructure roll-out: Increased by 2,0 % (929 chargers in total) Check out the figures

Incentives for electric vehicles: No significant changes were observed in Q2 Check out the figures

Most popular BEV: Tesla Model S Check out more

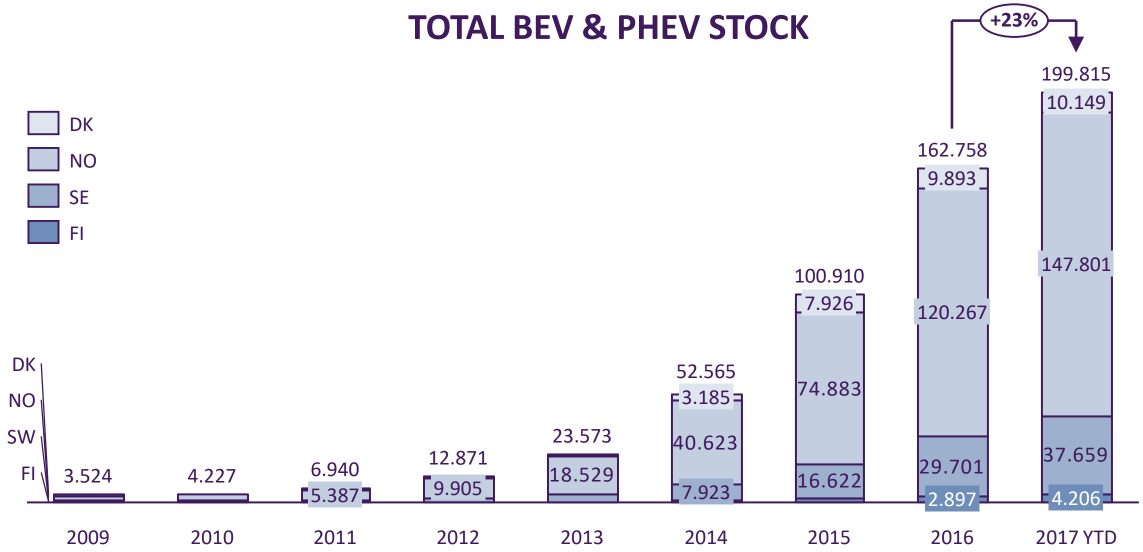
Most popular PHEV: Mercedes GLC

Other highlights: The Finnish EV market has surpassed the Danish market and is now the third biggest EV market in the Nordics. It is close to reaching the 700 new registrations mark in one-quarter for the first time. The Mercedes GLC is above 100 new registrations for the second quarter in a row which is the first time a single EV car model accomplishes that in Finland.

INSERO

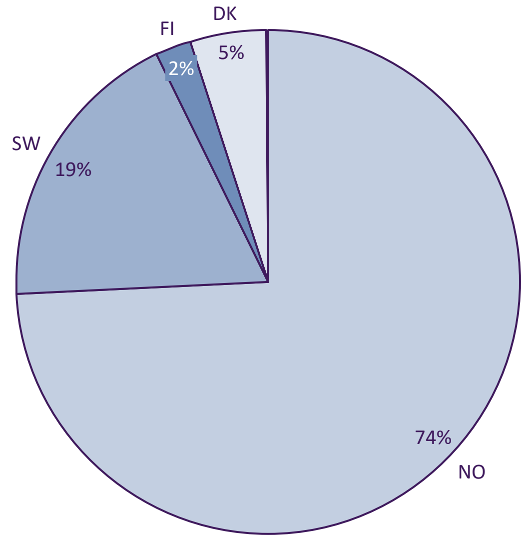
Nordic | The Nordic electric vehicle market had another record-shattering quarter in Q2 surpassing Q1 2017 with 497 vehicles in total with an average market growth of 5,77 % (Denmark excluded as they landed at a 41,5 % growth ratio).

TOTAL BEV & PHEV STOCK



- The entire EV stock rose with 18.777 vehicles in Q2.
- The total stock of BEVs and PHEVs is close to reach 200.000 registrations.
- As a result, the total EV stock grew by 23% in the first two-quarters of 2017.

Countries' share of total EV stock



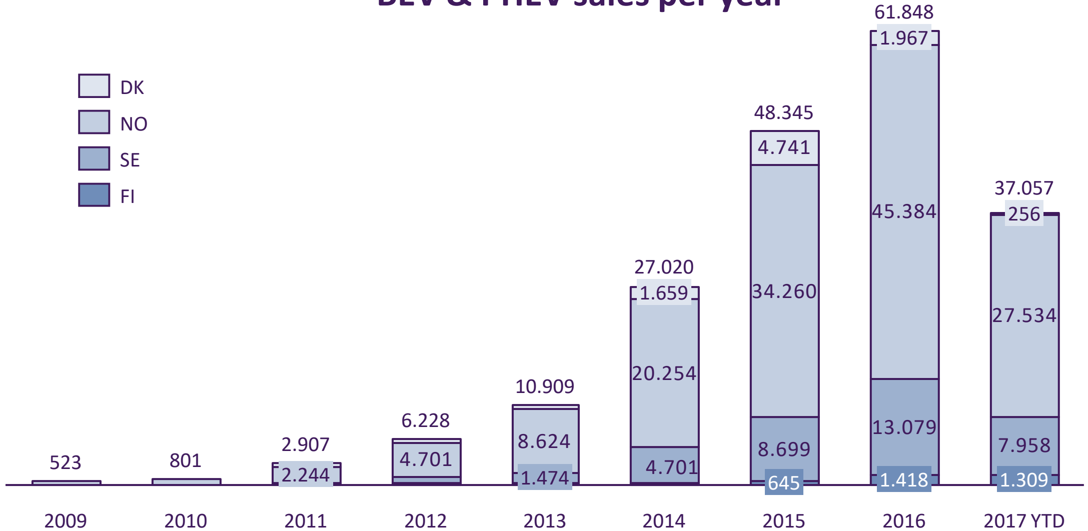
- Norway is close to achieving 14.000 in sales for the first time in one-quarter.
- Q2 raises the bar for EV sales in the Nordic region; Finland EV sales surpassed Denmark in Q1 and proceeds to do so in Q2 but is still behind in total.
- For the period, Norway accounts for 74 % of total sales while Sweden deems for 19 % followed by Denmark at 5 % closely accompanied by Finland at 2 %

If you are interested in a more detailed analysis, get in touch with us here

INSERO

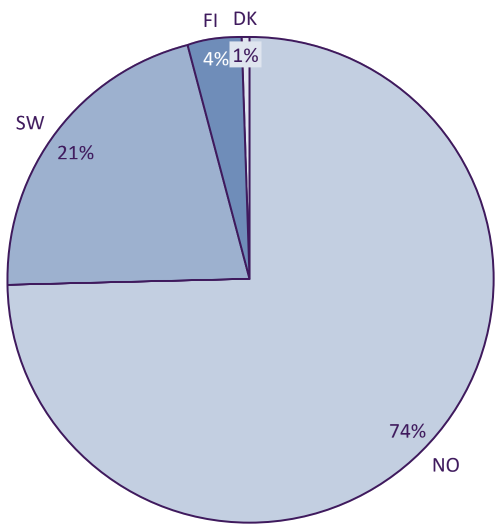
Nordic | Q2 2017 was the best quarter ever, and all Nordic countries managed to progress including Denmark, however the set back after the introduction of registration tax on EVs is still clear. Overall this indicates a promising Q3 and Q4.

BEV & PHEV sales per year



- Purchase incentives on EVs are still regulating market diffusion; Danish sales are still low with no clear effect of the tax freeze yet.
- Sweden sales continue growing, as they have the biggest difference between the two quarters with 200 registrations.

Countries' share of YTD sales 2017



- Sweden and Norway drive EV sales in the Nordic region, Finland extends its market share compared to the other markets
- The Danish market is expected to gain strength in the upcoming quarter due to the new tax regulation freeze.

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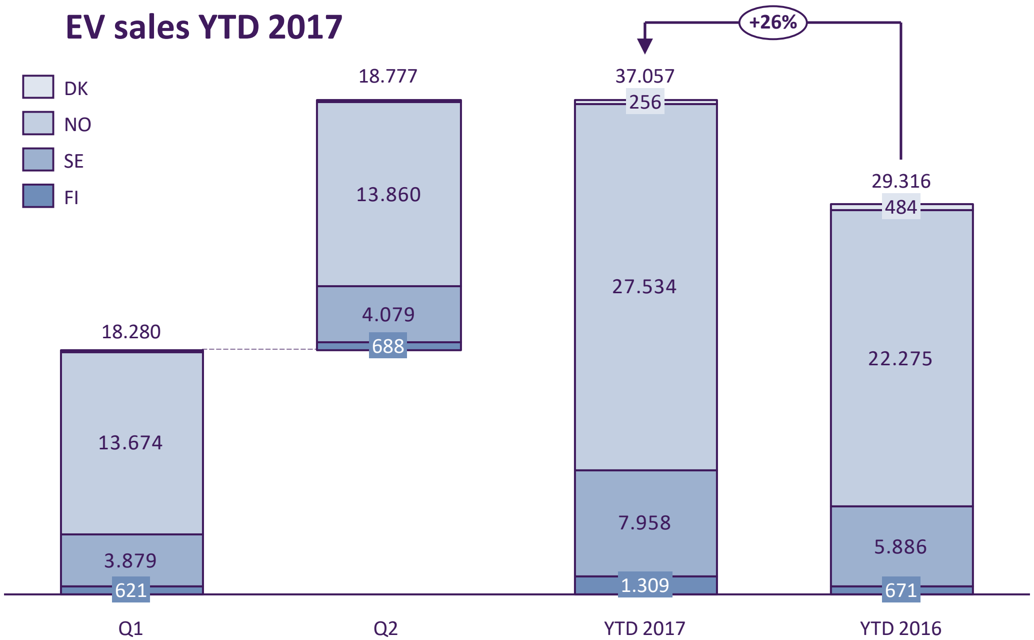
INSERO

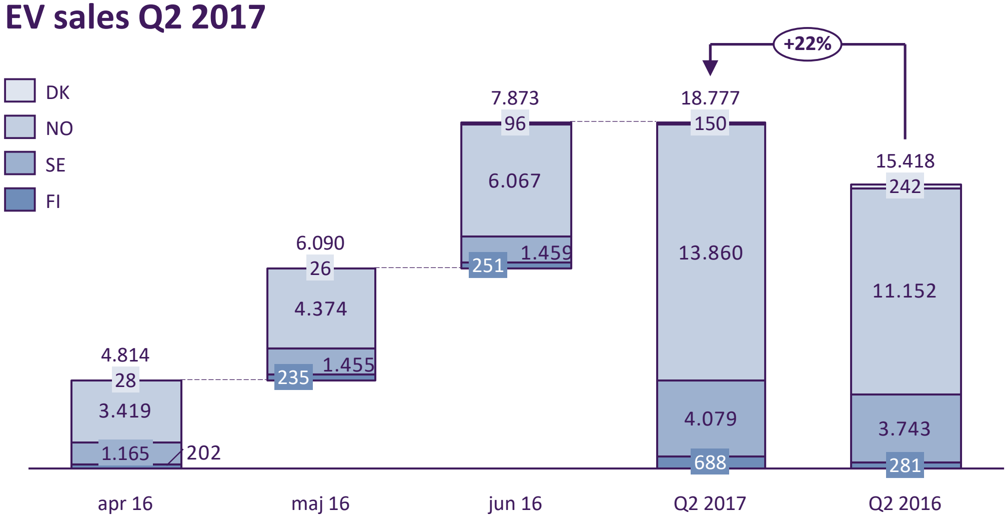
Nordic | The Nordic electric vehicle market witnessed record quarters in Norway, Sweden and Finland in Q2, while Danish sales are trying to get back on track due to the tax freeze on EVs in 2017. Consequently, the Danish market managed to grow slightly in Q2 compared to Q1.

EV sales YTD 2017



- Sales are increasing; Q2 sales beat all previous quarters in 2016.
- Q2 has been a strong quarter across the Nordic Region except Denmark who is still severely behind previous sales numbers despite growth in Q2. Insero does, nonetheless, expect better sales in the forthcoming quarters of 2017 due to the Danish tax freeze.
- In 2017 Insero expects an increase in sales of 20% compared to 2016 across the Nordic Region. The sale increased is projected to be driven by the tax freeze in Denmark and positive EV market penetration in Sweden and Finland and is currently 26 % up compared to YTD numbers 2016.

EV sales Q2 2017



- Sweden, Finland, and Norway keep delivering; Q2 2017 beats Q1 2017 with 8,05% despite the Danish market remains at a low level.
- All markets had June as the best selling month. In total 7.873 vehicles were sold across the four countries beating the previous record from December 15 (6.662).
- For the second quarter in a row the combined Nordic EV sale exceeded 18.000 vehicles and is close to surpass 19.000 for the first time.

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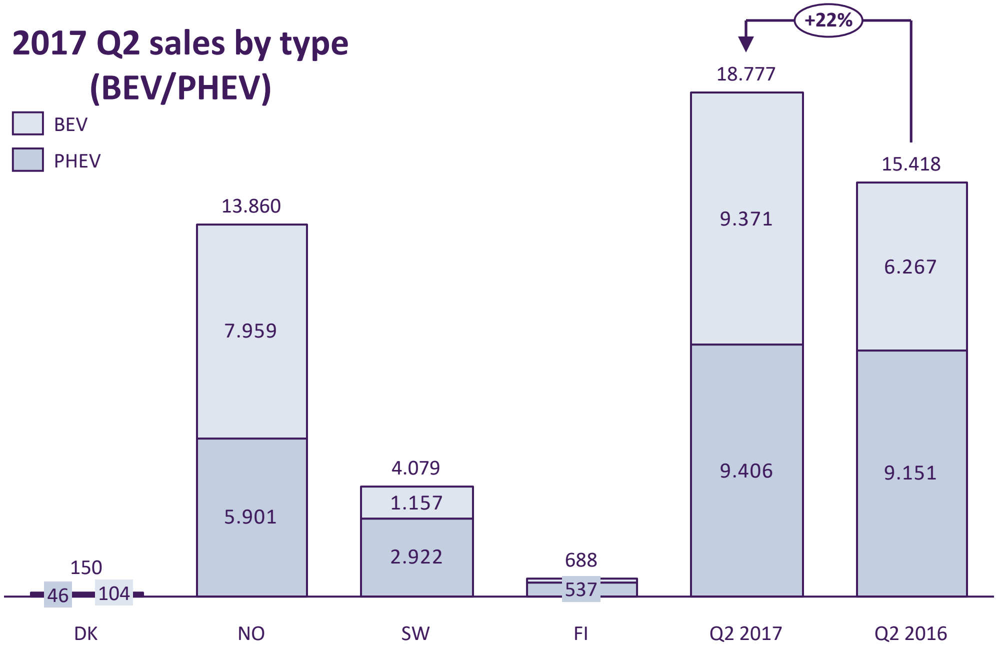
INSERO

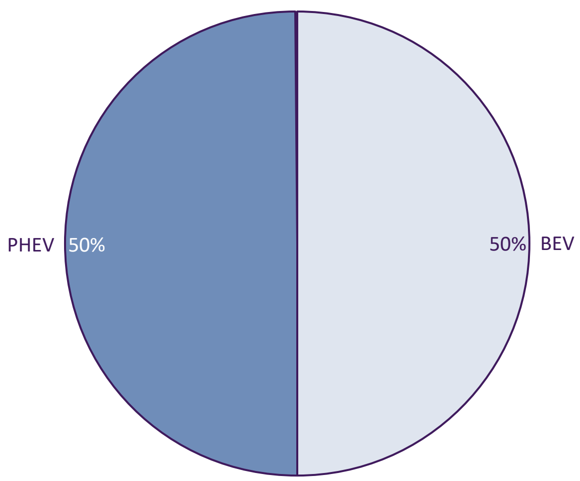
Nordic | PHEVs are getting, even more, control in Q2 compared to earlier quarters control; already the favored EV type in Finland and Sweden, while popularity is growing in Norway. Range, performance, price and model selection are superior compared to the currently available BEVs.

2017 Q2 sales by type (BEV/PHEV)



- PHEVs are the preferred EV type in both Sweden and Finland; accounting for respectively 72% and 78% of sales. However, BEVs are closing the gap.
- BEV remains the preferred EV in Norway, however, PHEVs are steadily becoming more popular as they now account for 47% of the sales.
- The total sale increased by 22% from Q2 2016 – Q2 2017.
- PHEVs have taken significant market share in Q1 but slowed down in Q2 and remained at the same level.

2017 Q2 sales composition



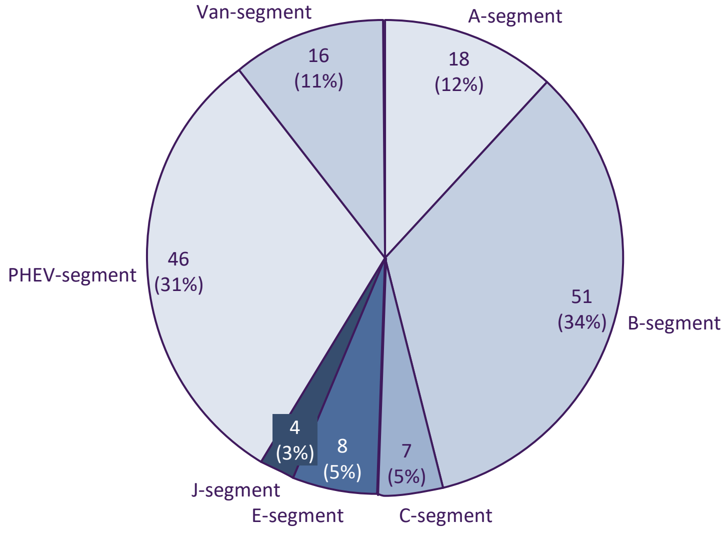
- PHEVs and BEVs were in Q2 equally popular in the Nordics; Norway being the leading market favoring BEVs together with Denmark while Sweden and Finland prefer PHEVs.
- The PHEVs segment share is expected to grow in 2017 as sales in Sweden, and Finland are confident, and Norway is adopting more PHEVs than previously.

If you are interested in a more detailed analysis, get in touch with us here

INSERO

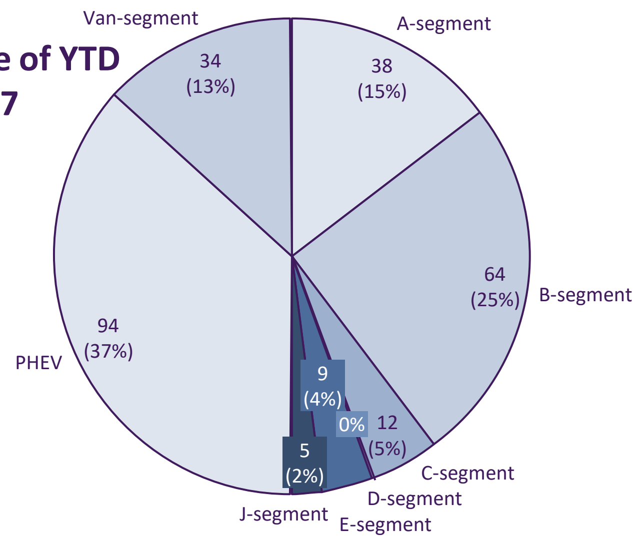
Denmark | Purchase incentives regulate EV uptake; sales remain significantly throughout the quarter compared to previous quarters in 2016, as the Danish tax on EVs remains at 20% in 2017. Tesla sales increased but remain at a low level.

EV sales Q2 2017



- B and PHEV segments are driving Danish EV sales in Q2.
- B-segment gains ground, Renault Zoe accounts for 34 % of the total registrations in Denmark.
- Tesla had a great quarter compared to previous sales; sales increased to 12 vehicles for the entire quarter compared to only 2 in Q1.

Segments' share of YTD sales 2017



- The B-segment had the largest increase in market share and went from 12 to 25 % mainly caused by high sales of Renault Zoe in June (48).
- VW E-UP is the most popular model in the A-segment
- The PHEV-segment maintains its position as the most popular segment.
- Sales are expected to increase across all segments as the market becomes more stabilized with the introduction of 20 % tax freeze.

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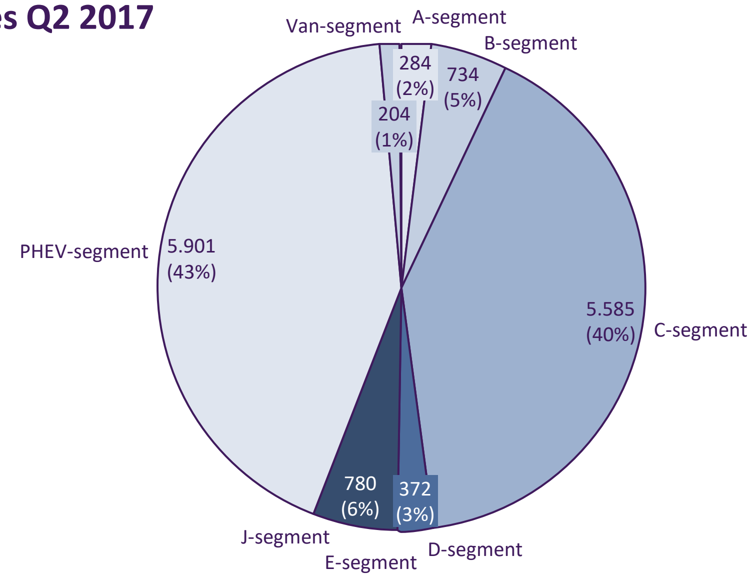
INSERO

Norway sets another record; C-segments proceed to flourish with the introduction of Opel Ampera-E and Volkswagen E-Golf, increasing its market share in the EV segment even further compared to Q1. Tesla model X boosts its total and is now among top 6 of total registrations in Q2 with a market share of 5.63 %.

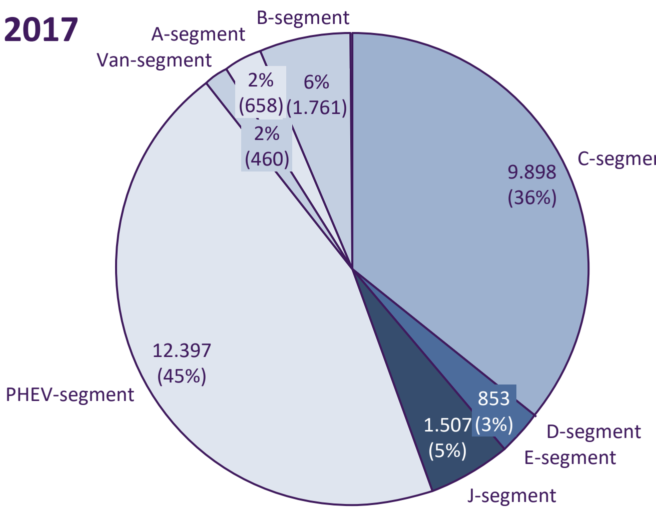
EV sales Q2 2017



- Norway raises the bar once again; For the seventh consecutive quarter, Norway is close to breaching the 14.000 hallmark by setting a new best-selling record at 13.860 registrations in Q2.
- However, the Norwegian EV market seems to slow down slightly, as sales growth only grew by 1.36 % between Q1 and Q2 2017.
- The PHEV and C-segment continue to dominate the market with 83% of the total sales. That is an improvement of 3 % compared to Q1 while the B and E-segments are losing ground.

The sales figures are divided into segments (numbers above and percentages below)

Segments' share of YTD sales 2017



- The PHEV-segment is down by 3% compared to Q1. The likely scenario with a market share of 50% or more is still not unlikely to happen in the future.
- The E-segment managed to increase its market slightly compared to the total segment's share of 2016.
- Both the B, J, and A-segment dropped a little although the C-segment reached 36% market share.

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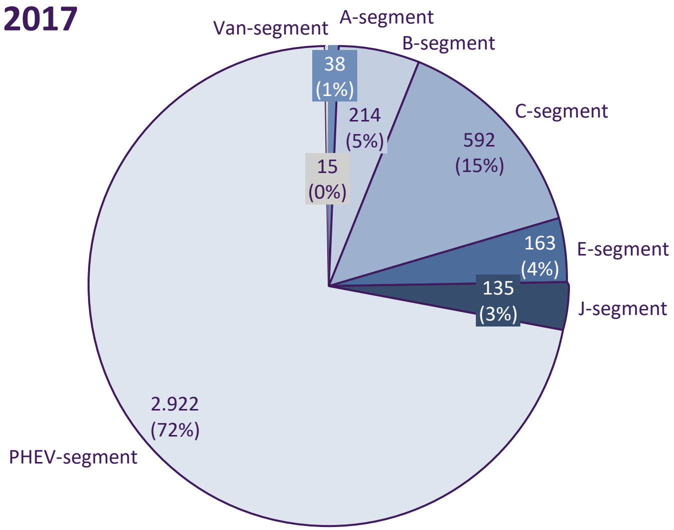
INSERO

Sweden breaks its sales record by surpassing the 4.000 hallmark in one-quarter for the first time with PHEVs controlling the market. Tesla's total market share drops by almost 4 %. Volkswagen Passat GTE continuous to successfully penetrate the Swedish market.

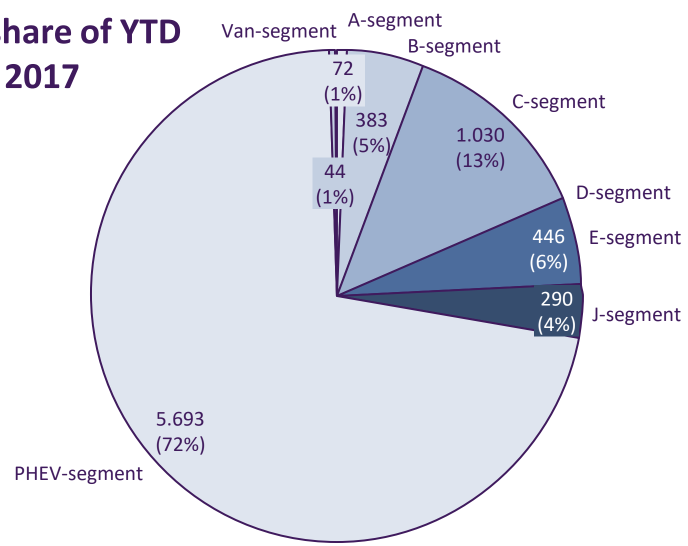
EV sales Q2 2017



- Sweden breaks its record yet again; sales up 5,16% compared to the previous record set Q1 2017.
- Sweden remains a PHEV country. A few models are sharing the EV market with both the Mitsubishi Outlander and VW Passat GTE above 14 % shares of the market followed by VW Golf GTE at 8,80 %.
- Focusing on BEVs, Tesla sales drop in Sweden. Both E- and J-segment saw a considerable drop in market share while the C-segment increases by 4 % as Nissan Leaf had a great quarter.

The sales figures are divided into segments (numbers above and percentages below)

Segments' share of YTD sales 2017



- PHEVs still have a substantial market share with a 72% market share as of YTD.
- The smaller BEV segments continue to struggle on the Swedish market while the C-segment is gaining ground.
- By the end of Q2, the J-segment surpassed its total sales of 288 in 2016 with 290 registrations in total. The E-segment is still 385 vehicles behind the overall numbers from 2016.

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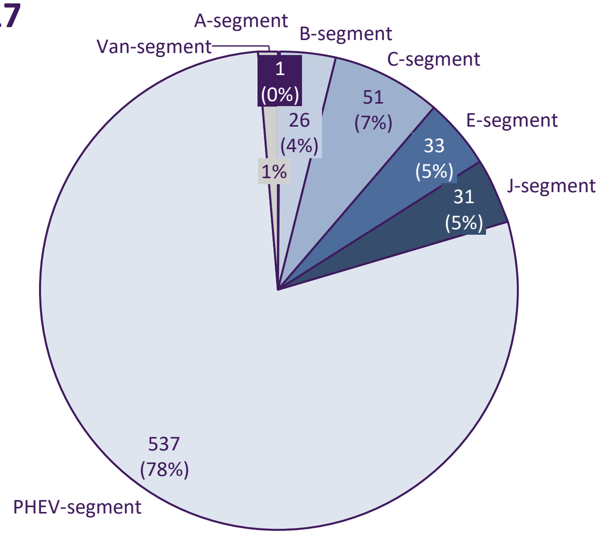
INSERO

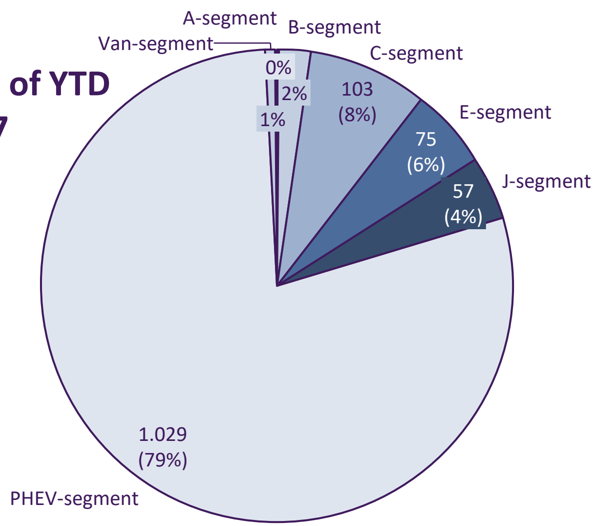
Finland | EVs are breaking records for Finland and are close to reach 700 new registrations in one quarter for the first time. BEVs with limited range are unlikely to penetrate the market as they do not meet customer needs.

EV sales Q2 2017



- Best growth rate in the Nordic Region. EV sales grew with 10,79% in Q2 2017compared to Q1 2017.
- PHEVs dominate; account for 78% of sales in Q2.
- Driving range seems to be a major issue in Finland; vehicles with short range account for 12% of sales in Q2.

Segments' share of YTD sales 2017



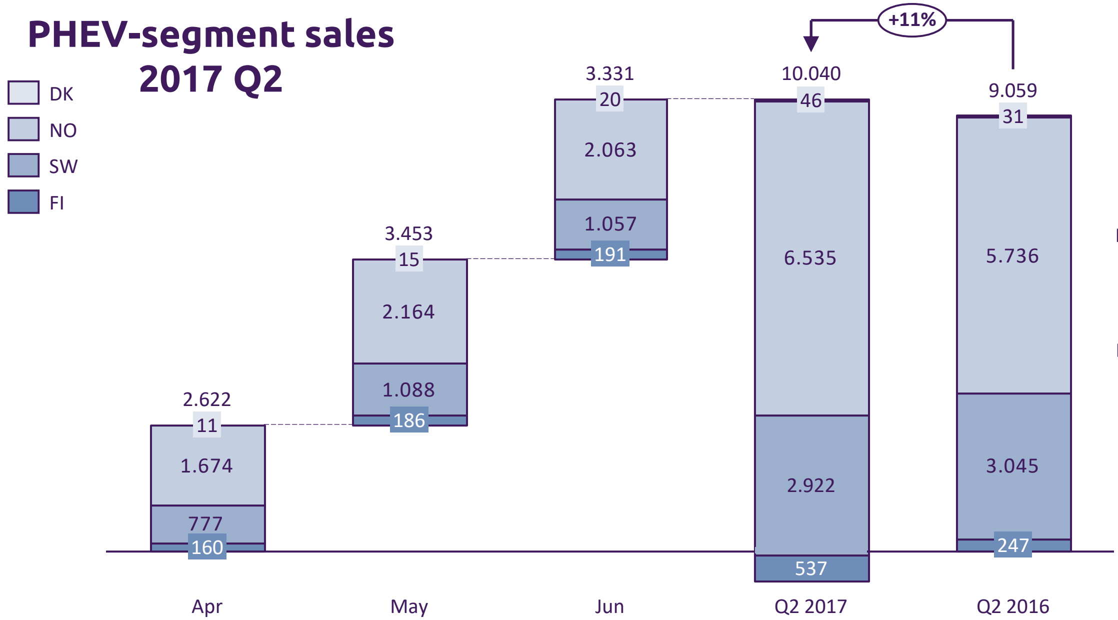
- The PHEV-segment market share is still below 2016 figures with current numbers being 5% down compared to the segment's share of 2016.
- The J and E segments are up 2% combined and seem to get a increased market share in 2017.
- Small vehicle classes with limited range are struggling on Finnish market; A- and B-segment sales are low. However, the C-segment sales are up 2% as of YTD numbers compared to 2016.

If you are interested in a more detailed analysis, get in touch with us here

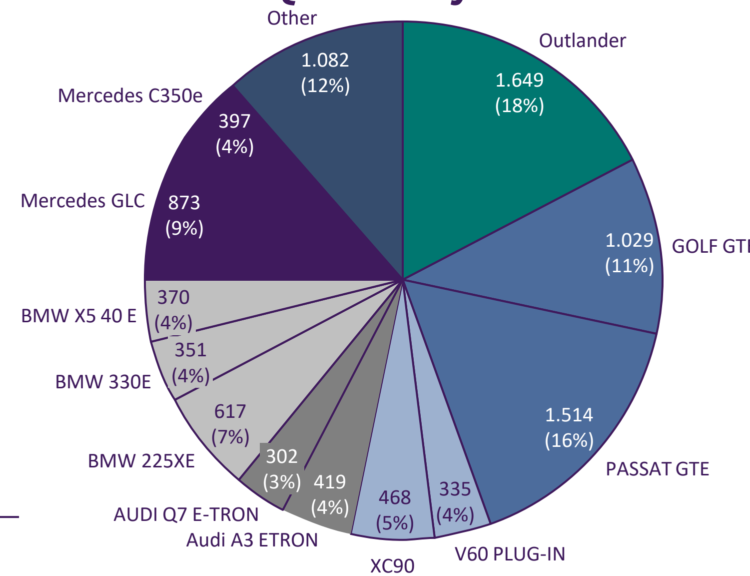
INSERO

Nordic | PHEV sales are increasing; the preferred EV type in Sweden and Finland while still popular in Norway. Number of car models available positively related to EV sales. Large car models dominate the PHEV segment.

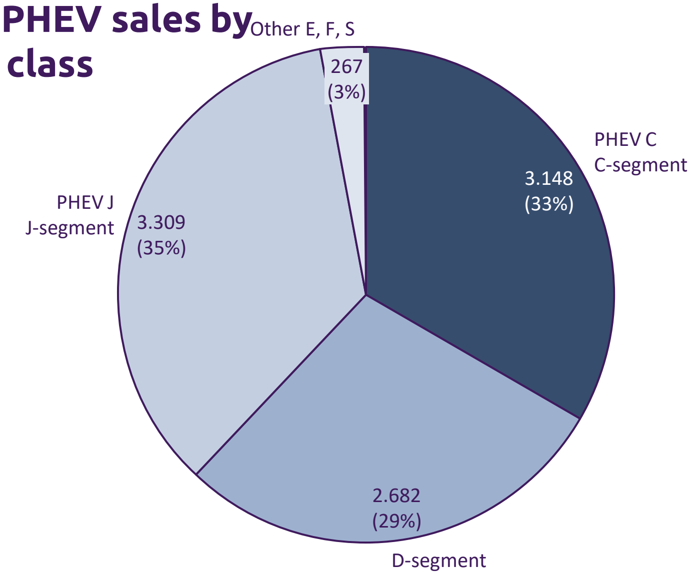
PHEV-segment sales 2017 Q2



2017 Q2 sales by model



2017 Q2 PHEV sales by class



- PHEVs are more popular than ever before; PHEV sales had another winning quarter with a considerable sales increase.
- The quarter started out great, with sales increasing over the period. As a result, the total sales of PHEVs surpassed Q1 with 233 vehicles.
- The PHEV segment has an increasing number of popular cars; for the first time 3 different models are above the 1.000 sales mark.
- The PHEV segment is dominated by large car models such as the Passat GTE and Mitsubishi Outlander.
- The E,F, and S segment contain four models: BMW 5-series, 740E, I8, and Mercedes S500-Plug-In.

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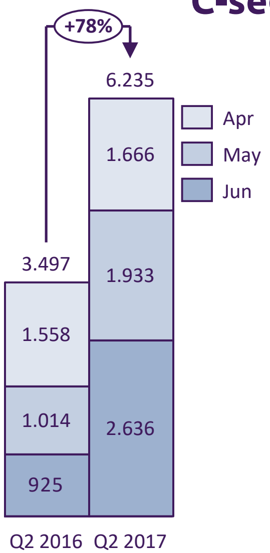
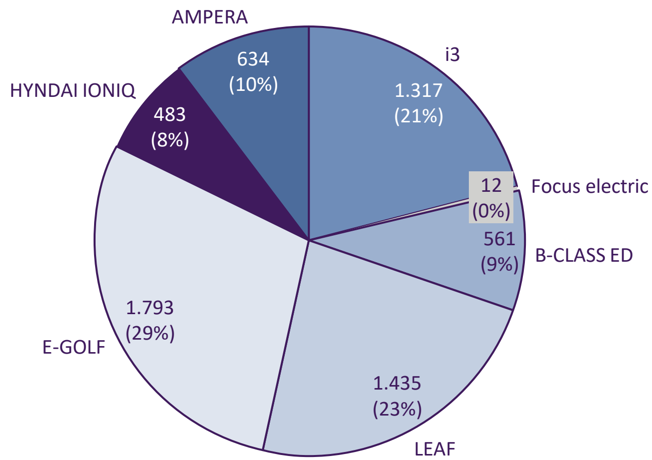
INSERO

Nordic | Tesla sales decrease. The C-segment is rising, caused by big interest in the Volkswagen E-Golf in Norway.

C-segment sales Q2 2017

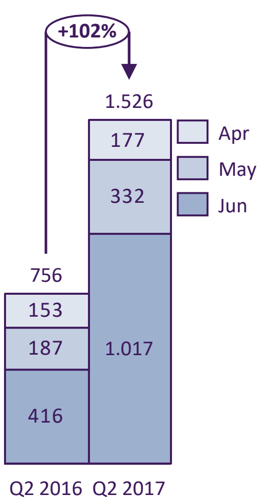


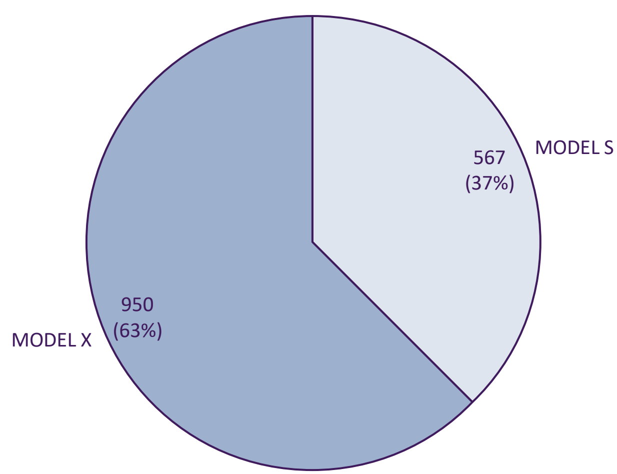


- Volkswagen E-Golf sales grow rapidly while the BMW I3 sales decline particularly in Norway; C-segment is increasing on most models.
- Most C-segment models saw increased total sales in Q2 compared to Q1 2017.

The sales figures are divided into segments (numbers above and percentages below)

E- and J-segment sales Q2 2017





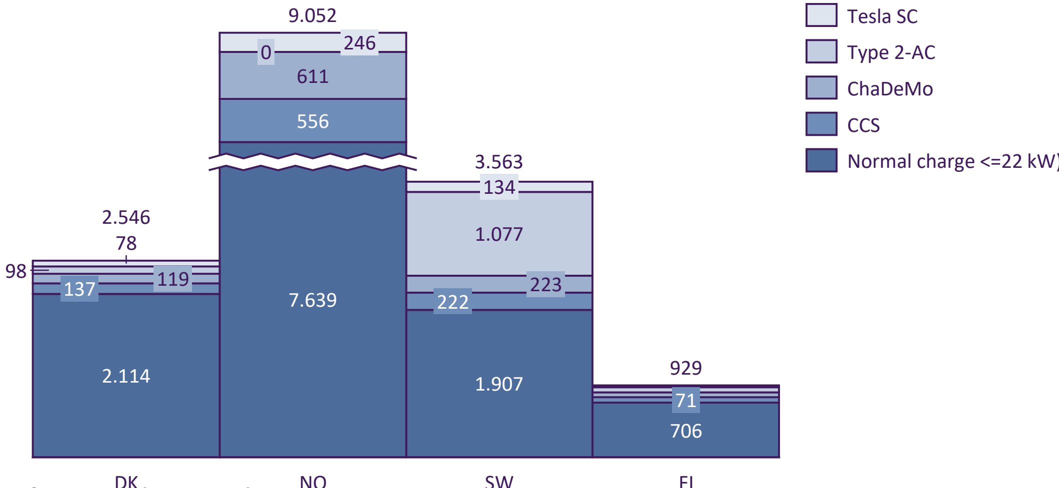
- Although still being 102% up compared to Q2 2016, Tesla sales decrease mainly caused by missing sales in Sweden. With a total sales decrease of 11,07%, all markets except Denmark saw a decline between Q1 and Q2 2017.
- Tesla model X is currently the most popular of the two.

If you are interested in a more detailed analysis, get in touch with us here

INSERO

Nordic | The second quarter of 2017 shows how numbers of charging plugs available set the pace for a possible strong second part of 2017, as the markets saw growth and momentum across the Nordic markets particularly in Sweden.

Number of public charging plugs available (e.g. up to three plugs at one charging point)



Number of EVs per charging plug

Q2 highlights

- **Denmark**:
  - Total plugs increased by 0,6 %
- **Norway:**
  - Total plugs increased by 4,4 %
- **Sweden:**
  - Total plugs increased by 24,9 %
- **Finland:**
  - Total plugs increased by 0,5 %

If you are interested in a more detailed analysis, get in touch with us here

- *Disclaimer: No completely accurate numbers exist for the charging infrastructure figures, however, Insero has been able to find improved sources including EAFO.eu for the production of the statistics. Insero has no accurate overview of all the types of plugs.*

INSERO

Nordic | The Nordic countries have added no new significant incentives in Q2.

Overview of incentives

	Tax incentives	Financial incentives	Convenience incentives
Denmark	◑	◔	◔
Norway	●	◕	◕
Sweden	◔	◑	○
Finland	◑	◔	○

Specific incentives

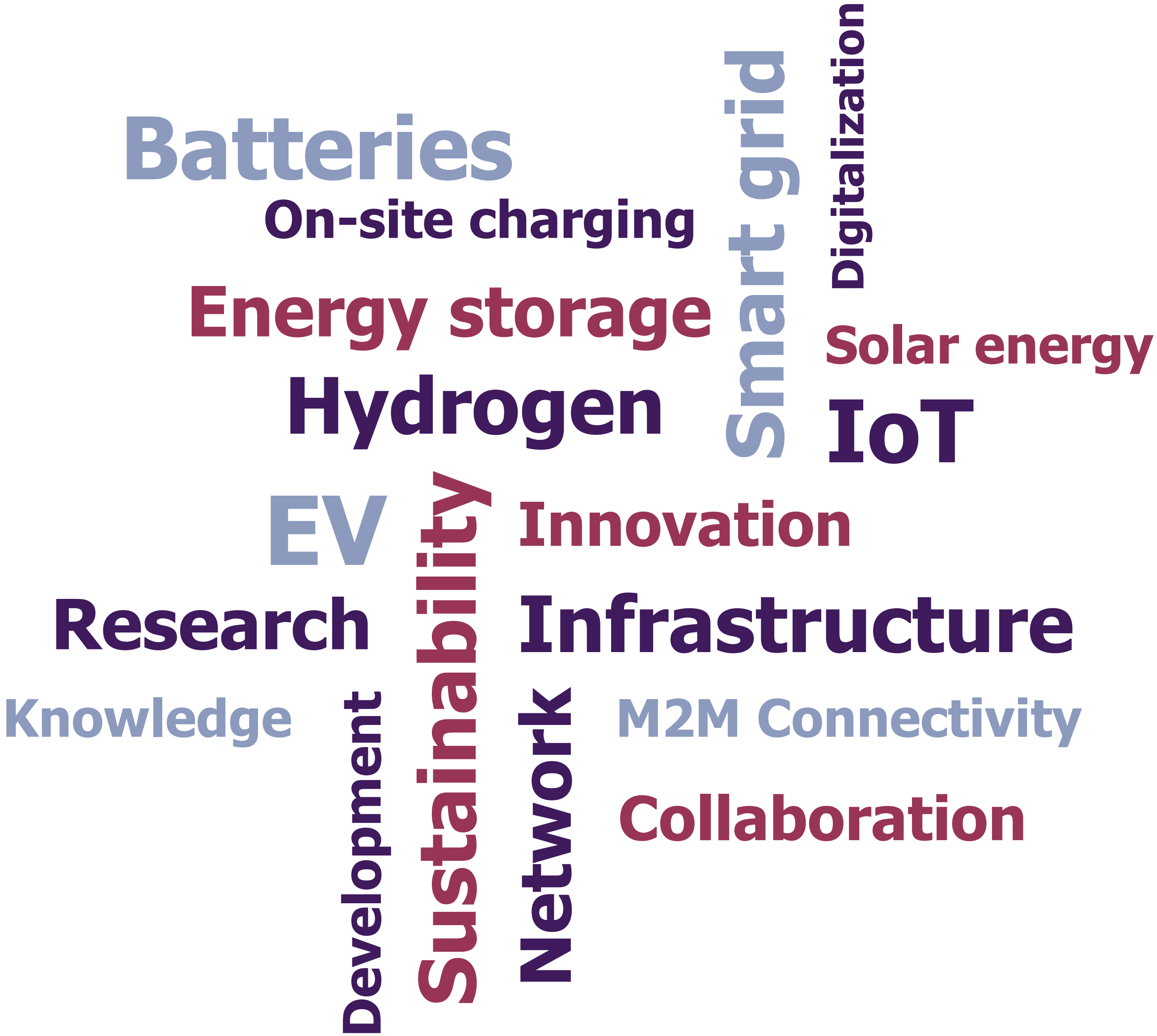
	Tax incentives	Financial incentives	Convenience incentives
Denmark	▪ **80% reduction in registration tax (until end of 2018 or until 5.000 new EVs registrations)** ▪ Tax exemption for FCEV	▪ Tax reduction (0,13 EUR per kWh) for businesses ▪ EV subsidies for business and municipalities.	▪ Reserved parking spaces for EVs ▪ Differentiated prices
Norway	▪ Registration tax exemption ▪ VAT exemption ▪ Road tax exemption ▪ Reduced company car tax (50%) ▪ Exemption from VAT (25%) on leasing	▪ Free parking spaces ▪ Toll road exemption ▪ Free public charging ▪ Higher mileage allowance ▪ No charges on ferries	▪ Bus lane driving ▪ Reserved parking spaces ▪ Fast charging station every 50 km on all main roads by 2017
Sweden	▪ Vehicle tax exemption for 5 years* ▪ Company tax benefits	▪ Super Green Car Rebate. ▪ EV: Max €4,500. ▪ PHEV: Max €2,200**	None
Finland	▪ Registration tax reduction (BEV buyer pays 2,5%) ▪ Ownership tax benefits	▪ Cheaper parking/ Free parking	None

*all Euro 5 or 6 level emission vehicles
**a subsidy of 35% of the price difference between a low-emission vehicle and a comparable conventional vehicle
*** New incentivise are **highlighted**

THEME Q2 2017:

Electric Vehicle Symposium & Exhibition, Stuttgart 2017 – The Nordic region shows the banner

"The gathering point for companies and organizations in the Nordic e-mobility industry"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On-site charging
Energy storage
Hydrogen
Smart grid
Digitalization
Solar energy
IoT
EV
Sustainability
Innovation
Research
Infrastructure
Knowledge
Development
Network
M2M Connectivity
Collaboration

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Welcome!

..to the **Nordic stand** at EVS30; *the gathering point for companies and organisations in the Nordic e-mobility industry*. Our stand represents the Nordic companies which functions as a business portal for our members who all have a expert driven focus on electric transportation and electric vehicles. In this magazine, you can meet our delegation members for EVS30 and learn more about their individual e-mobility business activities.

Getting the setting right

For those who are unfamiliar with EVS, the *Electric Vehicle Symposium & Exhibition*, held October 9-11, is the industry meeting point for the entire electromobility industry. Manufactures, users and decision-makers can get the latest picture of all form of electric mobility in Stuttgart and discuss new trends and possible uses of eclectic power transmission. The event rotates between North America, Europe and Asia every 12 to 18 months.

Our delegation strives to provide the optimal conditions for growth and network for our members through the creation of a common Nordic stand at EVS30, network events and exceptional knowledge of market trends. Pre booked cluster meetings ensure networking and idea development and thereby pave the road to new innovative projects and business opportunities.

We are in it together

Our stand of Nordic companies work towards a common objective, namely to develop sustainable cleantech solutions based on e-mobility.

In average we have more than 25 years of experience and our competencies cross a wide spectrum of e-mobility solutions, from IoT/M2M solutions, EV charging infrastructure solutions and to specialized consultancy within business opportunities and innovation.

Our aim is to provide the needed settings to generate increased turnover and to create more jobs in Nordic companies working in the e-mobility sector.

Please continue reading, as we introduce our members for the delegation at EVS30, Stuttgart 2017.

Enjoy reading!

SimService

Connectivity enablement

Driving a need to simplify connectivity enablement end-to-end SimService A/S was established in 2006 and became part of the Wireless Logic Group in 2015. With more than 2.200.000 IoT/M2M SIM Card we are one of the biggest suppliers for IoT/M2M solutions. Our multiple layers of specialized services complement the basic connectivity of a SIM giving customers a tailored, fully managed and highly competitive window to their device and asset bases.

In just a short time, SimService part of Wireless Logic has become globally recognized within the M2M and IoT sectors as well as being a preferred partner to many of the world's Mobile Network Operators (MNOs). We are pushing the boundaries as the market evolves – providing IoT/ M2M managed services, IoT connectivity and related solutions to millions of connected devices.

Wireless Logic Group Group Head Office is based in Hurley, UK and has four country offices located in Aix-en-Provence in France, Grassbrunn in Germany, Vizcaya in Spain and **Køge** in Denmark. Each location is headed up by a country manager along with business development teams and technical support. In UK, Polen and Denmark we also have our development located.

SimService

Part of the Wireless Logic Group

Unique value proposition

Our Unique value proposition is delivering connectivity and solutions with an ability to overlay a private secure network across the global mobile networks to give customers access to a secure otherwise high-cost and complex platform. And to make sure that customers' M2M & IoT assets remain in their control and giving them complete one-window visibility, management, tailored billing and reporting functions.

Areas of activity

Connecting Cars – Worldwide IoT and M2M connectivity

Valdermarshaab 11
DK – 4600 Køge
Contact: Steen Gregersen
Phone: + 45 20 80 61 16
www.simservice.dk

Hydrogen fuell

GreenHydrogen provides high efficiency, modular and scalable electrolysers for:

- On-site hydrogen generation for fuelling stations for hydrogen fuel cell electric vehicles
- Energy storage applications
- Industry applications.

Our electrolysers are either delivered as OEM solutions to providers of hydrogen fuelling infrastructure for cars, busses, trucks and forklifts or we may deliver complete hydrogen fuelling stations in cooperation with international consortium partners.

Due to our modular concept, we can deliver fully upgradeable solutions, providing refuelling of 1-5+ cars per day fuelled with short intervals, and for hydrogen fuelled busses we can provide solutions from 1-10+ busses refuelled per day. This allows for operators of hydrogen fuelling stations to start off with lower, initial investments and incremental investments in upgrades as the fleet of hydrogen powered fuel cell vehicles grows.

Automotive –hydrogen fueling stations

GREENHYDROGEN.DK

Unique value proposition

Our Unique value proposition is delivering electrolyze with the markets’ lowest CapEx and OpEx per Nm^3 produced and complete modular concept with incremental upgrade options – ideal for hydrogen and fueling stations.

Areas of activity

Infrastructure: Electrolyser solutions for on-site hydrogen generation. Complete hydrogen fuelling stations

On-site Industry

Plationvej 29 B
DK – 6000 Kolding
Contact: Niels-Arne Baden
Phone: + 45 20 66 50 47
www.Greenhydrogen.dk

GARO

Electric installation

GARO develops and manufactures innovative products and turnkey solutions for the electric installation market. The company has operations in Sweden, Norway, Finland, Ireland and Poland, and are organised in two business segments, GARO Sweden and GARO Other markets. GARO has a broad product range and is market leading within many product areas. The company is headquartered in Gnosjö, Sweden and employs 310 people. Production units are located in Gnosjö and Värnamo, Sweden and Szczecin, Poland. Since 16th of March 2016 GARO is listed at Nasdaq OMX (Small Cap). Garo develops profitable complete solutions for the electrical industry by focusing on innovation, sustainability and design.

Unique value proposition

GARO is an innovative force that develops opportunities and business for our customers. This makes us a dedicated responsive and active partner. We are experts at what we do and value the knowledge that leads to our clients' development and profitability. Our focus is to develop reliable products for a sustainable future through strong commitment.

Areas of activity

EV charging, electrical distribution products, solar energy, and business/product development

Södergaten 26
SE - 335 25 Gnosjö
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Phone: + 46 (0) 370 33 28 00
www.Garo.se

ChargeStorm

Charging infrastructure

ChargeStorm is Scandinavian technology leader in EV charging infrastructure solutions. ChargeStorm is the leading developer and provider of AC charging stations in Scandinavia. Founded in 2009, ChargeStorm identified the need of turn-key solution for EV charging. 100% design control since hardware, software, and mechanics developed by ChargeStorm. Complete system solution offered, including cloud-based back-end system for operations and maintenance, billing functionality together with various connected charging stations. Team of 20 experts with unique EV charging station competence. Shipping in high volume – Approximately 20 000 charge points installed using ChargeStorm technology. Proven in use in very harsh environments since 2010.

Unique value proposition

ChargeStorm is the leading and robust technology – all standards supported. High quality and durability – proven in in volume and extreme conditions with a low cost of ownership. Specialist team of engineers.

Areas of activity

Chargestorm is focusing on digitalization and infrastructure with the purpose of finding customers and partners outside Scandinavia at EVS30

Hospitalsgaten 3
SE – 602 24 Norrköping
Contact: Daniel Forsberg
Phone: + 46 761 863 200
www.chargestorm.se

Ensto

Electric solutions

Ensto is an international family business. Ensto was founded in 1958 and employs ca. 1,600 passionate professionals in Europe, USA and Asia. In 2016, we generated turnover of approximately 260 million euros. We believe in a better life with electricity and a more sustainable tomorrow.

Ensto is leading smart EV charging solution provider. We have delivered solution since 2009 to over 35 countries in Europe and worldwide. We support the development of sustainable electric mobility with energy efficient services and reliable, Smart Grid ready products. We do this with our low OPEX charging solutions to companies that want to offer EV charging to their customers, employees and stakeholders.

ENSTO

Unique value proposition

Ensto designs and provides smart electrical solutions to improve the safety, functionality, reliability and efficiency of smart grids, buildings and transportation. We believe in a better life with electricity and a more sustainable tomorrow.

Areas of activity

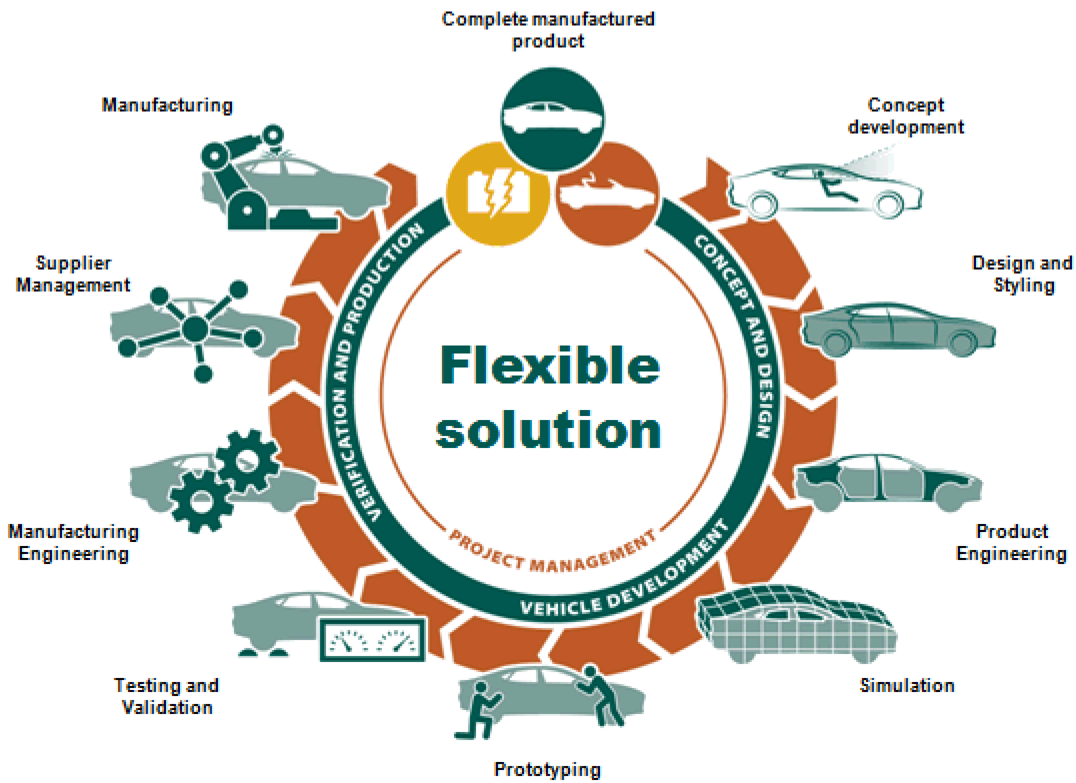
Digitalization & Infrastructure: Developing and manufacturing high quality charging products and services for electric vehicles.

Ensio Miettisen Katu 2
FI – 06101 Porvoo
Contact: Juha Stenberg
Phone: + 358 400 575 579
www.Ensto.com

Valmet Automotive

Engineering-driven

Valmet Automotive was established in 1968 and is headquartered in Uusikaupunki, Finland. The company is an engineering-driven provider of vehicle manufacturing services, convertible roof systems and EV powertrain and battery systems. Valmet Automotive specializes in premium cars, convertibles and electric vehicles, employing over 4,500 professionals with multiple locations in Finland, Germany, Poland and Spain. Valmet Automotive is one of the largest automotive contract manufacturers in the world, it has manufactured vehicles for leading automotive manufacturers including Saab, Opel, Porsche and Mercedes-Benz. Currently Valmet Automotive has manufacturing contracts for the Mercedes-Benz A-Class and the GLC SUV.



valmet automotive

Unique value proposition

Our engineering expertise offers the full range of services and solutions from complete vehicle projects and series production to concept cars and development of systems and individual components. Product development services include styling, concept and packaging, concept building, serial engineering and prototyping as well as testing, validations and homologation. Manufacturing engineering is a specialty area of Valmet Automotive, enhanced by the vicinity of our engineering and manufacturing facilities. The keys to our efficient and fast production launches are simultaneous engineering processes and strong project management.

Our longstanding experience and excellent track record in customer projects ensure we meet even the most challenging engineering demands by flexibly tailoring the services according to the customer needs.

Areas of activity

Digitalization & Infrastructure: Developing and manufacturing high quality charging products and services for electric vehicles

Autotehtaankatu 14
FI – 23501 Uusikaupnki
Contact: Katja Luoma
Phone: + 358 503 173 626
www.Valmet-automotive.com

PlugiIt Finland

White label charging solutions

Plugit founded in 2012 is a high-tech company in Finland and the leading provider of white label charging solutions as well as related services in Nordics. We offer electric vehicle charging solutions (HW, SW, MW and services) from individual consumers to businesses of any scale. What makes us a leading company, recognized by industry leaders and automotive industry? We have started, as passionate pioneers on electric vehicle charging solutions and currently consist of 25 motivated professionals. We develop, do the service design, install, manage and maintain the charging system solutions as a service for our customers. Our key markets are currently the Nordics, Baltics, APAC, China and India and over the last 14 months we managed to keep a track record of building 500+ charging stations.

Plugit Charging Solution Fact Sheet:
- 5 years experience in e-mobility business area
- More than 3000 chargers installed
- More than 160 business leaders as customers
- More than 500 stations managed remotely
- 58000 charging transactions recorded so far
- Current rate is about 350 transaction per day, increasing up to 900 per day during 2017
- White label Turn-key deliveries
- Future proof technology

plugIt!fi Charge your car.

Unique value proposition

The fact is that Electric Vehicles will change the world, permanently. This change has several names. You may call it MaaS (Mobility-as-a-Service), Electro Mobility, Charging-as-a-Service or something else. This era means new mobility services, new business opportunities for anyone. Working with Plugit means new business opportunities for you and your Business.

PLUGIT have made earning by charging easy for you. We have designed a three level program which fits to any requirement. You can be a private real estate owner and want share your wall with EV-drivers. Or you can be big bulk retailer with thousands of shops. Or you can be a professional service provider with large EV fleet.

Our program contains:

Plugit Private: Plugit charger(s) with ready-to-go backend
Plugit Business: White label charging solution designed to your business
Plugit Pro: White label charging cubes for professional use

Areas of activity

Digitalization & Infrastructure:
- Principal supplier of chargers and services for private households
- Turn-key projects for Electric Vehicle Charging Solutions
- Preferred charging solution & service partner for major car brands
- Charging-as-a-Service provider for business leaders
- Zero Emission Zone –projects
- Work place charging concepts fulfilling corporates sustainability targets

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www.plugit.fi

INSERO

Nordic | During the compilation of Insero Quarterly, we have used the various sources listed below. Thanks!
For more information, feel free to contact us today.

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SALES STATISTICS:
- BIL Sweden
- Oplysningsrådet for Veitrafikken AS
- TRAFI – Liikenteen Turvallisuusvirasto
- De Danske Bilimportører

CHARGING INFRASTRUCTURE AND EV INCENTIVES:
- E.ON Denmark, Clever, CleanCharge
- NOBIL
- PowerCircle
- HELEN
- Statens vegvesen Norway
- Skatteverket Sweden
- Transportstyrelsen Sweden
- Energistyrelsen Denmark
- TRAFI Liikenteen Turvallisuusvirasto

INTRODUCTION TO INSERO QUARTERLY

What is Insero Quarterly?
A quarterly publication visually presenting and analysing:

- Nordic electric vehicle (EV) and plug-in hybrid electric vehicle (PHEV) sales on a quarterly basis, including Denmark, Norway, Sweden and Finland.
- Overview of the charging infrastructure roll-out in the individual countries.
- Status on the national EV incentives.
- Cross-border price comparisons on specific EV models and conventional cars in several car segments, including vans.
- Theme section on relevant E-mobility related topics. This time it is a political status on banning fossil-fueled cars.

Who is Insero Quarterly for?
Insero Quarterly looks at the Nordic EV and PHEV market at a glance. *If you need further information or market analysis, don't hesitate to ask us*. Our insight in the Nordic market is unparalleled. Here are some examples of what we can do:

- Analyse the market potential for specific vehicles or types of vehicles
- Derive data on customer preferences
- Go-to-Market strategies for small to medium sized vehicle manufacturers
- Analyse incentives and causality, and how it will influence your business
- Industry mapping and technology reports
- Strategic transport planning / economic and emission analysis
- Component reports
- V2X technology and business case analysis.

Why is Insero Quarterly relevant for my business?
Insero Quarterly provides an unprecedented and continuously updated overview of the Nordic e-mobility market situation, which in turn leads to:

- Concrete market data to form a basis for a strategic / product decision
- Cohesive market insights
- A common work of reference for the industry across the Nordic countries

Behind Insero Quarterly
Insero offers new solutions, projects and education within energy and ICT. We are leading experts on intelligent software, energy and e-mobility. We offer a variety of consultancy services ranging from operational consultancy to strategic analyses and complete business strategies within e-mobility.

Smart Grid and V2X
This area is a core competence for Insero. We have worked extensively in R&D projects, living labs and consulting within this field for several years and use our knowledge and insights to help the energy sector, OEMs and SME vehicle manufacturers understand the business case and exploiting it.

Mobility and strategy
E-Mobility is starting to penetrate several mobility markets along with other alternative fuels which will structurally change the way mobility works. We specialise in analysing mobility patterns and identifying sweet spots where new fuel types can contribute greatly to a mobility solution that is better integrated.

NEXT EDITION
The next edition of Insero Quarterly (Q2 2017) will be out in early July 2017.

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