prototype.club

Corrently-Charge

Business Canvas Team STROMDAO
IAA Mobilitython 2022

Executive Summary

Climate change and environmental degradation endangers Germany, Europe, and the world. To address these challenges, the European Green New agreement will reshape the EU into a cutting-edge, resource-efficient, and competitive economy, ensuring no greenhouse gas emissions by 2050; Economic development decoupled from asset use and no individual or place be left behind.

Numerous distinctive sorts of electric vehicle (EV) charging innovations are depicted in writing and executed in viable applications. However, this proposal presents an EV charging Technology using Corrently Charge in terms of GHG emission and charging control methodologies and more. An outline of the business model is displayed as well.

The objective is highlighted and holding tall charging efficiency regarding the GHG emission. Charge contains the most significant perspectives on charging innovations and procedures with respect to GHG emission.

Correntlу Charge

Automated tariff evaluation as soon as charging session starts. Tariffs take local generation and green power index into account giving different tariffs to the client as options of required energy (final state of charge), available parking time, energymix.

Selected tariff requirements are automatically fulfilled via a scheduler connection to CPO's backend (via OpenEMS, OCPP...).

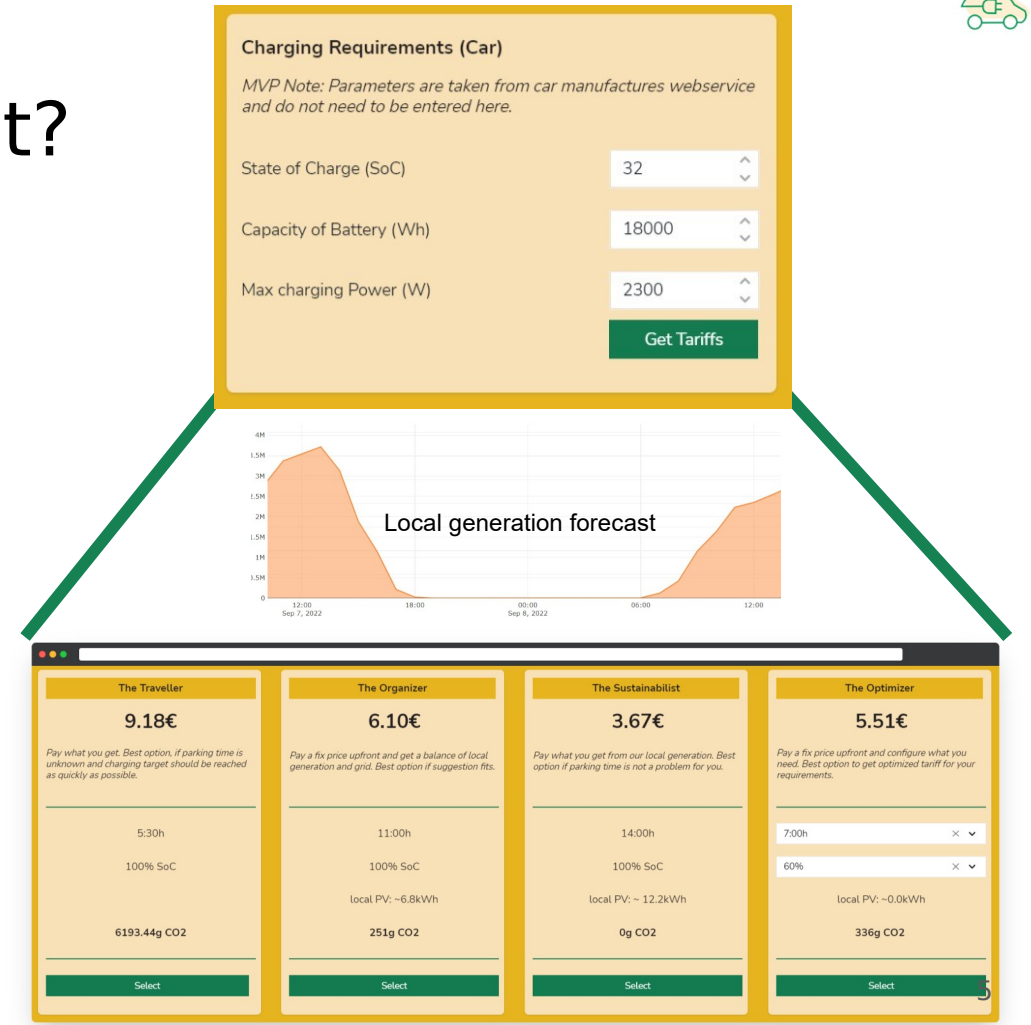
The sollution correntlу-charge acts as an intermediate between a given energy management system and the charge point.

What is our idea about?

Corrently Charge allows ChargePointOperators to offer ad-hoc tariffs for drivers, taking drivers charging requirements into account while optimizing the usage of local power generation.

Corrently Charge is a tariff builder focused on using available information to the actors in a charging event to optimize overall marginal return.

The builder optimizes based on local forecast, time/duration of parking, GHG emission, and grid mains electricity costs.



THE BUSINESS MODEL CANVAS

KEY PARTNERS

CPOs
- Regional Utilities
- White Label Customers
- Wholesales/Brand Owners (e.g. Aldi)
- Franchise Providers

E-mobility Solution Providers
- Mobility+
- Ladenetz Deutschland
- Elaway
- Spark Charging Solutions
- Heimladen

Real Estate Managers
- Swiss Life Real Estate
- Allianz Real Estate
- Westbridge Advisory
- First Cash
- Core.SE

Sustainability Managers

KEY ACTIVITIES

- Energy market disconnection - risk management regarding electricity rate
- Improved usage of own investments
- Implementation of ESG-strategy
- E-mobility rollout

KEY RESOURCES

- Access to charging app
- Access to charging point energy management
- Access to charging transaction billing
- Cloud hosting

VALUE PROPOSITIONS

Retail customers
- Adaption of charging tariffs to customer requirements
- Market penetration of charging infrastructure supply at relevant locations

Multiplicators
- Optimization of investments in solar panels - more EBIT from CAPEX

DSOs
- implicit, decentralised peak-shaving

Community managers
- Development of industrial zones

CUSTOMER RELATIONSHIPS

Retail customers
- B2B2C

Multiplicators
- B2B (value added reseller)

DSOs
- B2B

Community managers
- B2G

CHANNELS

Retail customers
- Apps

Multiplicators
- LinkedIn
- Business Influencer - PR
- Regional trade chambers

DSOs
- Word of mouth

Community managers
- Trade shows, road shows
- replicators

CUSTOMER SEGMENTS

Retail customers
Multiplicators
DSOs
Community managers

COST STRUCTURE

Initial development costs
Testing
Customer experience optimisation

REVENUE STREAMS

Retail customers
- Getting energy in the time and quantity they are requiring for the best price

CPOs
- Leverage investing by nurging customers flexibility to an extend

Value propositions of corrently-charge

Prototype delivers value

- To Drivers: By allowing them to specify charging requirements
- To CPOs: By optimizing use of local green energy usage – increasing marginal return
- To DSOs: By implicitly peak shaving.
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It solves the problem by creating a joined goal closing an information gap between driver and CPO.

Corrently-charge bundles a snap-in tariff selector for drivers and connects it to a tariff builder of the CPO via microservices and APIs.

If we bring drivers self-efficacy by giving them options, we create a Win-Win situation for themselfs, CPOs and DSOs – boosting marginal return for green energy investments.

Key partners for Minimum Viable Product

Key partners today

- STROMDAO (overall lead)
- OpenEMS (backend)
- Switchboard API (forecast/microservices)

Key suppliers for MVP

- All key partners of today
- Hotel Competency Center (Lighthouse installation)
- Heimladen, Elaway, Wirelane, Mobility+, Shell NewMotion, .. (EMT backend)
- UX Support via Core SE

Key resources acquired from MVP partners

- Access to existing install base
- Interoparability testing
- Existing CX knowledge
- Regulatory Compliance

Key activities performed by partners

- Access to existing Charging APPs
- Access to billing
- Access to Energy Management
- UX Development

Key Resources

Key resources required for value propositions for an **MVP within 100 days**

- Developer Backend (30 days)
- Developer Connectivity/Interoparability (15 days)
- Developer Frontend UI/UX (15 days)
- Legal/Compliance advisory (10 days)
- IT-Ops / Cloud-Ops (10 days)
- Key accounts / partners Interviews (5 days)
- Lighthouse project success management (10 days)
- Project Management / Sprint planning (12 days)

Missing Data

- None

Missing Experts

- UX design (possible via shareholder Core SE)

Resource protection

- Liquidity for exclusive assignments

Status of partner relationships

- Existing / Established

Revenue Streams at MVP

- See Revenue Streams (MVP)

Key Activities

Project Month	TRL	Activity
1	6-7	Implementation of Prototype, Connectivity to EM and CPO/EMT Backend
2	7-8	Testing and documentation, Establish Lighthouse installation, Stresstest legal compliance
3	9	Rollout MVP and acceptance tests
4	10	Product design and distribution.

Distribution

Retail Customers (Apps), Multiplicators (Social-Media/PR), DSOs (Word-Of-Mouth), Communtiy Managers (Trade shows, replicators)

Customer relationships

B2B, B2B2C

Revenue streams at MVP phase

Licensed usage – see revenue streams

Customer Relationships

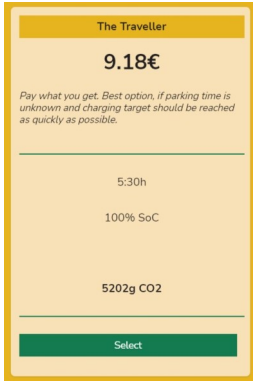
Segment	Type	Established?	BM Integration / Role	Costs
Drivers	B2B2C	No	Acceptance of solution proposed. Critical for success.	High (UX, CX)
CPOs	B2B	Yes (=> extend)	Decides about usage and pays for solution	Medium (communication)
DSOs	B2B	Yes	None	None
Local Community Managers	B2B	No	Replicators for areals	TBD

Customer Segments / Value Proposition

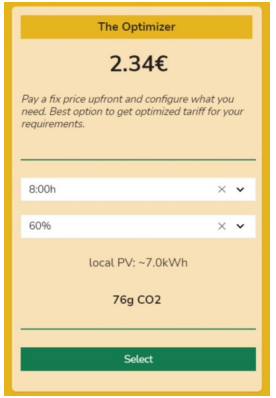
Given: 8 hours of parking and required 60% SoC target at the end.

Driver

No Corrently-Charge



With Corrently-Charge



CPOs with local generation

Revenue	9.18€
Costs	9.05€
Marginal Return	**0.13€**

Revenue	2.34€
Costs	0.22€
Marginal Return	**2.12€**

Communication Channels – Strategy MVP/POC

- Reaching out to CPOs using Mock-Up UIs/toolkits in Appstores driving awareness of corrently-charge.
- Utilize word-of-mouth/influencers to create interesst to get CPOs providing corrently-charge.
- Use existing network (eq. OpenEMS, bwcon,...) to build reputation.
- Organized PR campaign to address all client segments.
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A complete marketing-mix is suggested to accelerate adoption of corrently-charge directly after the MVP/POC.

Communication Channels – GoToMarket

- Solution Launch Campaign:
    - 90s video
    - Advertorial
    - Press Releases / Media outreach
    - Development of branded media toolki

Potential partner: Proteco GmbH (~50.000€)

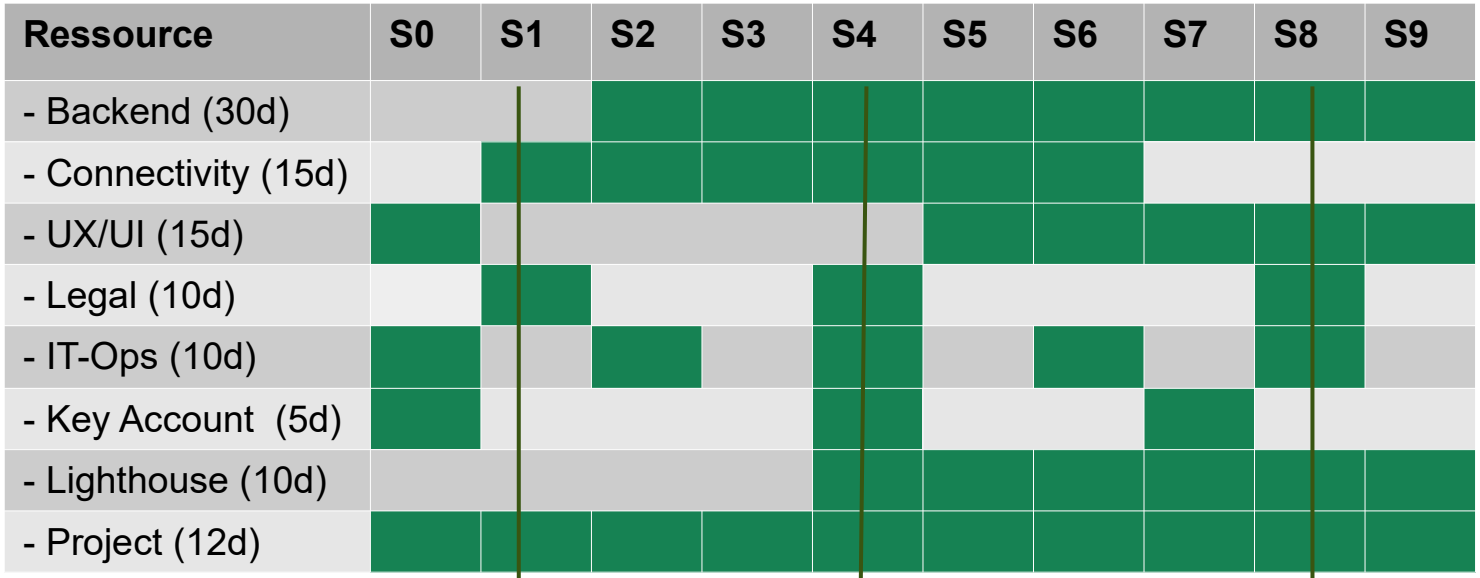
Cost structure MVP

If we get 128,300€, it is possible for team STROMDAO to bring corrently-charge to an MVP running at the lighthouse customers in production gaining first revenue.

Ressource	Costs
People	**93,300€**
- Backend (30d)	21,000€
- Connectivity (15d)	10,500€
- UX/UI (15d)	10,500€
- Legal (10d)	10,000€
- IT-Ops (20d)	14,000€
- Key Account (5d)	5,000€
- Lighthouse (12d)	12,000€
- Project (12d)	10,300€
Organization / Technology	**35,000€**
- Cloud / Infrastructure	10,000€
- Marketing / PR / Communication	10,000€
- Other (travel, rental, capex, license ...)	15,000€
Total MVP	**128.300€**

Timeline (for the next 100 days to MVP)

Organized in 10 sprints with 10 days.



Milestone 0
Fine-Tunes Prototype. Sign LOIs

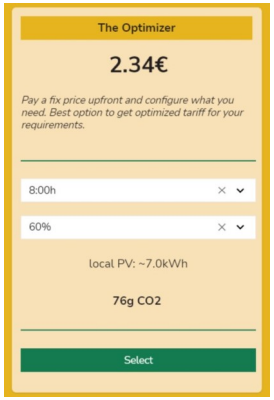
Milestone 1 (POC)
First Charging at one lighthouse project.

Milestone 2 (MVP)
Transition to Go-To-Market phase

Revenue Stream / Pricing

- One-Time: Setup/Integration costs (not for Lighthouse/MVP projects)
- Recuring: 20% of marginal return
- Pure sucessbased pricing

Driver



CPO

Revenue	2.34€
Costs	0.22€
Marginal Return	**2.12€**

20%

Revenue

0.42€

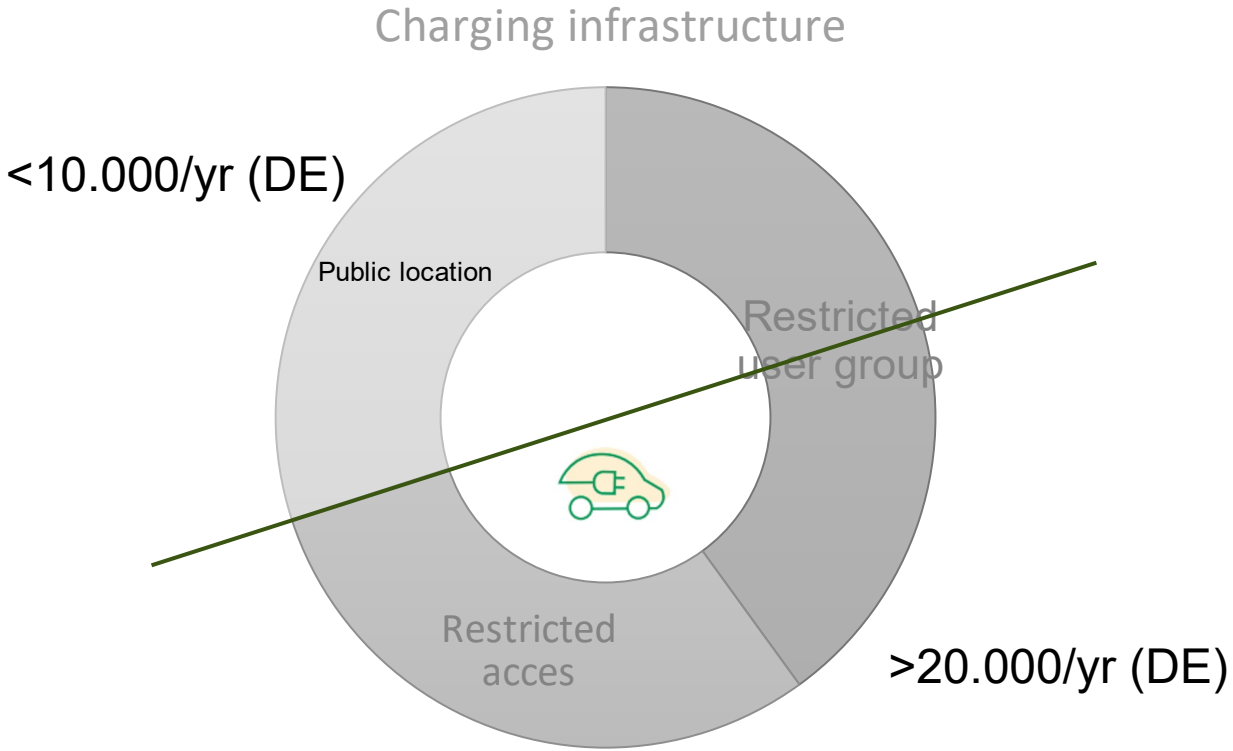
- Might replace exising subsription costs of EMT/Networks
- Might disrupt existing payment/billing fees

What is missing?

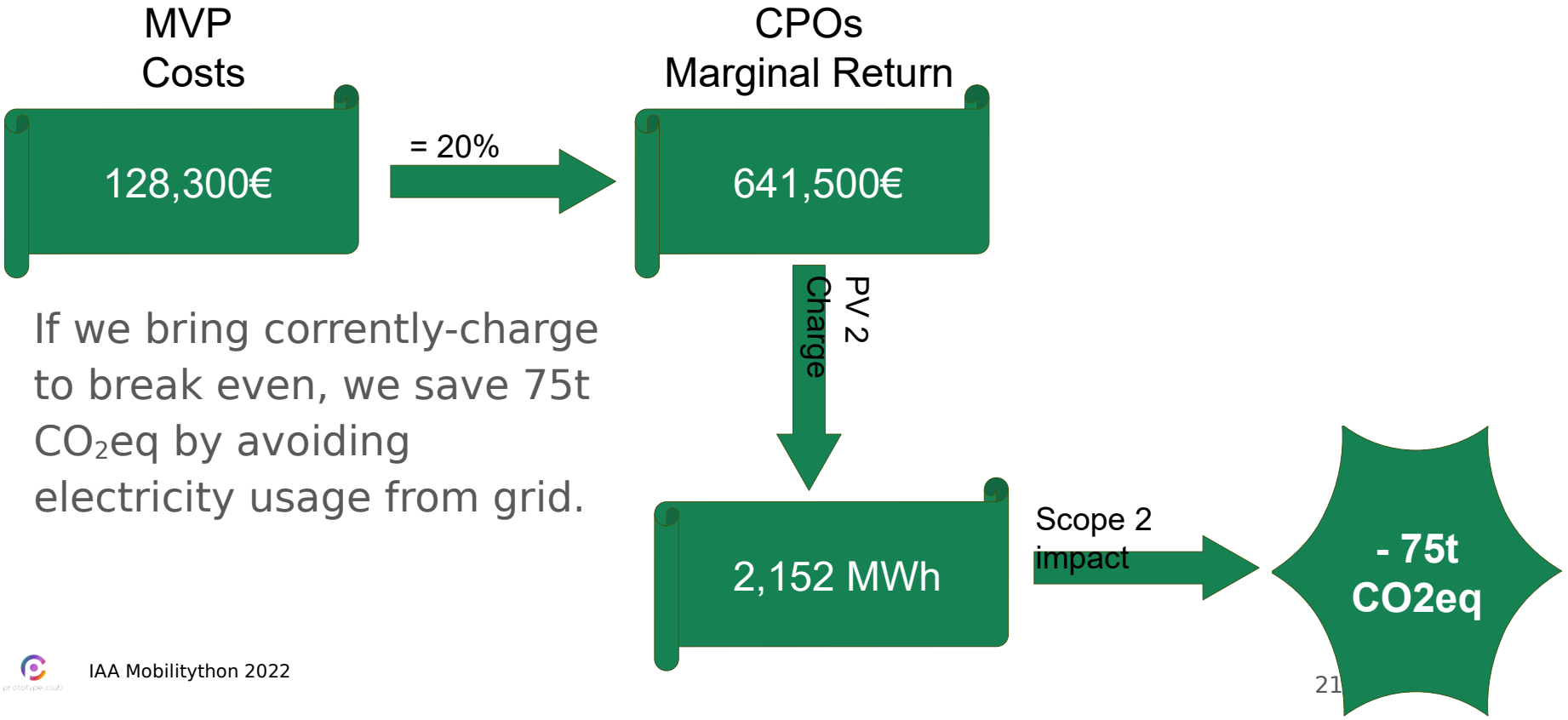
- Liquidity Plan / Cash-Flow for 3years
- Stresstest of partners required for fulfillment
- API integration to existing/established charging apps
- LOIs of 2-3 lighthouse projects
- Indepth legal due diligence of joined venture / development
- Evaluation of ISMS/ISO 27001 impact
- I18N concept
- Check of possible public funding/grants.
- Sustainability audit of project/MVP

Backup Slides

Market Analysis



MVP Sustainability



If we bring corrently-charge to break even, we save 75t CO_2eq by avoiding electricity usage from grid.

Personas

- Works at a medium-sized company who offers their employees EV charging on-site
- Goal that at the end of the working day (8 hrs) EV is at least 80% charged
- Benefits from most phyically available green energy in the grid → good conscience
- Benefits from low charging price as this price is lower than the average electricity tariff

- Company has solar panels installed on company site
- Becomes a more attractive employer in times of skill shortage with offering reasonable EV charging tariffs
- Higher revenue through directly selling EV electricity to employees instead of feed-in compensation

Most optimised load profile and least outputted carbon emissions EV charging possible