

# Project idea

- Electric car, **charging station map**

<https://latauskartta.fi/>

<https://www.helen.fi/sahkoauton-lataus/sahkoautojen-julkinen-latausverkosto>

<https://www.virta.global/fi/sahkoautoilija> (app only)

<https://www.abcasemat.fi/aseamat?filter=charging>

<https://k-lataus.fi/>

## Key features

- interactive map (zoom ability, spread of pins makes sense and is adjusted)
- stations (amount, availability, power)
- all trustworthy service providers available
- possibility to sort service providers (someone only uses k-lataus bc easy payment etc.)
- user experiences with station (star, thumb? and comment ability)
- search engine
- connector type information (type 2, ccs, CHAdeMo jne)
- login possibility (current availability for saved stations? payment info?)

## Extra features

- picture of charger location (google maps view)
- user pictures (helpful to find charger!)
- availability view (some visual, green/red?)
- electricity price (changes every 15min nowadays, alerts for big increase/drop to email?)
- stations payment info (app required, card payment?)
- real-time navigation assistance, to provide directions to the selected charger using GPS or a link to open google/apple maps
- charger occupancy prediction, include historical data analysis for peak times at each station
- 'available now' filter
- backend: data caching for faster load times on website, caching strategies to keep frequently accessed data
- option for users to report a station issue (e.g., malfunction, blocked by other cars) that could display as a temporary warning