# EADER IN ENVIRONMENT ANALYSIS AND DEFINITION OF STRATEGY



## EADS

LEADER IN ENVIRONMENT ANALYSIS AND DEFINITION OF STRATEGY





### Logic Model

#### Input

#### Output

#### **Outcomes**

#### Resources:

- Time
- Data resources
- Collaboration software
- IAR assignment

#### People:

- Our team
- Classmates
- Professors
- Professionals
- Electric car drivers

#### Analysis of:

- Charging stations market
- Electric vehicle market
- Technology
- Laws and regulations
- Architecture and zoning

#### Impact of:

- Oil Price
- Battery Market
- Fuel Cells
- Electricity price
- Environmental agreements
- Substitution markets
- User acceptance
- Economy conditions

Understanding of the current situation

Understanding of the most relevant case studies

Understanding of the global context

Provide an overview of the charging stations industry

Better understanding of the policies and strategies of companies and governments

Better understanding of the mechanisms that influence the markets

Increased development of the electric charging station market in order to increase electric driving

Current Situation

Case Studies

Global Context

Analysis of relevant factors

Conclusion Strategy design

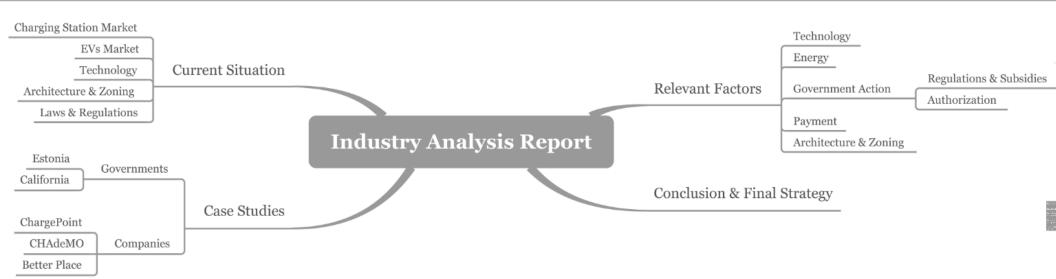
> INDUSTRY ANALYSIS

Alleviate the range anxiety

Well distributed, EV compatible, and affordable charging station network



EADS.





#### **Charging Station Market**

EVs Market

Technology

Architecture & Zoning

Laws & Regulations

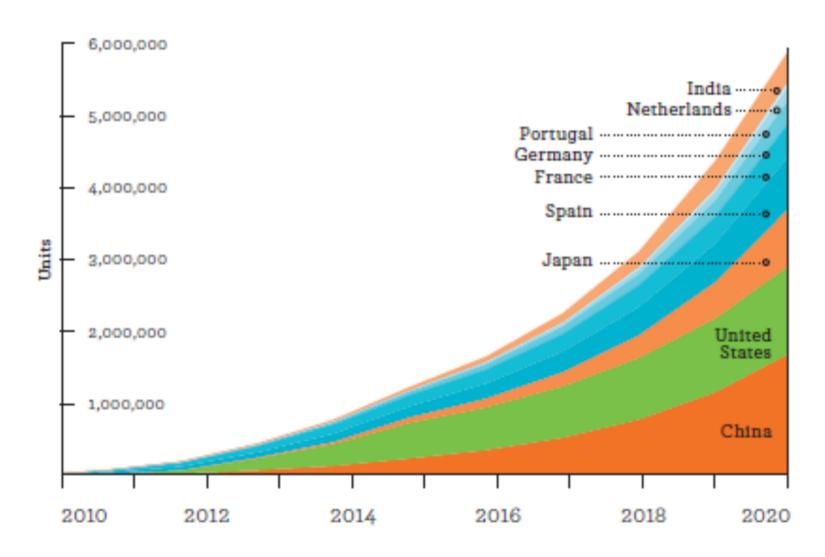
**Current Situation** 

Estonia

California

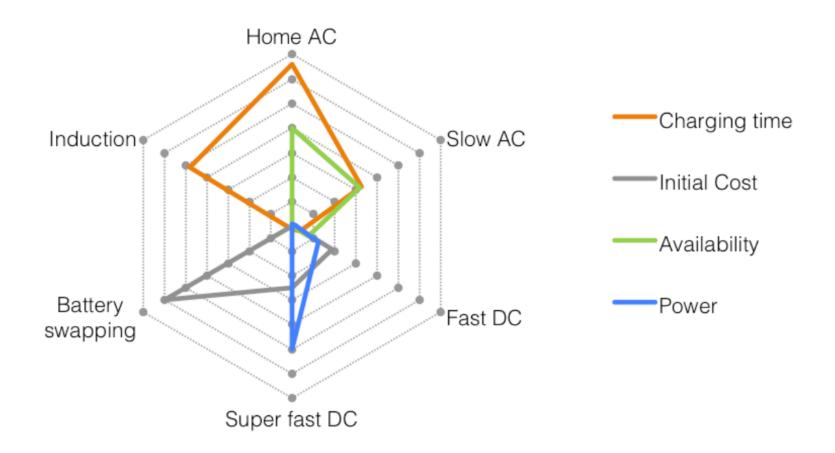
Governments

## **EV Market: EV Sales Targets**



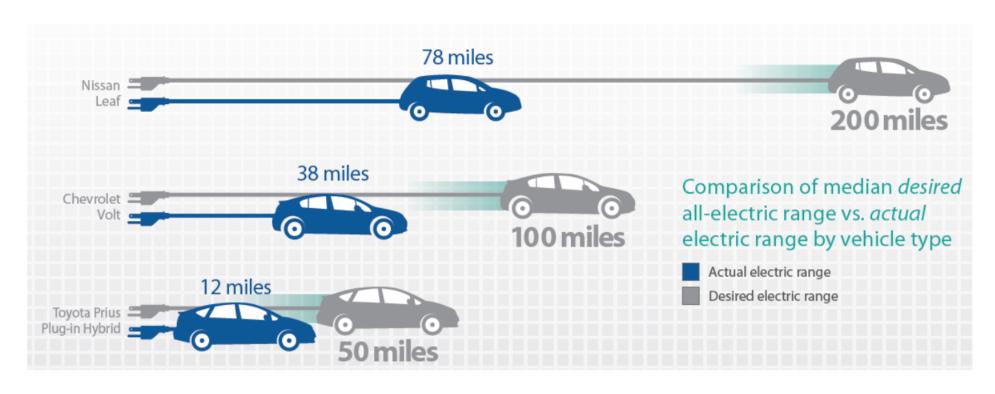
EVs sales have been growing for the past 5 years, and the market is predicted to continue its exponential growth

## Technology: Attributes of different charging methods



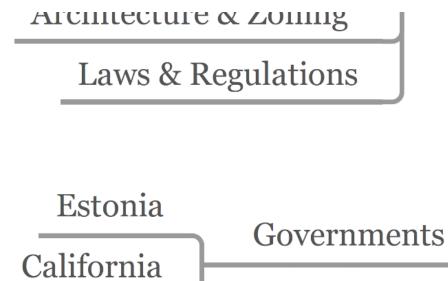
Charging Methods are many, and each present very different characteristics. Super Fast DC is one of the best technology exising.

## Architecture & Zoning: Comparison of Median desired EV range vs. actual range



Range Anxiety is one of the main factor slowing the growth of the EV Market





Indu

**Case Studies** 

Charge Point

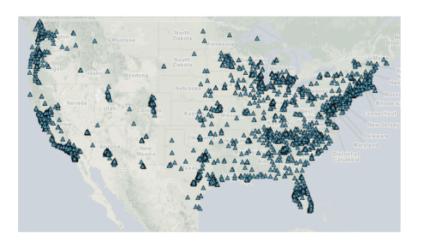
CHAdeMO (

Companies

**Better Place** 



#### **Case Study 1: California**



Map of Charging Stations location in the US

#### Case Study 2: Estonia





Map of Charging Stations location in Estonia

#### **Case Study 3: Successful Company**



Case Study 4: Successful Association

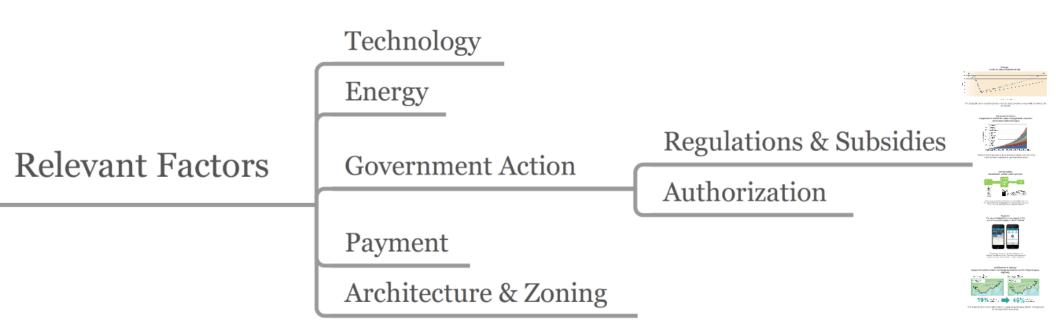


**CH**\(\text{de}MO\)

**Case Study 5: Unsuccessful Company** 





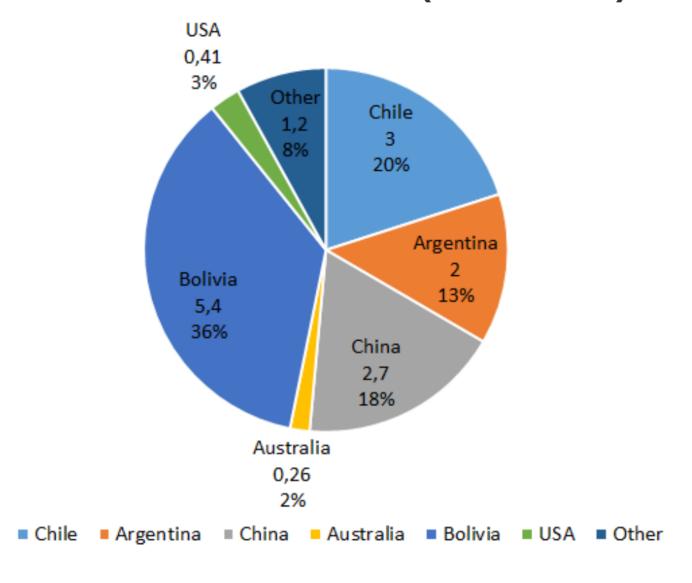


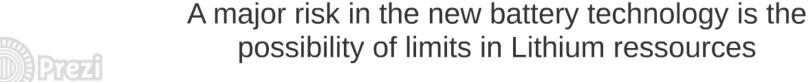
#### Conclusion & Final Strategy



Conduction
The detailed and the global vehicle that he ange to
The technological and industrial ratios axis in fact, at
makes examined with the ratios, for example, may
perquential examine of the ratios for example, may
described and decimine of these
described and the reserved and transfer
described and the reserved and transfer
described and the reserved and transfer.

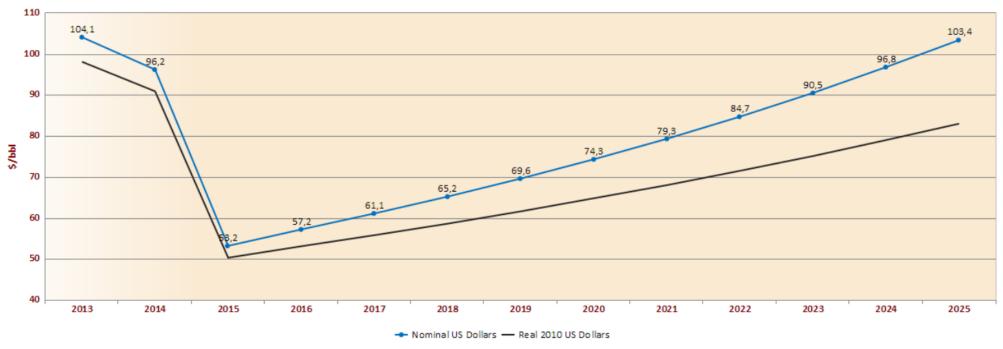
#### **Technology: Lithium Reserve Base (in MM tons)**







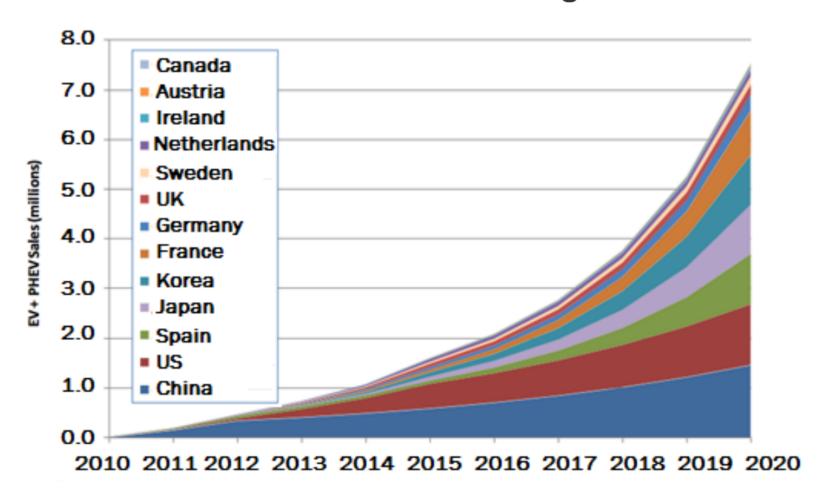
Energy: Crude oil, \$/barrel (World Bank)



The expected rise in crude oil prices in the 10 years to come is very likely to favorize the EV Market

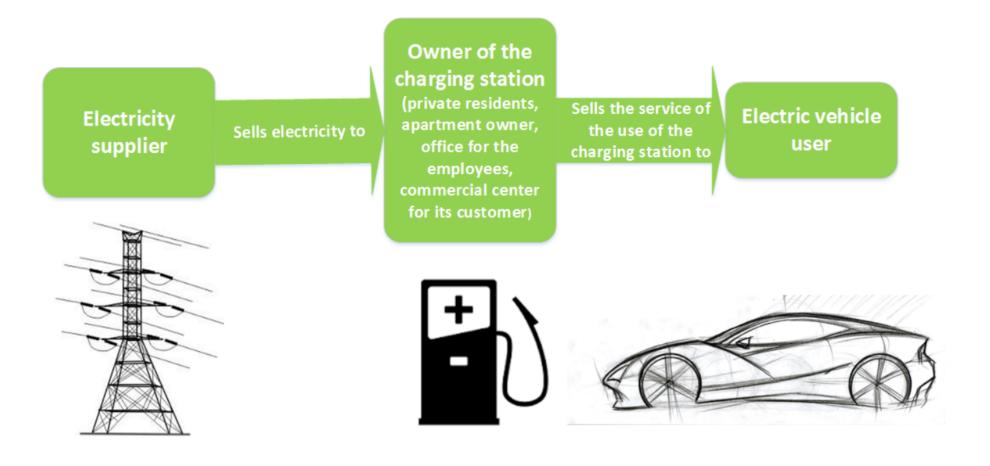


## Government Action: Projected EV and PHEV sales through 2020, based on announced national targets



National and International Environmental Goals are one of the most efficient incentive for governmental action

#### Authorization: Stakeholder authorization process



Many actors are involved in the process of installing and and selling the service of charging stations. Complications can occur in high density cities (problem of apartment owners)

#### Payment:

### The use of smartphone is one aspect of the use of new technologies in the EV Market





The payment system is actually not standardized between the different actors. The use of online payment system is important to be visible and attract customers.



#### Architecture & Zoning: Impact of implementation of Charging Stations on the Tokyo-Nagoya Highway



19% of EV drivers used the highway



This example shows the importance of a supporting Charging Station Infrastructure in the use of EVs and roads.



## Conclusion & Final Strateg



#### Conclusion

The electrification of the global vehicle fleet is a long-term ambition.

The technological and industrialization pace is fast, unlikely to slow down the market expansion.

Still, uncertainties and risks remain, for example: market competition, consumer perception and technology choices

Close collaboration between government and companies is key to success in the market.



# EADER IN ENVIRONMENT ANALYSIS AND DEFINITION OF STRATEGY

