

# With Shield And Lance – How Tesla Scaled EVs

Paper presentation  
January 17, 2023



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# With Shield And Lance – How Tesla Scaled EVs. Working Paper Presentation

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# Agenda

- 1** Motivation
- 2** Background
- 3** Methods
- 4** Findings
- 5** Discussion
- 6** Feedback

# Gas- and Diesel-Powered Cars Should be Replaced. Mobility from a Sustainability Perspective



## Big potential for sustainability in mobility

Mobility sector accounts for ~25% of global CO<sub>2</sub> emissions (IEA, 2019).



## Competition among technologies

Nascent technologies (e.g., fuel cells, eFuels)

Older technologies (e.g., BEVs, natural gas)



## Sector coupling and flexibility

Transition needs to be achieved among different organizations.

Technologies enabling sector coupling and open new business opportunities.

# It all Started Differently...

## Background of this Project



**BEV as winner (passenger cars) – only sustainable technology that achieved to scale so far.**

Source: CNG Mobility (2022). CNG gas station [Online image]. [https://www.cng-mobility.ch/wp-content/uploads/2022/01/CNG-Header\\_der\\_CNG-Tankstellen\\_1200x500px.jpg](https://www.cng-mobility.ch/wp-content/uploads/2022/01/CNG-Header_der_CNG-Tankstellen_1200x500px.jpg)



# Why Did BEV Cars Prevail? Tesla's Impact



Source: Nahr, K (2010). 1976 Citicar 6HP [Online image].

[https://upload.wikimedia.org/wikipedia/commons/f/f6/1976\\_Citicar\\_6HP.jpg](https://upload.wikimedia.org/wikipedia/commons/f/f6/1976_Citicar_6HP.jpg)



Source: IFCAR (2011). Tesla Roadster photographed in Washington, D.C., USA [Online image].

[https://upload.wikimedia.org/wikipedia/commons/f/f6/1976\\_Citicar\\_6HP.jpg](https://upload.wikimedia.org/wikipedia/commons/f/f6/1976_Citicar_6HP.jpg)

# Looking Beyond the Horizon of Pure Business.

## Market and Non-Market Strategies



### Market strategies

Market strategies deal with the economic context of market competition (Frynas et al., 2017).

Market strategies alone are often not sufficient to launch and scale sustainable innovations because of prevailing social, cultural, political and legal arrangements (de Medeiros et al., 2022; Olson et al., 2013).



### Non-Market strategies

Non-market strategies deal with the institutional and societal arrangements that structure economic competition (Mellahi et al., 2016).

Non-market strategies concern the arrangements that constrain and facilitate firm activities (Doh et al., 2012).

**In academia, analyses of market and non-market strategy were mostly separated from each other (Holburn & Vanden Bergh, 2014).**

# Words, Sentences, and Texts Matter.

## Case Study

Exploratory research design, single case study:

In-depth investigation of the strategies taken by a successful firm:

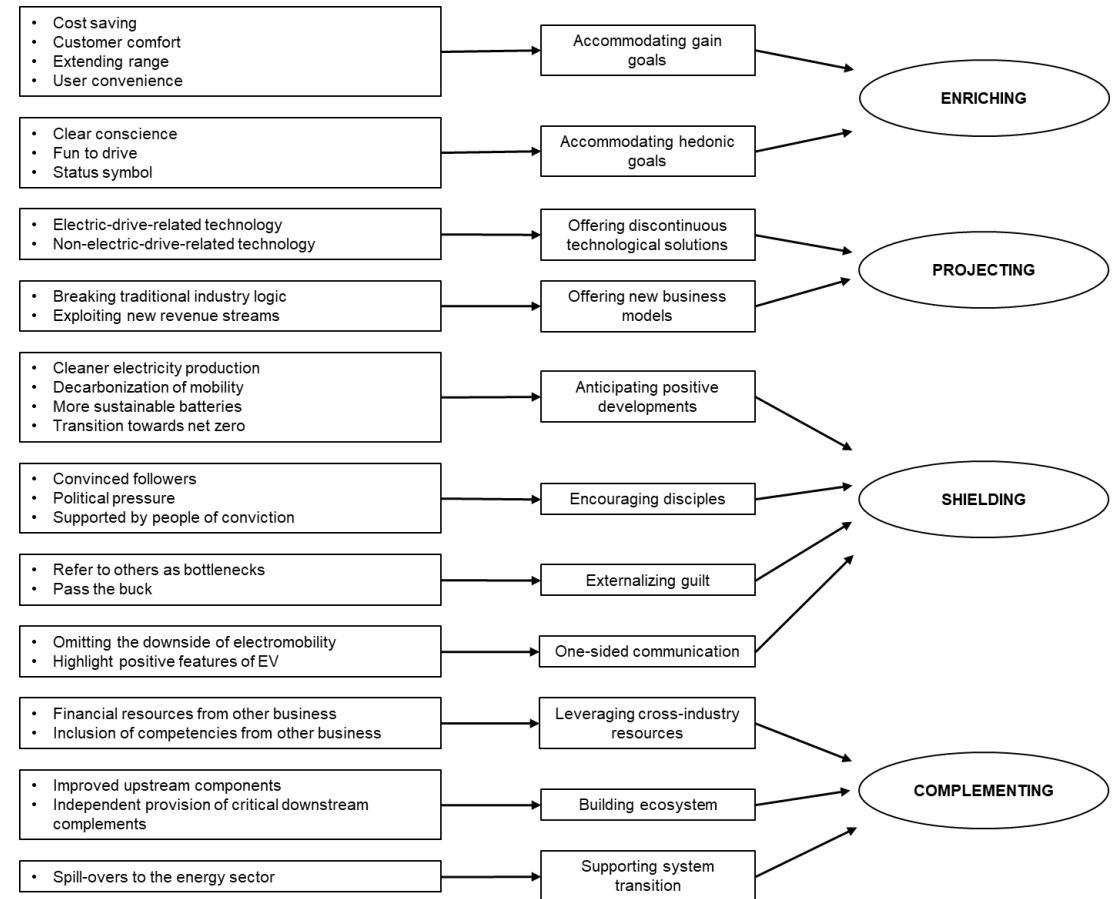
### TESLA

- 2008: Roadster – sports car
- 2012: Model S – luxury sedan

54 semi-structured interviews, 20 min – 3.5 h.

39 informants, 32 organizations.

1298 pages, 69 minutes video (secondary data).



Data structure



**“We’re not going to compromise on a customers’ transportation experience just to make it sustainable.”**

(J. Guillen, Vice-President Sales and Services at Tesla Motors)

# Tesla Won the Hearts and Minds.

## Market Strategy: Enriching



### Accommodating hedonic goals

“The Roadster’s performance, handling and styling exceed even the highest expectations. People are always delighted to glimpse it – and it’s a pleasure to show off.” (Cochrane, 2008)



### Accommodating gain goals

“[The Model S] competes with the top cars in its class in spaciousness [...]. Because there is no internal combustion engine or transmission tunnel, the interior of the car allows for additional cargo space in the front of the vehicle and one of the most spacious cabins in its class.” (Tesla, 2012)

# Tesla Directs the Focus of its Users Towards the Future.

## Market Strategy: Projecting



### Discontinuous technological solutions

Clearly distinguish the car from the present and past.



### New Business Models

Questioning the commercial status quo.



Source: Cyberbackpack (2022). How to update Tesla without wifi [Online image].  
<https://cdn.shopify.com/s/files/1/0611/3981/2534/articles/how-to-update-your-tesla-without-wifi.jpg>

# Looking at the Value Proposition with a Wide Lens. Market Strategy: Complementing



## Leveraging cross-industry resources

Silicon Valley background.



## Building an ecosystem

Addressing the chicken-egg problem.



## Supporting energy transition

Going beyond BEVs.



Source: Tesla (2022). Power Wall [Online image]. <https://tesla-cdn.thron.com/delivery/public/image/tesla/173055ff-afe2-4114-947e-ba62cf8e05c6/bvlatuR/std/2880x1800/PW-Inverter-Hero-D.jpg>



# What Tesla Might not Want You to See...

## Non-Market Strategy: Shielding



### Anticipating positive developments

“Goal for Model S is to show that electric is way way better than gas. Combine w[ith] solar power & the future looks bright.” (Musk, 2012)



### One-sided communication

Leveraging ambiguities and knowledge gaps.



### Encouraging disciples

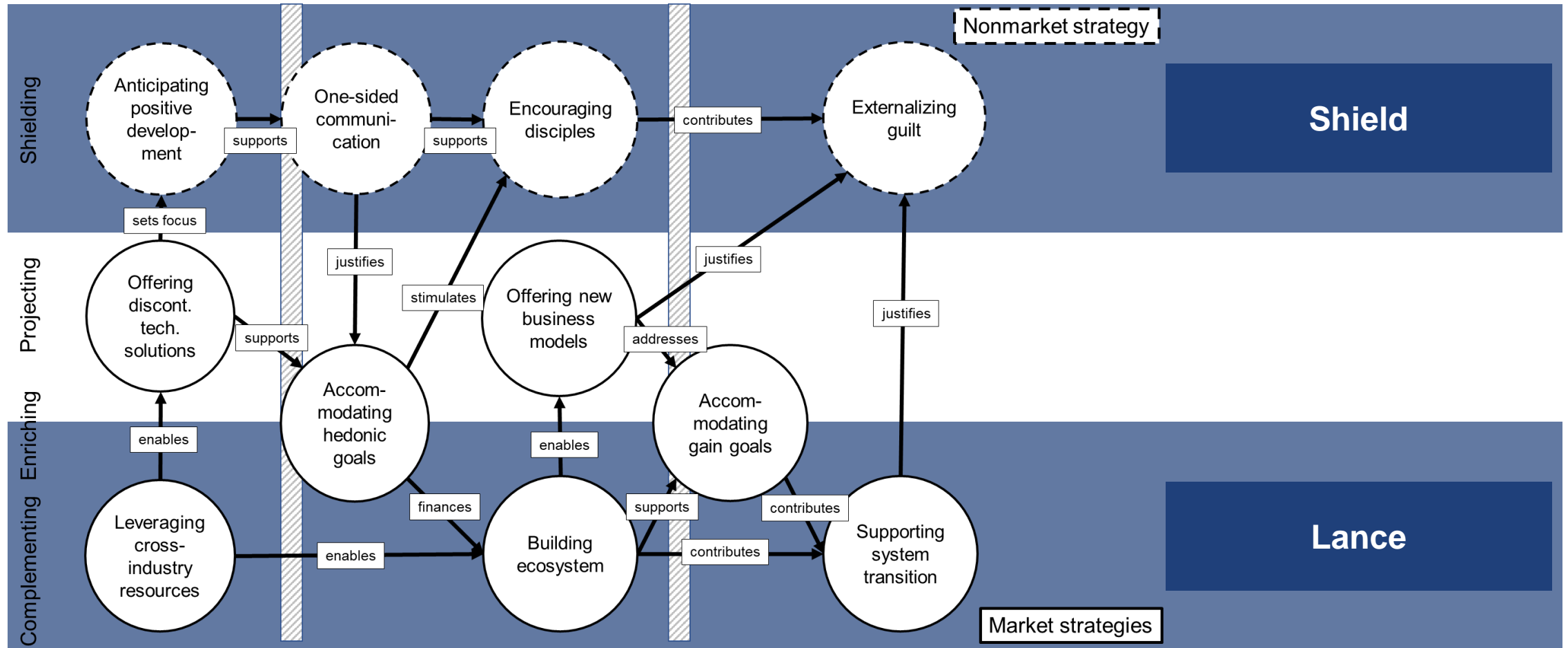
Supporting community building.



### Externalizing guilt

Pointing at others for not being sustainable.

# There Are Topics to Talk about and Topics to Remain Silent about... Resulting Framework



Framework integrating market and non-market strategies

**Does that mean that Tesla did not  
contribute to the sustainability  
transition?**

# Integrating Market and Non-Market Strategies.

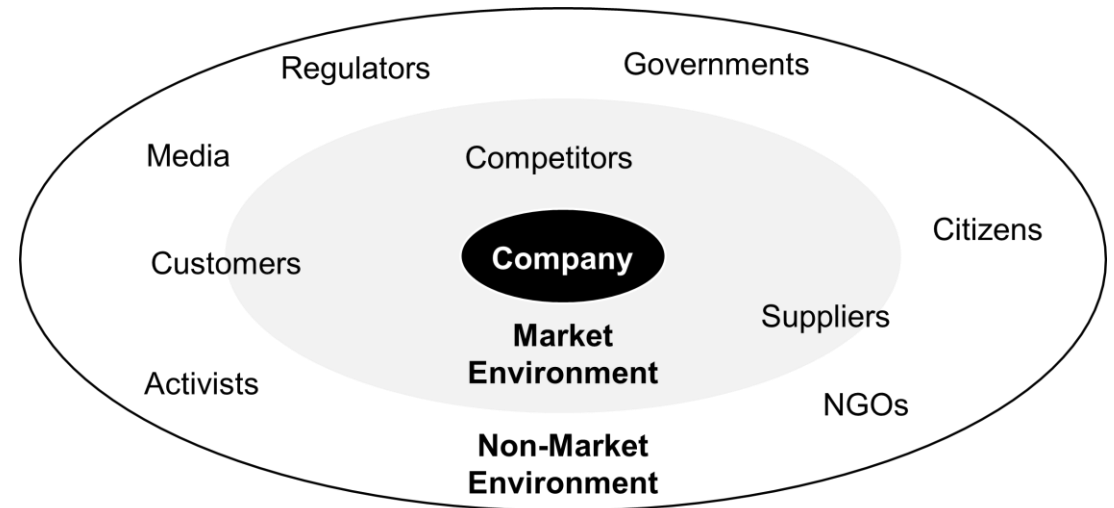
## Contributions of our Study

Non-market complement market strategies.

Peripheral ecosystem members need to be considered.

An underrated management tool is blame.

For-profit companies can make major contributions to societal change.



Market and non-market environment (Based on Bach & Allen (2010: p. 45))



# What We Suggest to Firms.

## Implications of our Study

Set your innovation apart from the status quo!

Consider emphasizing hedonic and gain, rather than normative goals!

Think about how you can avoid being held accountable for any compromises in environmental performance!

Make sure that your (potential) customers have sufficient access to complementary goods and services!

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Lucas acknowledges research funds provided by the Swiss Federal Office of Energy's "SWEET" program. His research was conducted under the 'PATHFNR' project, led by ETH Zurich with Empa, PSI, ZHAW, HSLU, UNIGE, EPFL, and TU Delft.