

BioEthanol for Sustainable Transport



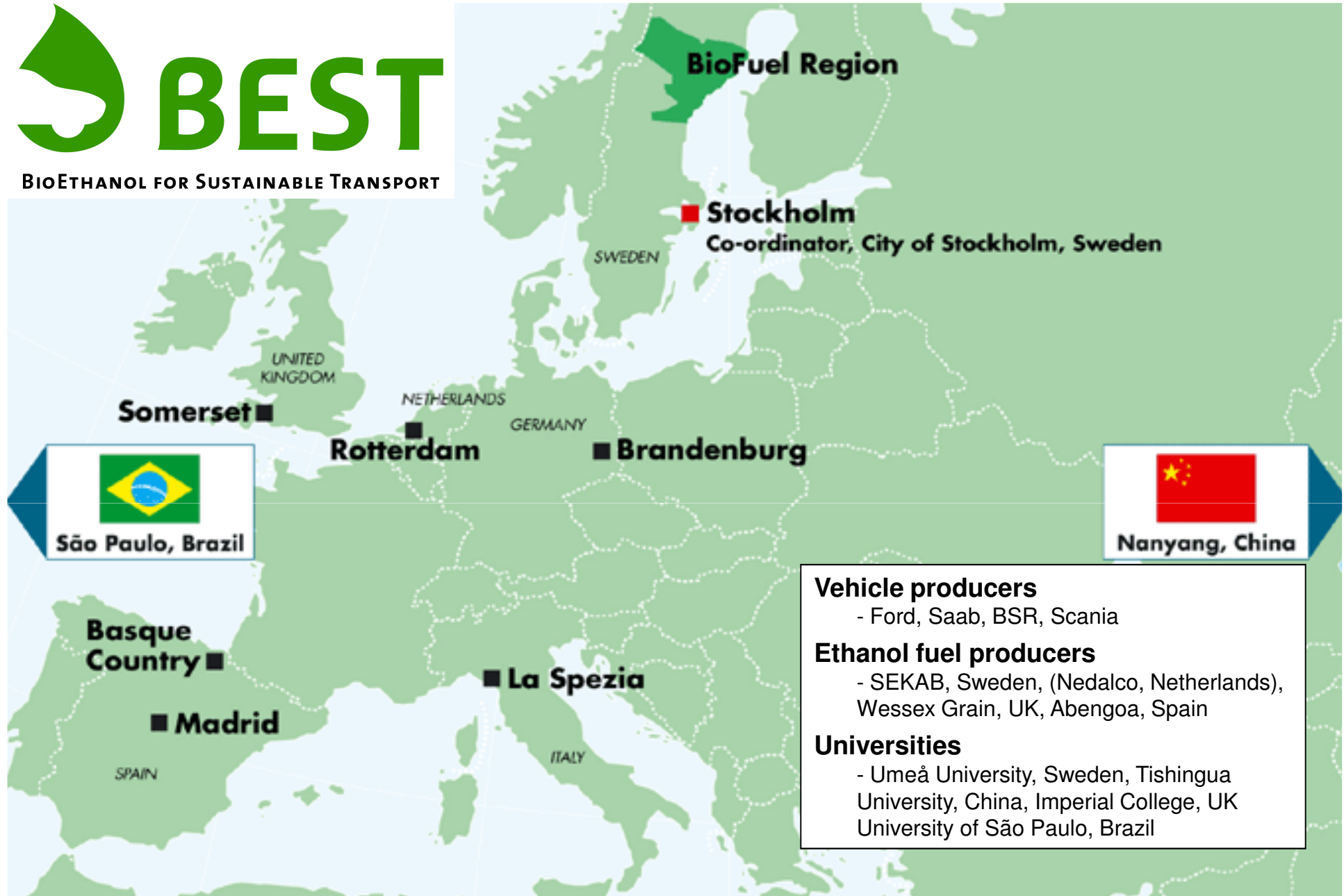
BEST objectives

- Study Market introduction
- Validate the technical, environmental and social benefits





BIOETHANOL FOR SUSTAINABLE TRANSPORT



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FOR SUSTAINABLE
TRANSPORT

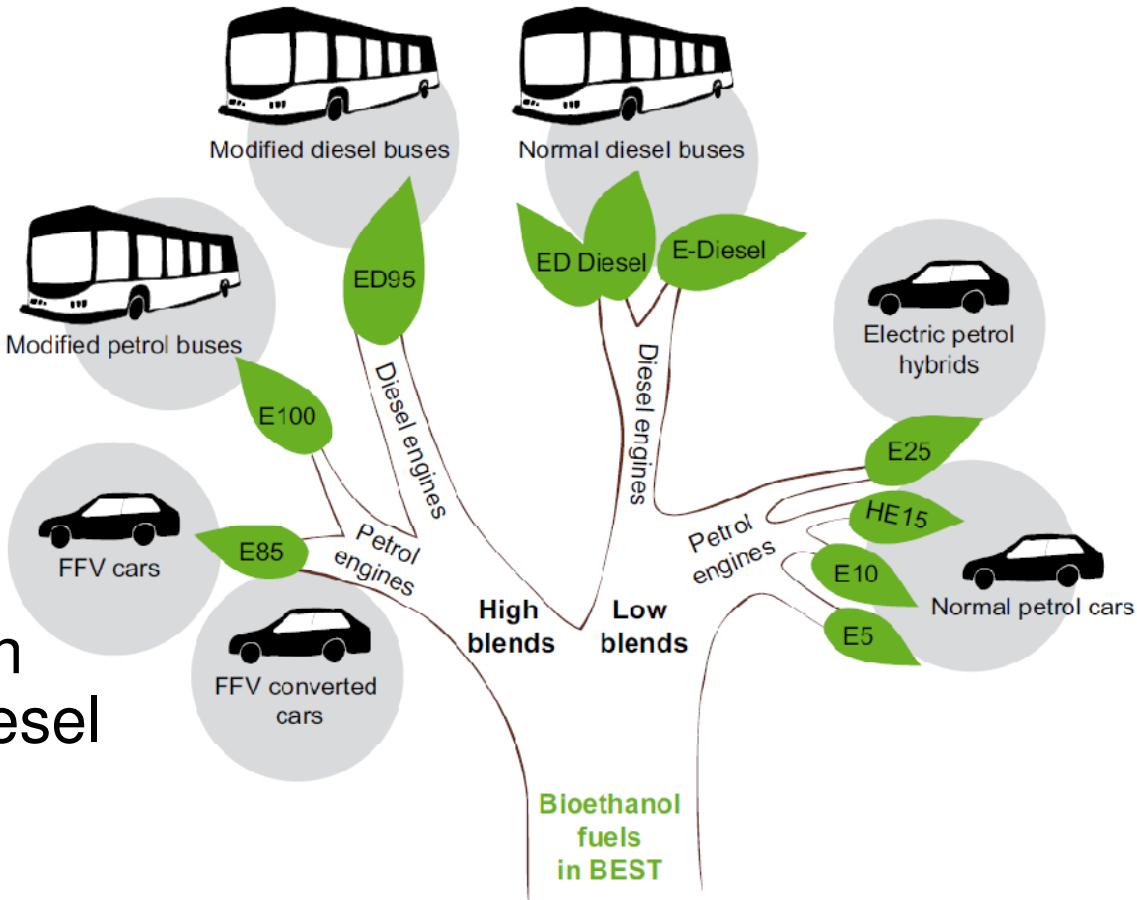


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www.best-europe.org

Extensive demonstrations

- 79.000 FFV cars
- 310 E85 pumps
- 190 ED95 buses
- 2 E100 buses
- 12 ED95 pumps
- 4 conversions
- 3 HEV on E25
- 4 Low blends in petrol and diesel



Cars

- 1-26 % higher energy efficiency when running on E85 vs. Petrol
- Up to 79 % CO₂-reduction
- Slightly higher maintenance (oil filter changes)
- Fuel economy can be even further developed by:
 - Optimizing to the specifics of ethanol
 - Ethanol-electric hybrids
 - ED95 in diesel engines



Buses

- Higher reliability
- 80 % CO₂ reduction and reduced particulate matters
- More scheduled maintenance
- 10 % higher prices
- Need for more manufactures



Low-blends

- Diesel low blends
 - E-diesel (10 %)
 - ED-diesel (10 %)
handle as diesel
- Petrol low blends
 - E5, E10, HE15



Sustainability - How "green" is ethanol?

- Reduction of CO₂, NO_x, HC, PM
- Effect on biological life ?
- Fuel vs food ?
- Working conditions in production?

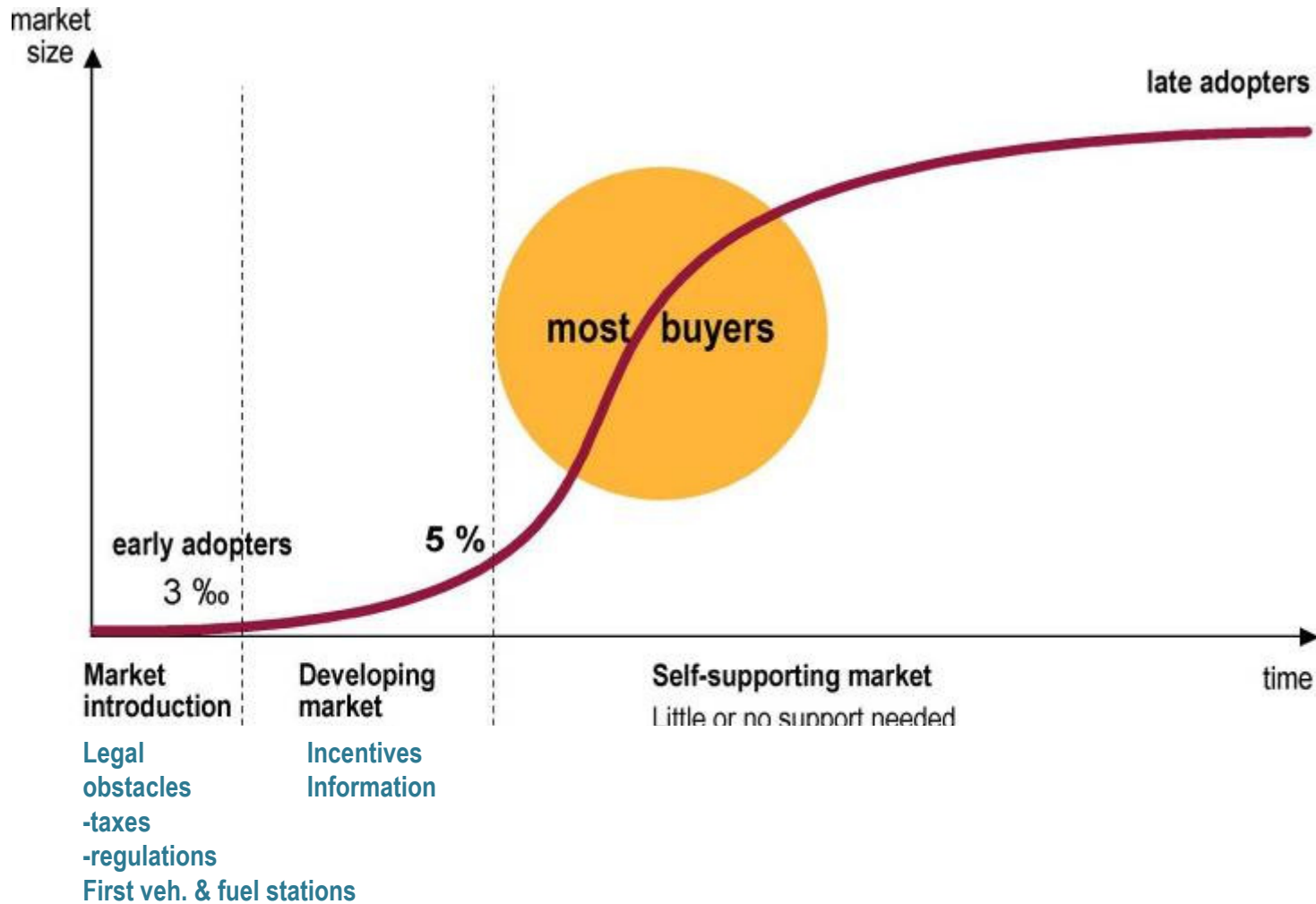


- **It differs! - 1-79 %**
 - You can do wrong or you can do **right!!**



Market development

Market development



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The two phases

- Pre market phase
 - vehicle supply
 - fuel distribution
 - identify and remove legal barriers & tax disadvantages.
 - Legalising local incentives
- Developing market phase
 - monetary incentives for end users
 - reliable information
 - Satisfied drivers



BEST achievements of The first vehicles & filling stations

- Public fleets
- Support for setting up filling stations



BEST Examples of Legal and legislative issues solved

- **Customs classification**
The bus fuel is classed as an energy product in Sweden in a Binding Tariff Information (BTI))
- **Spain:** E85-Ethanol no longer taxed as drinking alcohol
- **Italy:** fuel pumps permitted for E85
- **Germany:** Mitigation measures for E85 leaks at fuelling stations solved
- **Sweden:** Safety issues in Sweden solved



The two phases

- Pre market phase
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 - Legalising local incentives
- Developing market phase
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 - reliable information



Information on vehicles



HOME | BIOETANOL | MAPA DE BIOGASOLINERAS

EL BIOETANOL

¿Qué es?

Usos

Marcas

Ventajas

La apuesta de España

COCHES DE BIOETANOL

¿Qué son?

¿Qué modelos existen?

PROYECTO BEST

Proyecto

Objetivos

Participantes

DOCUMENTOS DE INTERÉS

Coches de bioetanol

¿Qué modelos hay disponibles?

En Brasil casi todos los modelos que se comercializan, tienen un modelo con motor FVH. Además, todos los motores, admiten mezclas de etanol de hasta el 20%. Actualmente, aquí disponemos de modelos de las marcas Renault, Audi, Saab y Volvo, aunque otros marcas como Audi, Citroën, Peugeot, Saab o Volkswagen, han anunciado la fabricación de líneas de vehículos flexibles dentro de sus actuales modelos para Europa.



Modelos comercializados	
Marca	Modelo
	Clio Business

MILJÖ
fordon.se

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FORDON
TUNGA LASTBILAR
BRÄNSLE
ERONOMI
MILJÖSPORTER
AKTUELLT
OM MILJÖFORDON.SE

Detta är miljöfordon.se

Detta är en riksomfattande informationstjänst för miljöfordon och bränslen. Portalen drivs gemensamt och står i samarbete med Miljöbil i Stockholm, Miljöfordon i Göteborg och Bilkontoret i Västerås. Här hittar du allt som är värt att veta om miljöbilar och bio E85.

[Mer om miljöfordon.se](#)

Sök miljöbilar

Sök bland alla miljöfordon på den svenska nybilsmarknaden

Personbilar
 Transportfordon

Bränsle:

Märke:

Definition:

[Sök fordon](#)

Jämför

Gör jämförelser mellan fordon, ekonomi, miljöbilar och E85.

- > Personbilar
- > Transportfordon
- > Jämför bränsleekonomi
- > Miljöbilsdefinitioner
- > Miljöbilsstatistik

Just nu

Göteborgs Bilbörser – nyheter september

> Läs mer

OK för trängselkort i Göteborg

> Läs mer

Nu 100 tankställen för fordonsgas

> Läs mer

Här kan du beräkna din miljöbesparing

> Läs mer

Uppdaterad "Guide elbilar och laddhybrider"

> Läs mer

Sök tankställen

Hitta alla stationer med miljöbränslet på din ort.

[Tankställen](#)

Miljöjämförelse

Jämför olika fordonss utsläpp av miljöfarliga ämnen.

[Gör miljöjämförelse](#)

Seminarier & konferenser

16 - 18 sep 2009 - "World Bioenergy - Clean Vehicles & Fuels 2009", Stockholm

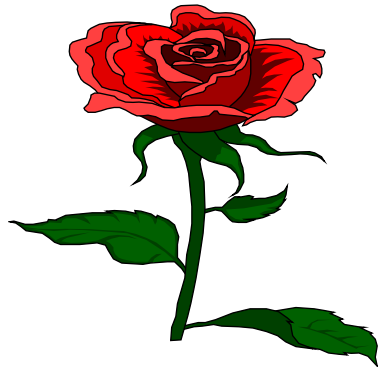
28 - 30 sep 2009 - "The international forum for the fuel cell industry", Stuttgart

24 - 26 nov 2009 - "Vägar och bränsleceller i Norden", Oslo

> Hämta mer info här

Ekonomijämförelse

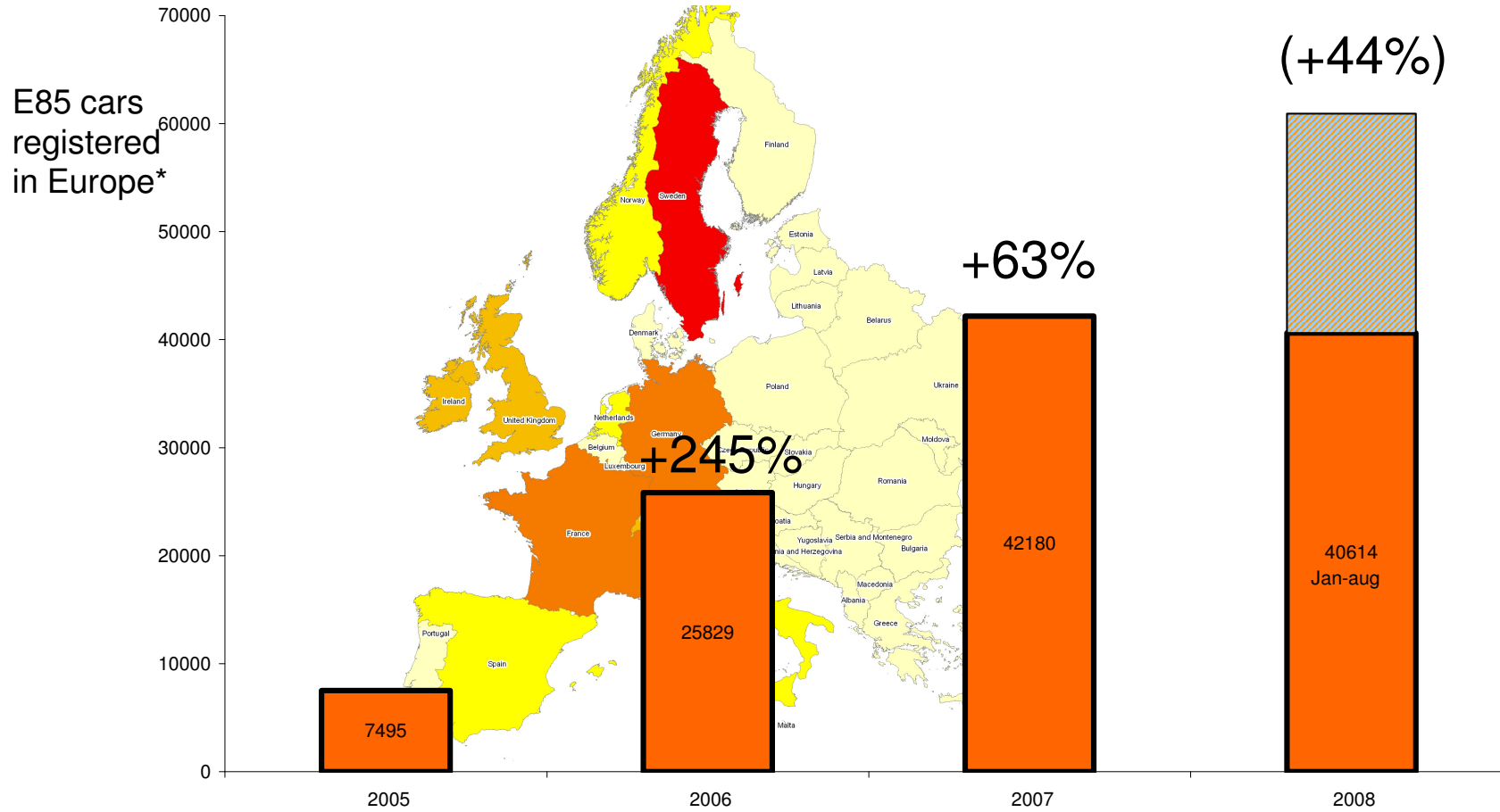




Local incentives

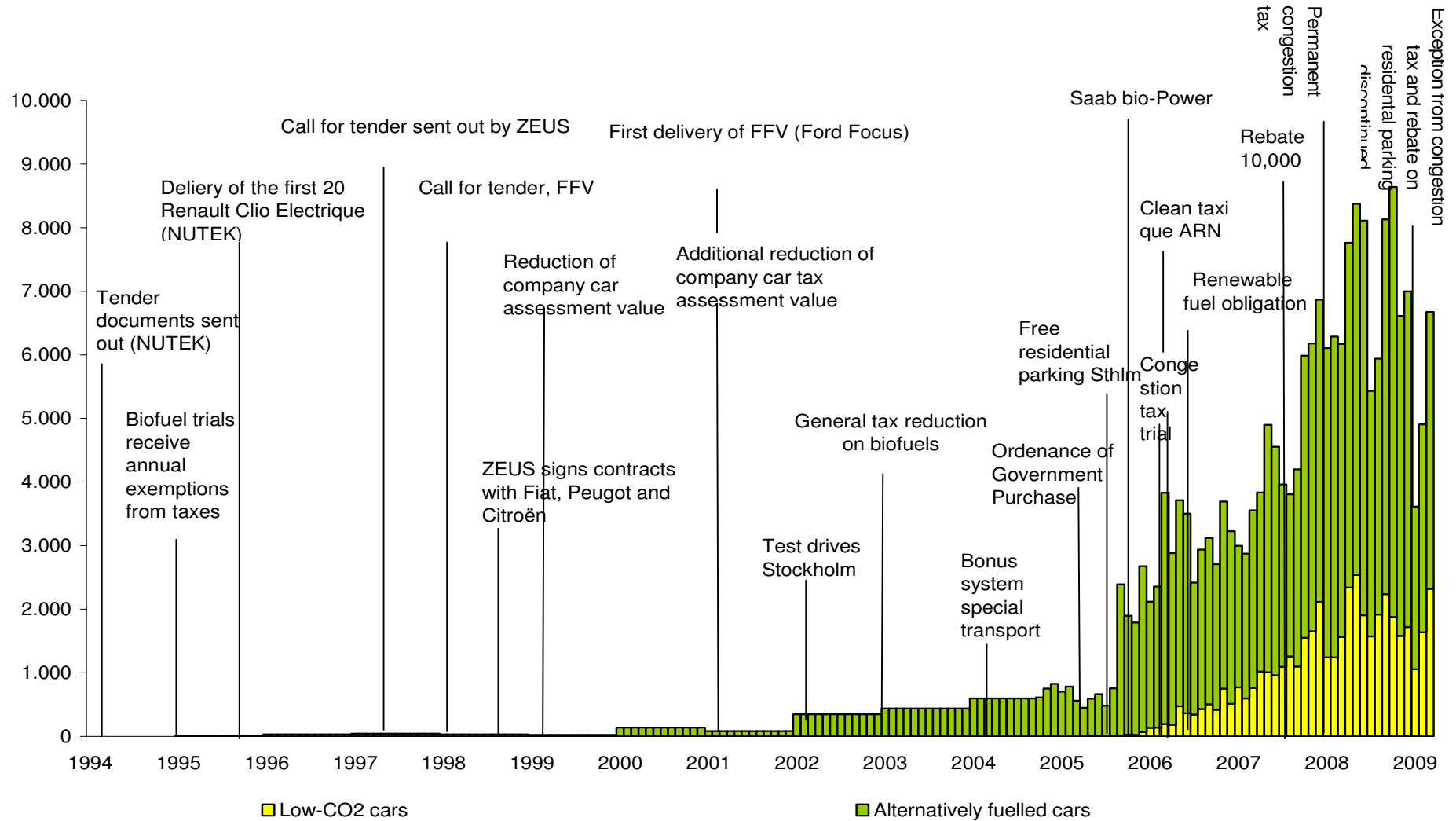
- ✓ No congestion charges
- ✓ No parking fees
- ✓ Test fleet
- ✓ Taxi priority
- ✓ Subsidies for special vehicles

The E85 segment in Europe grows!



*Figures from MIS, Germany not included since they do not report alcohol cars separately

Selling of Clean Cars in Sweden



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Lessons learnt

Lessons learnt

Politicians are key leaders!



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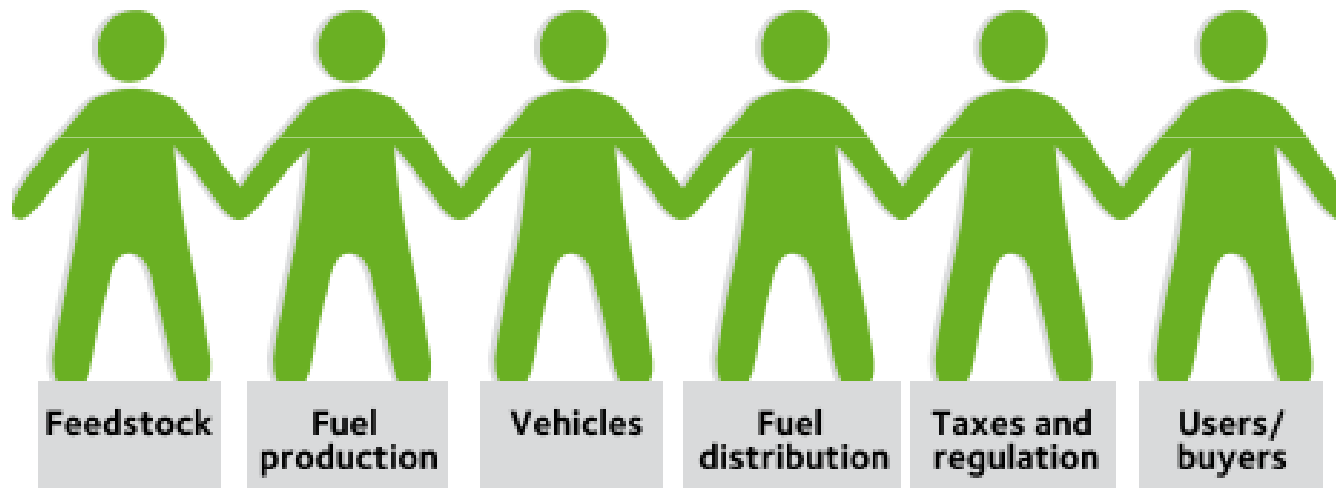


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Commission



How to start?

Make sure ALL important part of the fuel-vehicle chain is involved and cooperate. Who will do what?



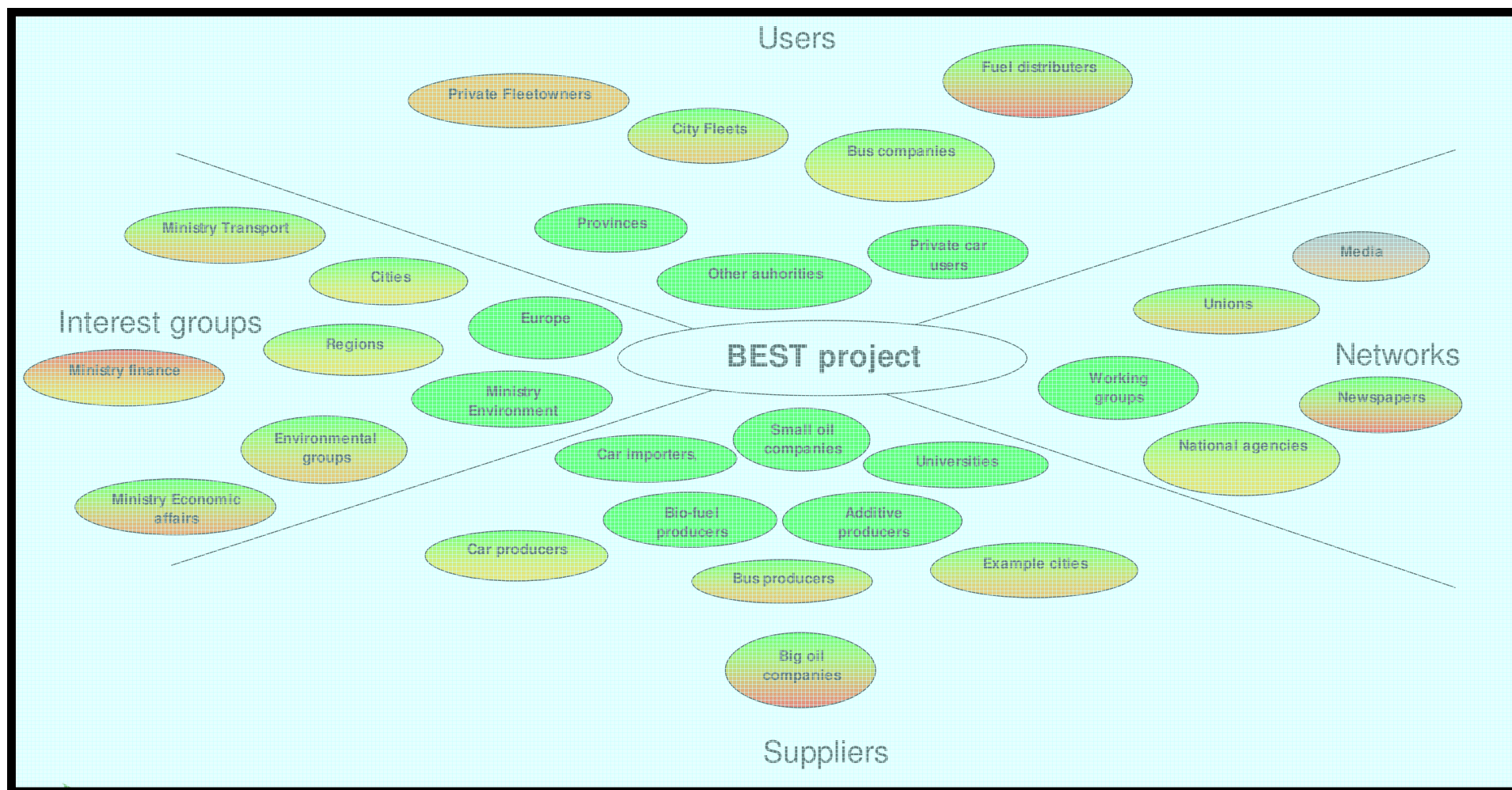
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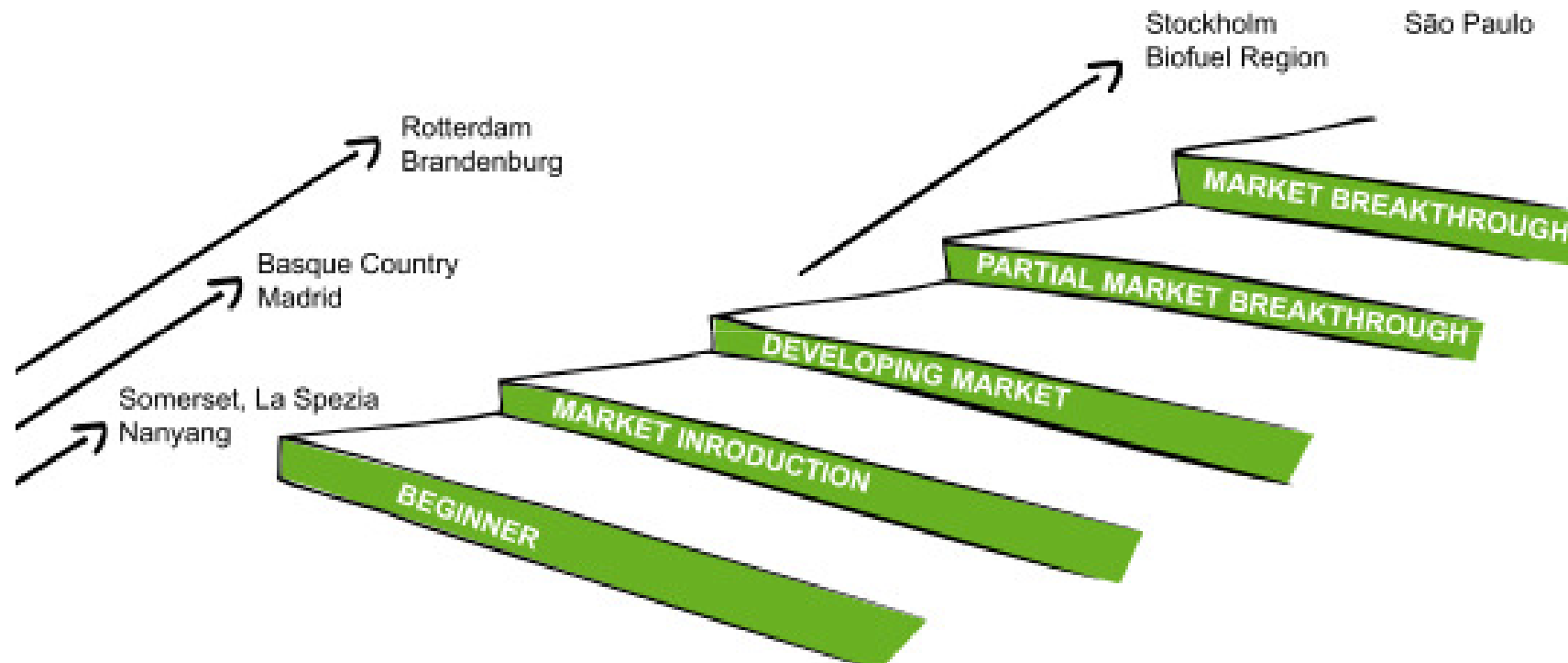
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Analyse the stakeholders views



Set individual objectives

Record successes & failures! Analyse!



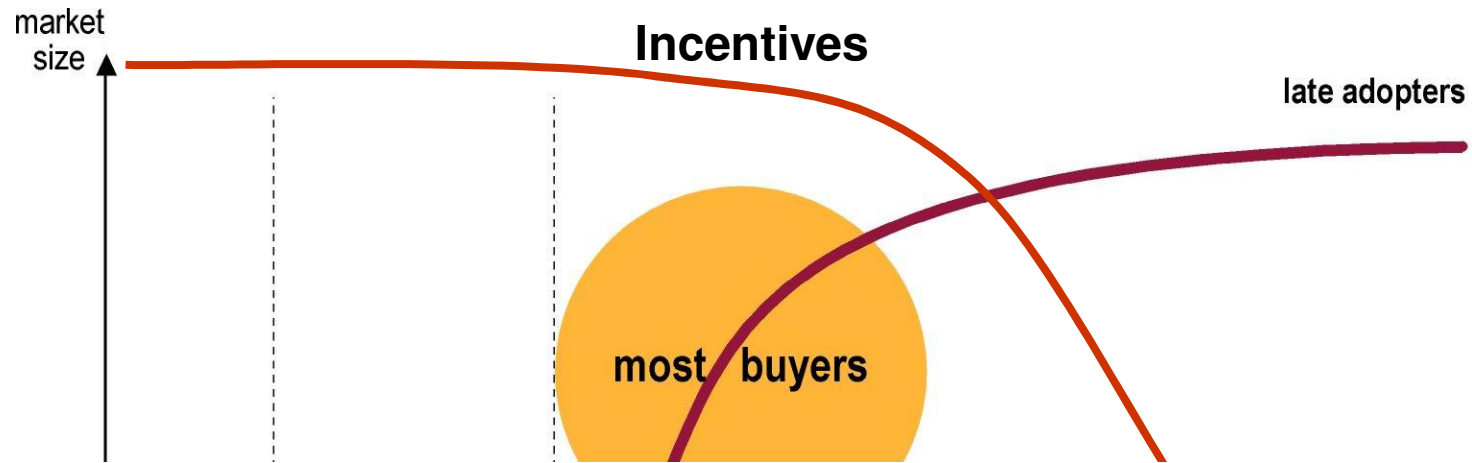
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Market development



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