

(Part of)

**Background to the initiative
"Leaders of Sustainable Fuel Change" (LoSFC)
presented at meeting #1**

- 1. "Climate Political Framework"**
- 2. How the actors could contribute**

(First presented in Gothenburg on June 4, 2018)

Stockholm October 16, 2018

Ingvar Landälv, Fuels & Energy Consulting



CHEMREC

1Porcupine AB



 **DME SWEDEN**

"Climate Political Framework"*

Part goals on the way to zero net emissions of GHG year 2045

- **2020** emissions shall be at least **40%** lower than **1990**. (Decision taken 2009)
- **2030** emissions shall be at least **63%** lower than **1990**.
- **2040** emissions shall be at least **75%** lower than **1990**.

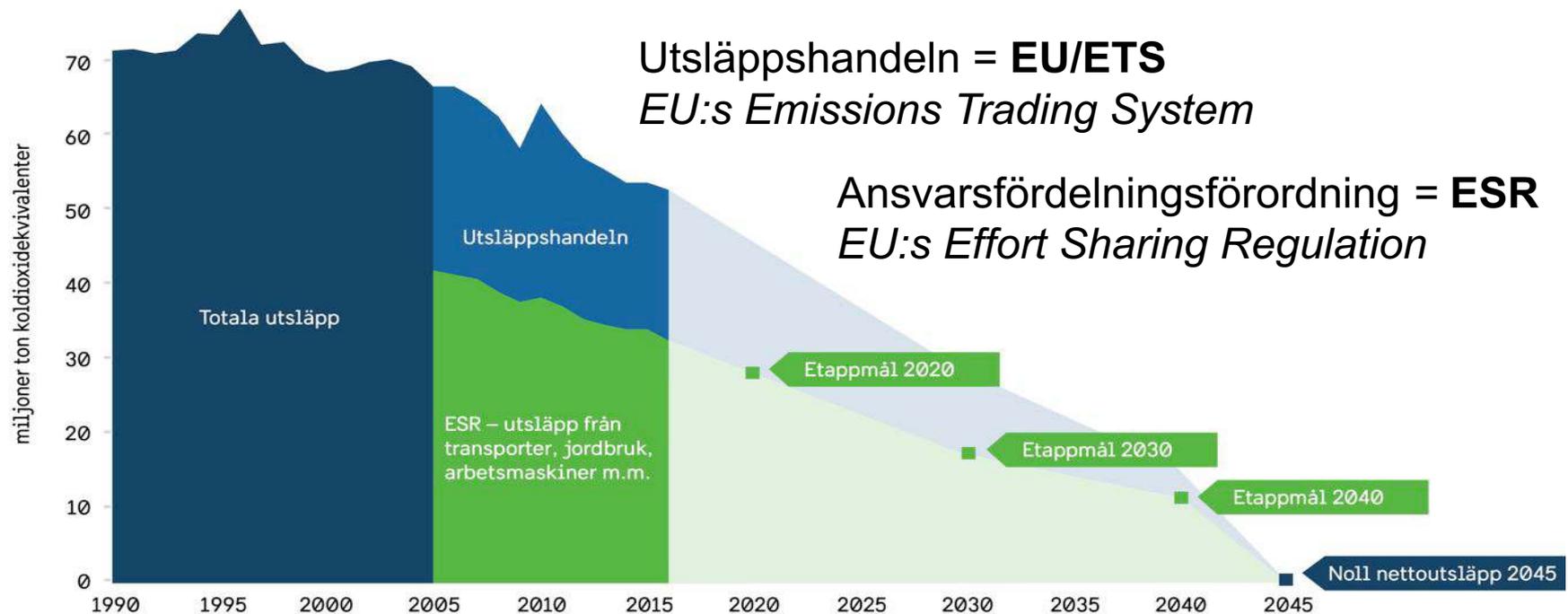
Over and above this there is a part goal regarding domestic transports:

- **2030** emissions from domestic transports (except domestic aviation which is part of EU ETS) shall be at least **70% lower than 2010**.
- **2045** Sweden shall have reached zero net emissions of GHG. Thereafter net emissions shall be negative.

*Klimatpolitiskt ramverk. Swedish Parliament
Decision June 12, 2017.



GHG-emissions from Sweden 1990–2016 and the Climate goals



From 2005 GHG emissions has been divided between those covered by the ETS system and by those covered by ESR, the EU Effort Sharing Regulation. The curve showing future emissions covered by ESR also indicates the part goals for 2020, 2030 and 2040. Emissions from domestic aviation is part of ETS in the figure.

Source: Swedish Environmental Protection Agency



CHEMREC

Porcupine AB



OME SWEDEN

Concequences of the goals presented

- Fossil based fuels must be moved out from the transport sector by 2045
- 100% sustainable fuels must be prioritized now
- Climate, energy and cost efficiency for sustainable alternatives must be maximized
- All other environmental impacts (on top of climate impact) from sustainable concepts must be minimized
- General inproved system efficiencies and change of behavior habits which leads to savings in general, need to be a necessary part of the overall change of fuels form fossil to renewable



2. How the actors could contribute



CHEMREC

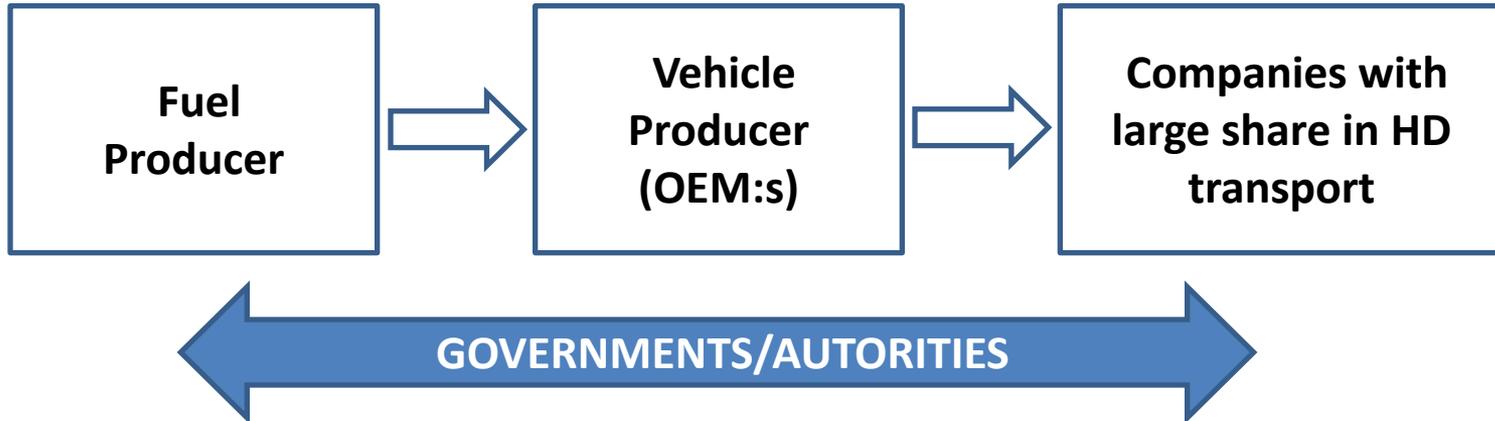
Porcupine AB



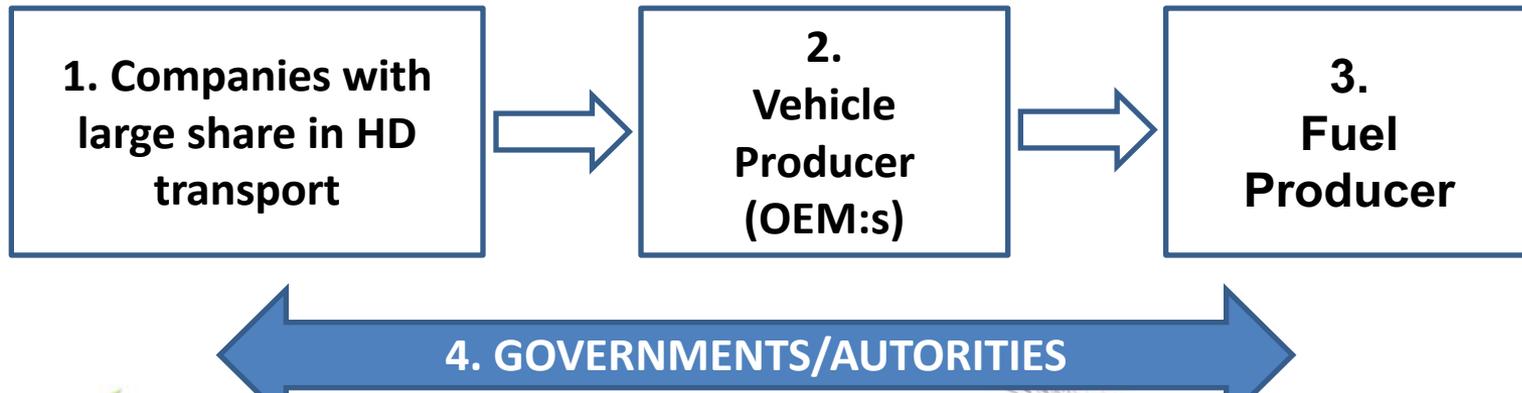
 DME SWEDEN

Key actors in collaboration

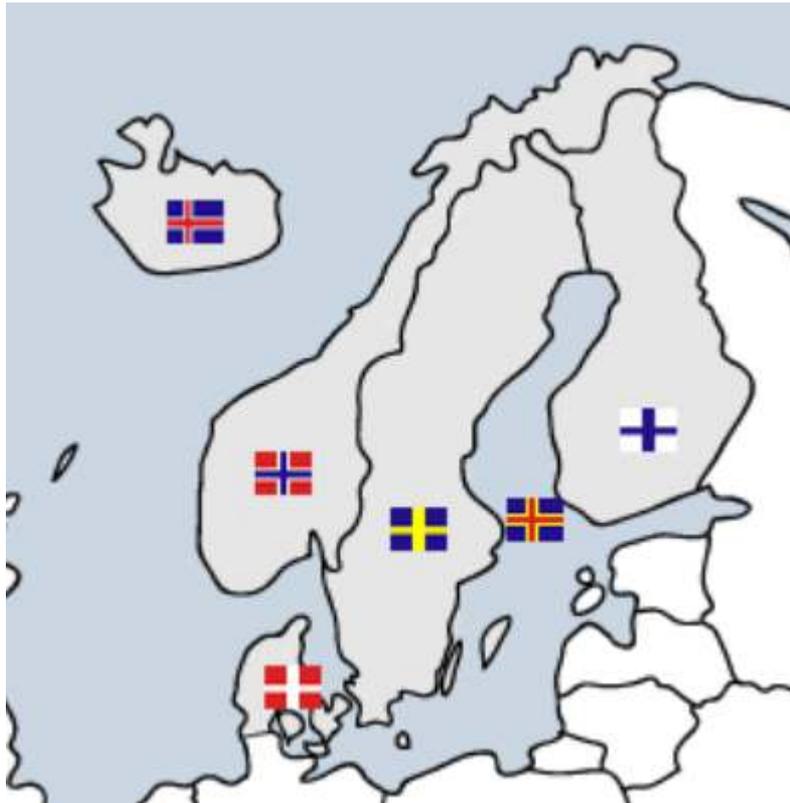
Historic: SUPPLY PUSH



Future: CLIMATE/MARKET PULL



Nordic perspective



There is a general common view with respect to the climate and the environment within the Nordic countries.

The Nordic market has some 27 million inhabitants

To get a better impact:

Look for common grounds within the sustainable fuel area. Seek to act together in the EU community. There is a long list of qualified actors in all important sectors within the Nordic countries.



How can each respective sector group act to fulfil the targets?

- **Transport buyer** – Ask for and use vehicles with 100% sustainable fuels solutions with minimal impact in the climate and the environment
- **Vehicle producers (OEMs)** – Produce efficient drive lines which at least fulfil the demands from authorities and customers with respect to climate, environment and costs
- **Fuel producers** – Push for development and production of fuels with minimized climate and environmental impact in a "Well to Wheel" perspective and at the same time meet the demand on fuel quality from the OEMs
- **Politicians** – Create long term stable legislation enabling investments in large scale sustainable fuel production in Sweden



Meetings

Meeting #1 June 4 with transport buyers

6 large transport buyers such as IKEA, Södra and Arla Food

Meeting #2 October 3 with transport buyers and OEMs

Transport buyers now total 9, e.g. also DHL, plus Scania and Volvo. Info also from Ford. Three additional large transport buyers to join next meeting.

Meeting #3 planned for November 13 with same as for meeting #2 plus potential fuel producers

Contacts with potential fuel producers under way. List not ready yet. Key representatives from governmental bodies also invited.

FURTHER PLANS AFTER MEETING #3 NOT DECIDED IN DETAIL. OUTCOME OF #3.

Meeting #4

To be arranged with top management of committed companies which hopefully will be a vast majority of the companies which have attended Meeting #1-3.

Objective for that meeting is to plan how to connect to key politicians and to finetune the key message. Preliminary text See earlier slide 8 for **politicians**.

Should then lead to Meeting #5 with politicians.

Example of text which has been part of invitation letters to meetings

- Sweden's overall goal in the climate policy framework is to have zero net emissions of greenhouse gases to the atmosphere by 2045, at the latest.
- We (LoSFC) cannot wait to start the conversion. We need a forum where a number of large participants in the transport sector representing transport buyers, vehicle producers and fuel producers work together to jointly develop complete transport solutions comprising close to zero GHG emissions, high efficiency well to wheel and very good emissions data. Furthermore, to plan and present appropriate policies and activities for politicians and authorities, and to work together on implementing these much needed changes.
- **One way to formulate the overall Objective:**

Influence the process required for the Swedish Parliament to decide without delay on long term stable legislation enabling investments in large scale sustainable fuel production in Sweden.