

A scenic landscape featuring a road, a river, and a PostNord truck. The road is a two-lane highway with a white guardrail, curving along a rocky embankment. A blue PostNord truck is driving on the road. The background consists of a dense forest of tall, thin trees on a hillside, with a mountain peak visible in the distance. The sky is overcast with light clouds. The water in the foreground is calm, reflecting the surrounding landscape.

Transport Procurement

Test of NTME₂cap in an integrated transport system

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postnord

Test of NTME₂cap in an integrated transport system

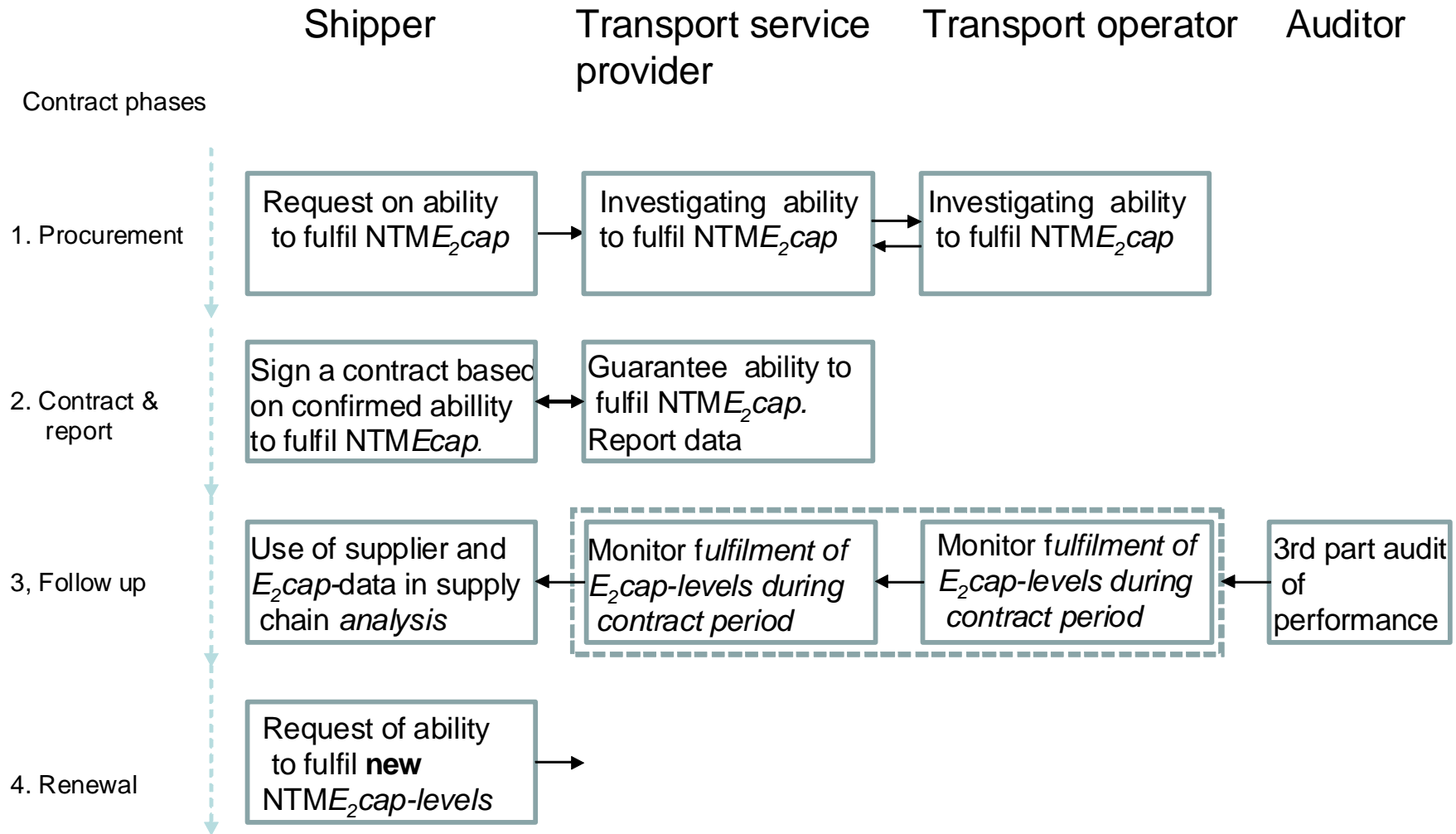
Case study Systembolaget



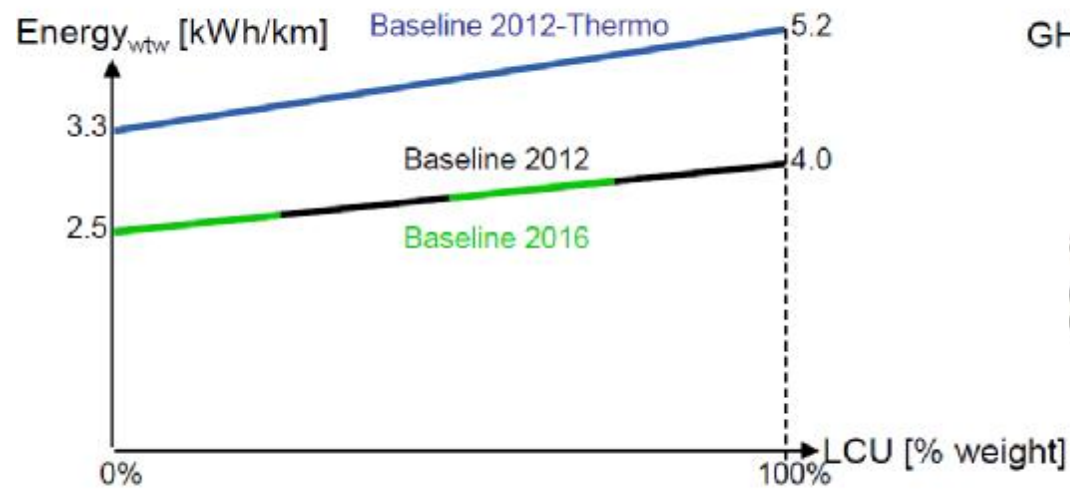
NTME₂cap aims at meeting shippers need to secure legal responsibility and stimulate the improvement of the environmental performance of transport services.

The performance is measured as specified energy use and CO₂e performance from the well to the wheels (wtw) forming general baselines that must not be exceeded by either individual or fleets of the transport suppliers vehicles or vessels.

Operational process of NTME₂cap



Baselines example Energy and GHG



Chosen transport flow

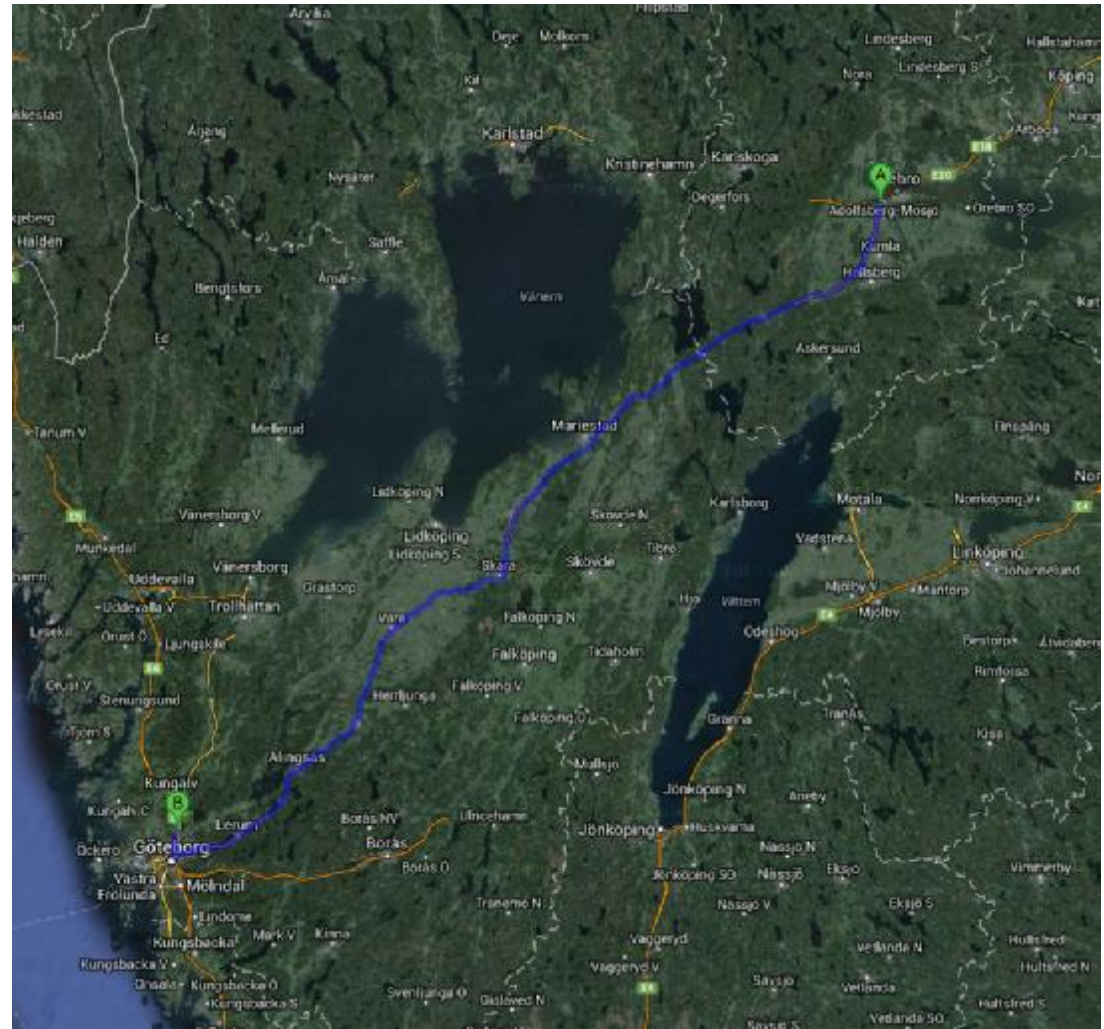
Systembolagets stock depot in Örebro

PostNord Logistics terminal in Örebro

PostNord Logistics pallet hub in Göteborg

PostNord Logistics distribution branch in Göteborg

Systembolagets stores in central Göteborg



Performance

Route	Distance km	Type of vehicle	Gross weight ton	Fuel consumption liter/km	Load capacity, kg	Load weight kg	Load factor w %
Systembolagets depå	1	Heavy truck	14-20	0.25		7,350	
HUB Örebro till HUB Gbg	278	Heavy 3 axle truck + 4 axle trailer	42	0.42	36,000	23,300	65%
		Heavy 3 axle truck + 3 axle trailer	33	0.37	27,000	18,300	68%
Distribution Backa- Gbg City	10	Van 3.5 ton, diesel	3.5	0.12		800	
		Van 3.5 ton, methane gas		0.16			

Classification

Truck type	CO ₂ e wtw [g/km]	Energy wtw [MJ/km]	Load factor [%]	FC [l/km]	Gradient	Road	Engine	Fuel	Source
NTME ₂ cap Rigid truck 14-20t baseline 2014	684	10.1	25%	0.239	2%	Urban	Euro 4	Diesel EU B5	NTM
NTME ₂ cap Rigid truck 14-20t baseline 2014	758	10.5	47%	0.239	2%	Urban	Euro 4	Diesel EU B5	EN 16258
Postnord*	674	9.7	25%	0.25				Mk1 B5	NTM
NTME ₂ cap Rigid truck 14-20t baseline 2014	804	11.8	69%	0.281	2%	Urban	Euro 4	Diesel EU B5	NTM
NTME ₂ cap Rigid truck 14-20t baseline 2014	891	12.4	52%	0.281	2%	Urban	Euro 4	Diesel EU B5	EN 16258
Postnord*	674	9.7	69%	0.25				Mk1 B5	NTM
NTME ₂ cap Truck with trailer 40-50t baseline 2014	1128	16.6	52%	0.394	2%	Rural	Euro 4	Diesel EU B5	NTM
NTME ₂ cap Truck with trailer 40-50t baseline 2014	1249	17.4	25%	0.394	2%	Rural	Euro 4	Diesel EU B5	EN 16258
Postnord*	1131	16	52%	0.42				Mk1 B5	NTM
NTME ₂ cap Van baseline 2014	246	3.6	47%	0.09	2%	Urban	Euro 4	Diesel EU B5	NTM
NTME ₂ cap Van baseline 2014	274	4.0	47%	0.10	2%	Urban	Euro 4	Diesel EU B5	NTM
NTME ₂ cap Van baseline 2014	273	3.8	47%	0.09	2%	Urban	Euro 4	Diesel EU B5	EN 16258
Postnord diesel*	331	4.8	47%	0.123				Mk1 B5	
Postnord biogas*	94	9	47%	0.204				Biogas	

Conclusions - Integrated Transport System

- The methods output is easy to communicate
 - Compared to a dedicated transport, an integrated transport system is more complicated to analyze
 - It is particularly difficult to analyze the transport efficiency for a specific customer
 - If it is possible, the whole actual integrated transport system shall be evaluated
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- Is it possible...?

Thank you
for your
attention!