

# SECAP development

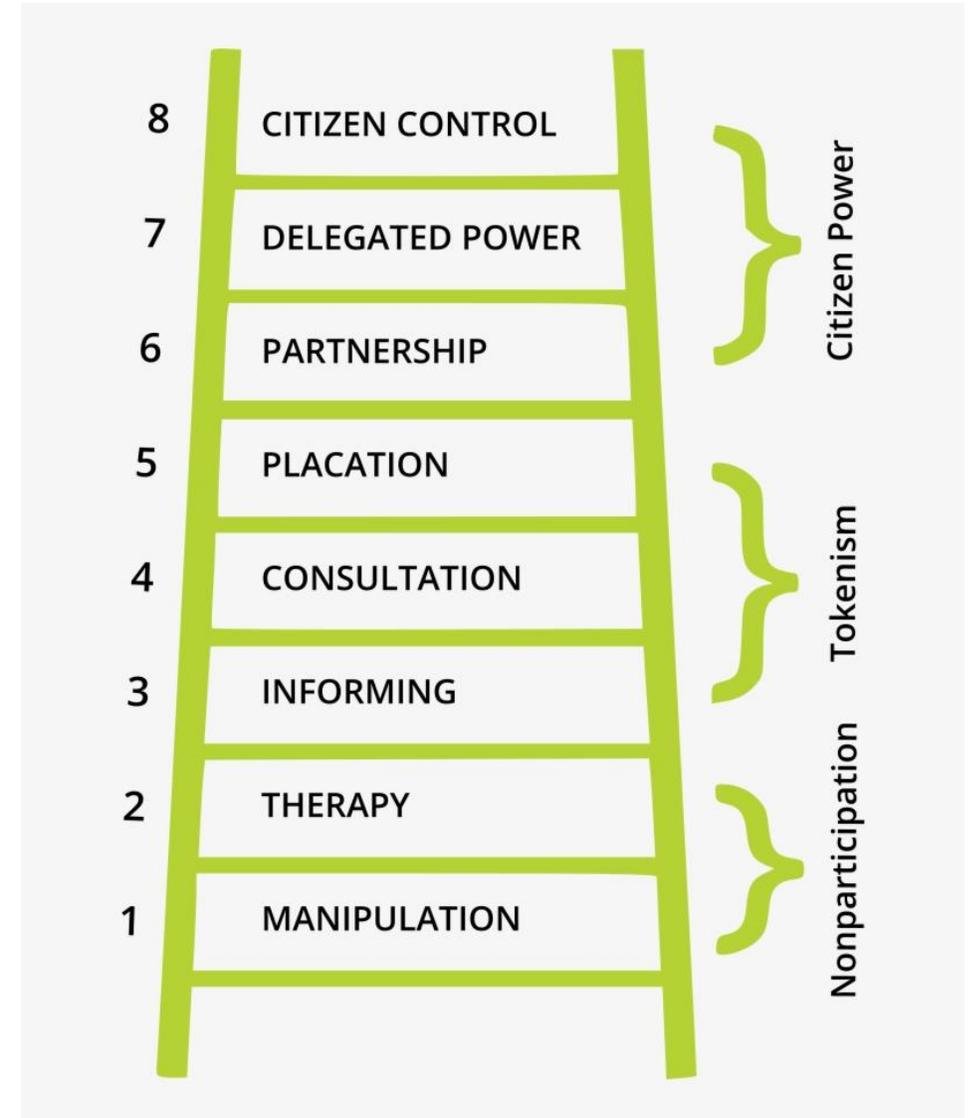
# The PentaHelix method – why?



- Norwegian municipalities and counties have made SECAPs for up to 20 years – mandated by law last 10 years
- Low implementation rate
- Increasing public and political interest
- Available knowledge and technology

# The PentaHelix method – how?

1. True involvement with all parts of the society: industry, public (local, regional, state level), NGOs, inhabitants, academic sector
2. Climate communication and climate psychology
3. Improved climate and energy statistics
4. Planning theory; using SMART goals (Specific, Measurable, Ambitious, Realistic, Timed)
5. Climate budgets connecting SECAPs and municipal budgets



# 1. Climate Partners

- Workshops with ~2000 people from all parts of the society
  - Gathering knowledge
  - Anchoring goals
  - Cooperating on measures
- Established Climate Partners as a lasting partnership including all five pillars of the PentaHelix
- PentaHelix guidelines:  
<https://pentahelix.eu/wp-content/uploads/2019/04/D3.2-Pentahelix-guidelines- updated-version.pdf>



## 2. Climate communication

- Cooperated with climate psychologists, research institutes, and communication experts to develop climate communication guidelines and training materials:

[D3.4-Guidelines-for-the-implementation-of-climate-communication-and-training-materials final-1.pdf \(pentahelix.eu\)](#)  
(also available as leaflet and ppt)





# 4. SMART goals

## Main objectives

Greenhouse gas emissions in Østfold County are to be reduced by 60 % compared with 2016.

By 2030, at least as much energy in Østfold County shall be produced as is consumed through increased production of more than 3000 GWh of renewable energy, energy efficiency improvements and increased production of district heating.

By 2050, all energy produced and used in Østfold County shall be fossil free or plantbased. By 2050, Østfold County shall not discharge more greenhouse gases than we can bind (net-zero).

To contribute to the global low-emission society by 2050, Østfold County shall reduce consumption and reduce our carbon footprint from the goods and services we buy.

[SECAP østfold in English](#)

### Transport:

- By 2030, all transport in Østfold County shall be fossil free. The percentage of passengers using public transport will reach 10 %. The percentage of bicycle users should be 15 % for urban areas and 8% in rural areas, for a total of 10 %.
- By 2025, public transport, all county municipality vehicles and machinery, and public transport services purchased by the county will use sustainable fossil-free fuel, predominantly electric, hydrogen or biogas.
- By 2030, just as much sustainable fuel should be produced in Østfold County as is used.
- By 2030, everyone in Østfold County shall have sufficient access to renewable fuels. There will be filling stations for biogas and hydrogen in the vicinity of the E6 and E18 freeways, and at least one public charging station per 10 rechargeable cars.

### Agriculture:

- Energy consumption in agriculture in Østfold County shall be fossil free by 2030.
- Food production in Østfold County shall increase by 20 % by 2030, but emissions per produced unit will be 20 % lower than in 2016.
- Carbon retention in forests, marshes and soil should be at least equal to the biological emissions from agriculture in Østfold County by 2050.

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INNOVASJON OG  
INFRASTRUKTUR



15

LIV PÅ  
LAND



# 5. Climate budgets

## Direkte utslipp

Reduksjoner vises i tonn CO2 ekvivalenter

Beløp i 1000 kr

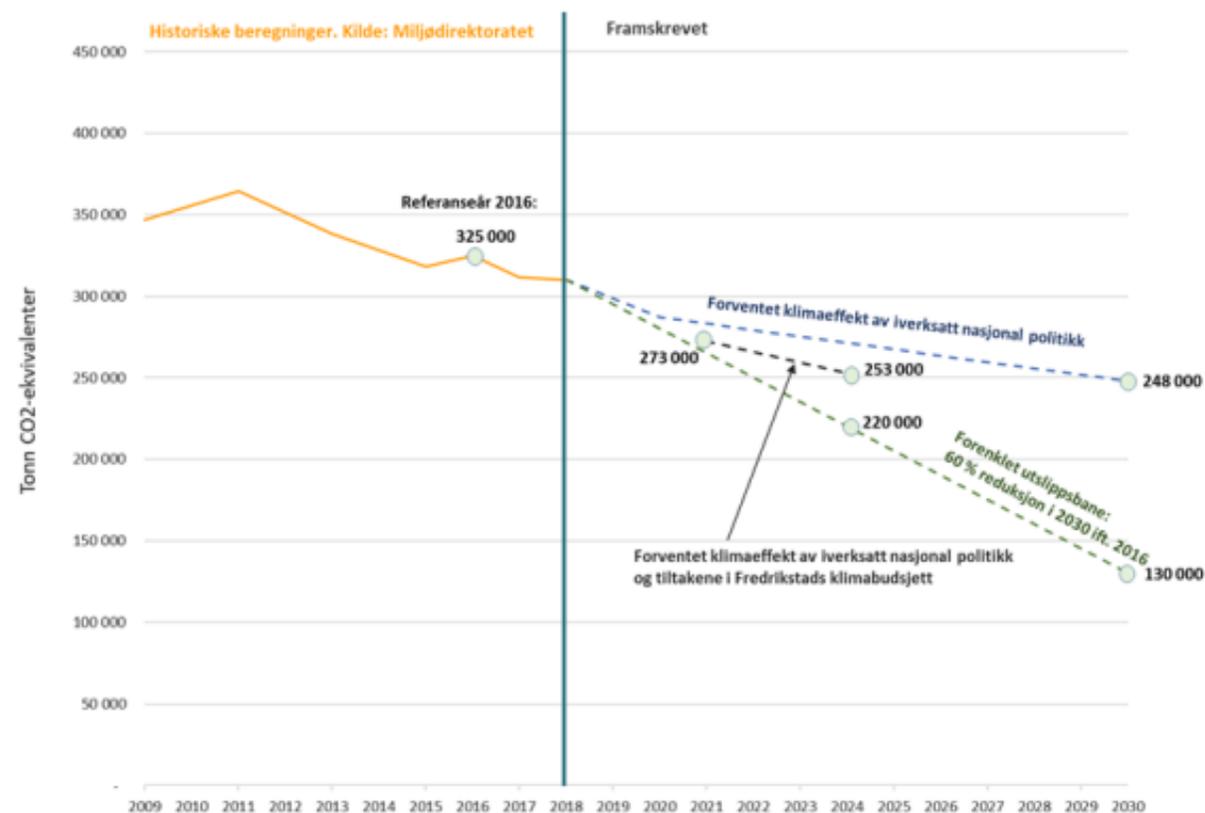
	Kostnad	Totalkostnad	Årlig energibesparelse i	Sektor	Kilde	Reduksjon	Reduksjon	Reduksjon	Reduksjon
	2022	2022-2025	kWh						
Grønn Havn - Elektrifisering av droner (båter) fra og med 2022	0	0	0	Sjøfart	Tunge kjøretøy	1 792,0	1 792,0	1 792,0	1 792,0
Delebilordning	0	0	0	Veitrafikk	Personbiler	27,0	27,0	27,0	27,0
Gangetiltak - nå målet om gangeandel på 25 prosent i 2030	2 000	8 000	0	Veitrafikk	Personbiler	111,0	148,0	184,0	221,0
Hjemmekontor (reduksjon reiser)	0	0	0	Veitrafikk	Personbiler	33,0	33,0	33,0	33,0
Leasing av elsykler for kommunalt ansatte	0	0	0	Veitrafikk	Personbiler	53,0	53,0	53,0	53,0
Sykkeltiltak - Tilrettelegge for sykkel - Nå målet om 20 prosent sykkelandel i 2028	5 500	22 000	0	Veitrafikk	Personbiler	756,0	1 243,0	1 730,0	2 216,0
<b>Sum</b>	<b>7 500</b>	<b>30 000</b>	<b>0</b>			<b>2 772,0</b>	<b>3 296,0</b>	<b>3 819,0</b>	<b>4 342,0</b>

## Eksterne tiltak

Reduksjoner vises i tonn CO2 ekvivalenter

	Sektor	Kilde	Reduksjon	Reduksjon	Reduksjon	Reduksjon
			2022	2023	2024	2025
Ferjer på elektrisitet (tre ferjer i 2022)	Sjøfart	Dieseldrevne motorredskaper	4 200,0	8 400,0	8 400,0	8 400,0
Kollektivtiltak for å nå en kollektivandel med buss på 8 prosent i 2030	Veitrafikk	Personbiler	0,0	0,0	0,0	0,0
<b>Sum</b>			<b>4 200,0</b>	<b>8 400,0</b>	<b>8 400,0</b>	<b>8 400,0</b>

Framskrivninger av utslippsreduksjon i Fredrikstad. Utslippskutt måles mot referanseåret 2016.



# Plan for fossilfri v

Mål: Viken fylkeskommune si verksemd s

## Flytskjema for val av køyretøy og maskiner

## PLAN FOR KJØRETØY OG L-2022



### 1. Kollektivtransporten skal være fossilfri før 2028.

- Ruter, ØKT og Brakar skal gjennomføre sine strategier for omlegging til fossilfrie drivstoff, fortrinnsvis el, hydrogen og biogass.



### 2. Fjernvarmen skal være fossilfri før 2028.

- Akershus energi og Østfold energi skal legge om siste rest av spisslast til fossilfri energi før 2028

### 4. Vi skal kjøpe fossilfrie varer og tenester

- Gjennom arbeidet med klimabudsjett og miljøstyring skal vi finne gode fossilfrie alternativ når vi kjøper varer og tenester og investerer i bygg og anlegg.

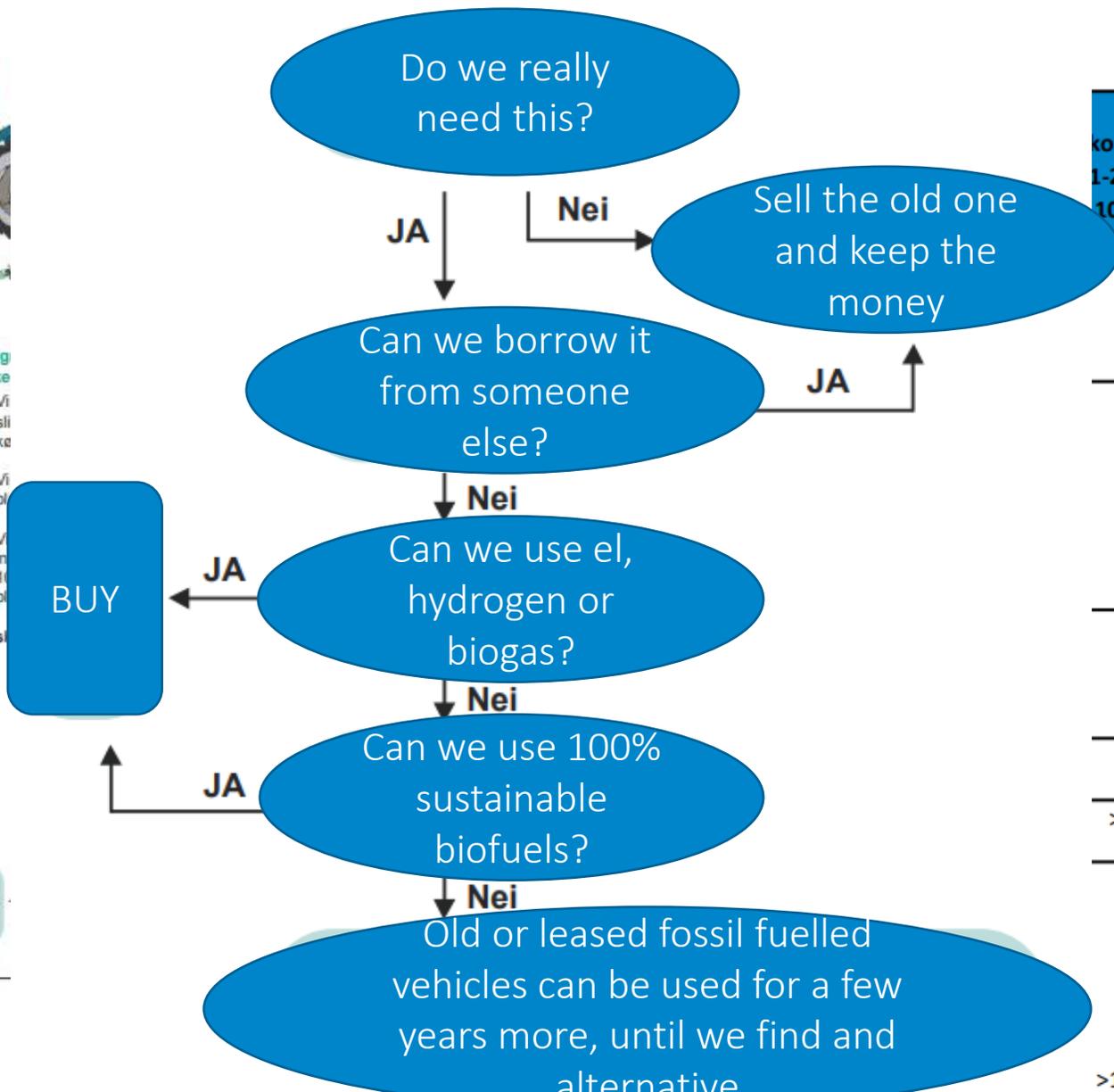


### 3. Eig bruke

- Vi sli ke
- Vi pl
- Vi in 10 pl

Flyts

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Årlig kostnad 2021-2024 i 1000 kr	Årlig effekt, tonn CO <sub>2</sub>	Utslippsreduksjoner pr år for å nå 2028-målet
2 000	>1600	
		-
250		-
2850	15	15
>5500	36	40
>13100	82	100

# Planning for the future, by the future

