

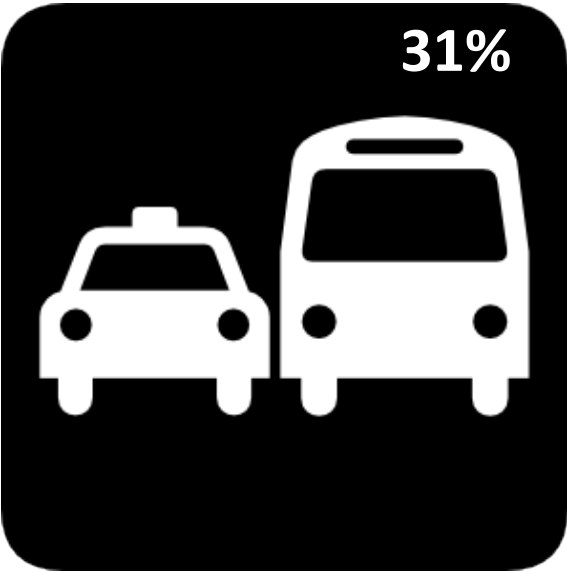
BIO4 FUELS

Bio4Fuels Days

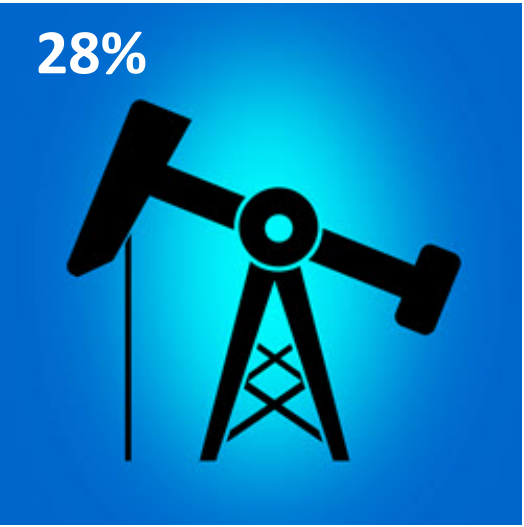
**Norwegian Centre for
Sustainable Bio-based Fuels and Energy**
2 - 3rd November 2017

- HES (Scandic)
- Practical Issues (Janne)
- Introduction (Duncan)
- Overview of Program (Duncan)

Transport



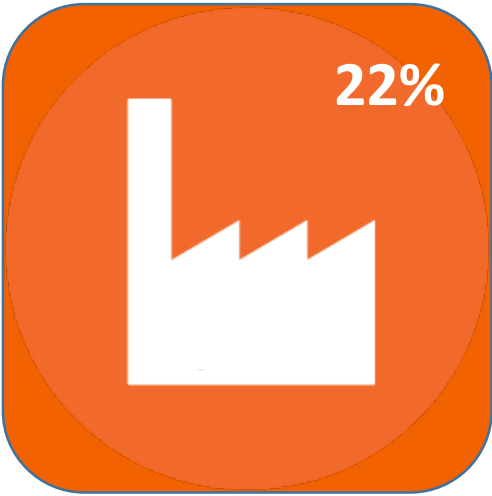
Oil & Gas



19%



22%



Industry

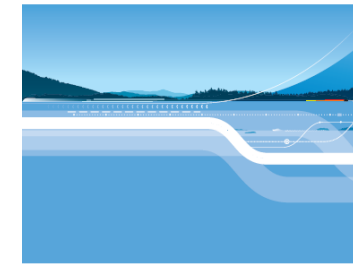
Norway's climate gas release (2015)



Bio4Fuels – linked to National Strategies



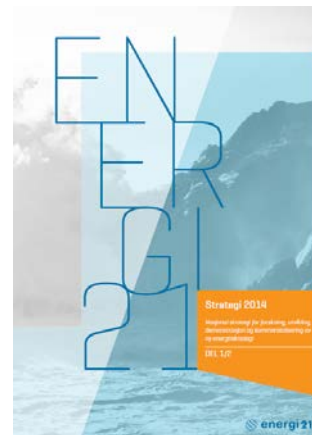
Norwegian
Industry
White paper



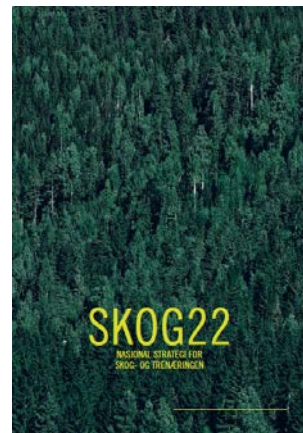
National
Transport Plan



Roadmap
Process Industry
For new Energy Technology



National Strategy
For new Energy Technology



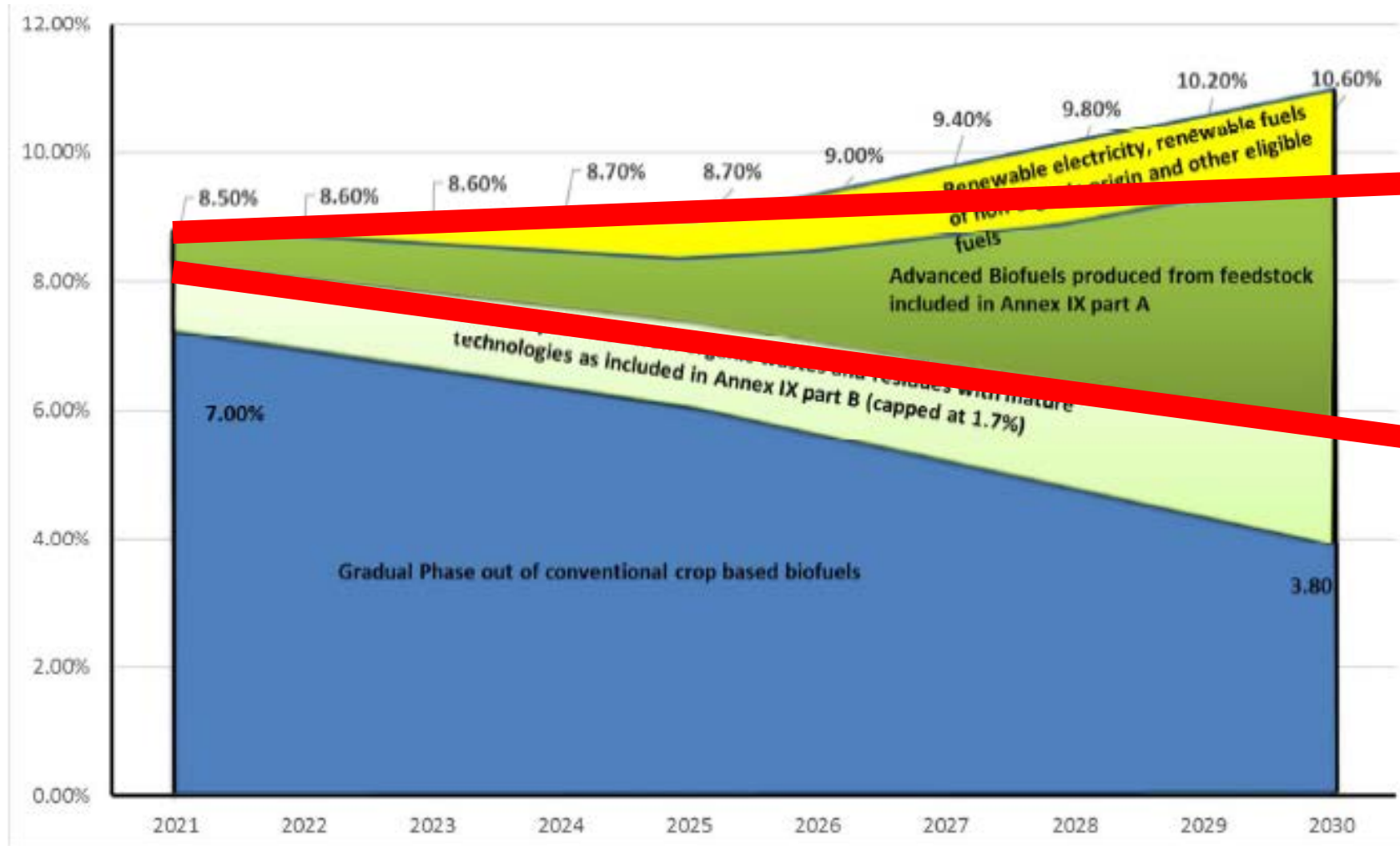
National Strategy for
Forestry and Wood Industry



Norwegian Enterprise
Norwegian Energy Resources

Norwegian
Climate Policy

Promoting Innovation in Transport: EU



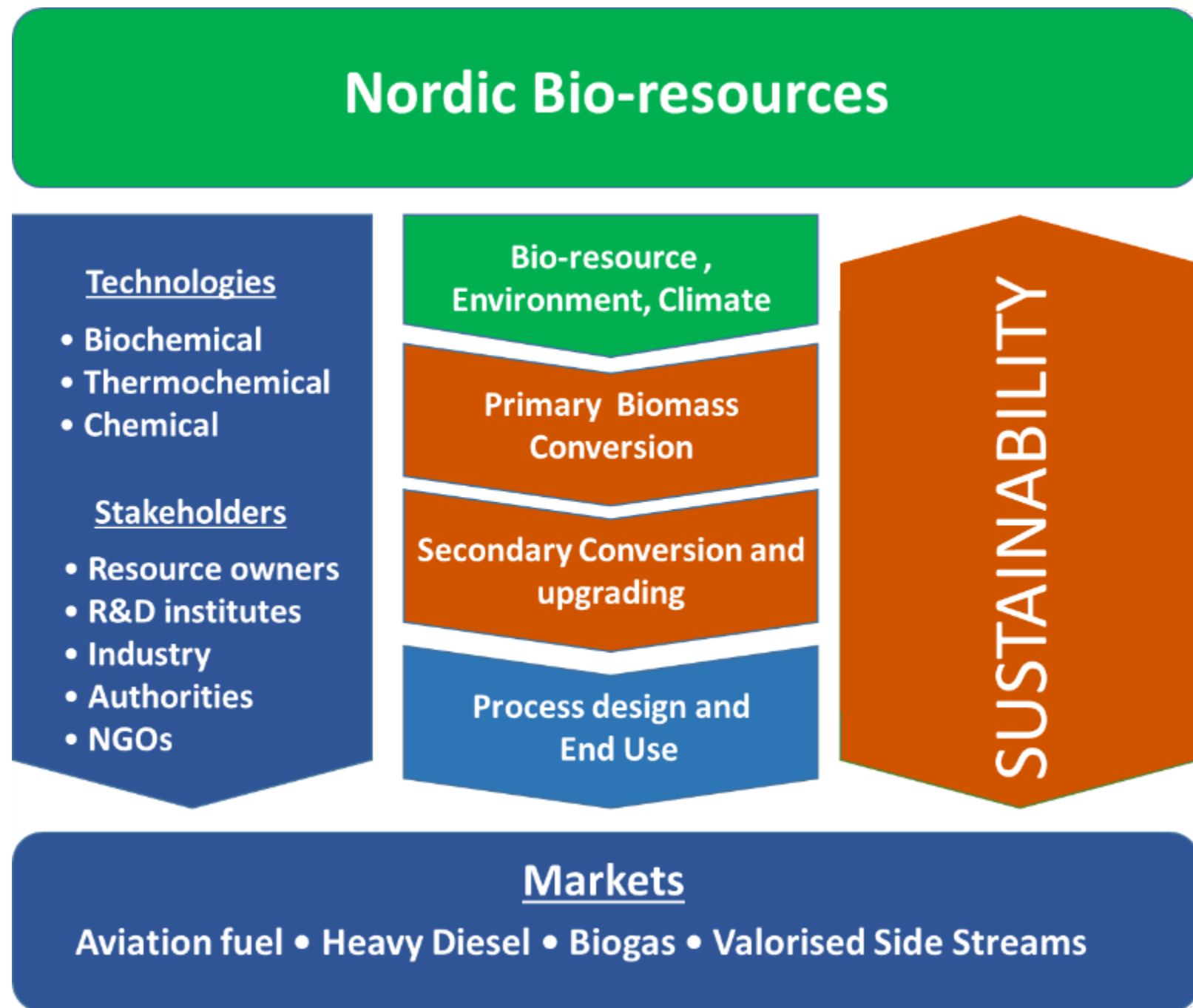
Advanced
Biofuels

BIO4 FUELS

Norwegian Centre
for Sustainable
Bio-based Fuels
and Energy

~ 50 partners

Budget ~270 MNOK, 8 years



**BIO₄
FUELS**

Kick-off Seminar



The Research Council of Norway

Norwegian Centre for Sustainable Bio-based Fuels and Energy

9 -10th February 2017

Vitenparken, NMBU-Ås Campus, Norway



Bio4Fuels General Assembly June 2017

Herøya Industrial Park



Bio4Fuels Days 2017: Scientific Meeting



NORSKE SKOG SKOBN

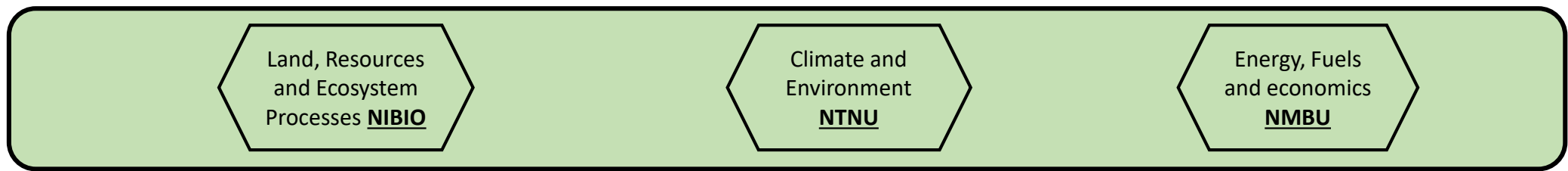
BIOKRAFT AS

Bio4Fuels Day 1 – 2nd November

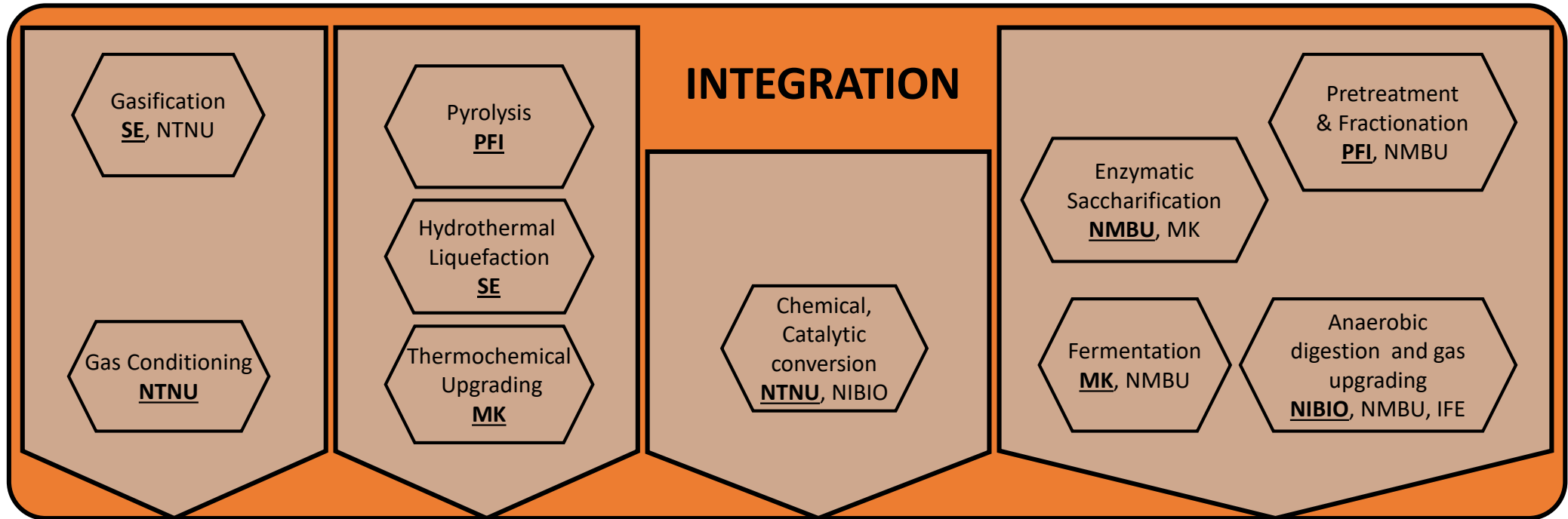
National and International Perspectives				Presenter
09:00	00:20	09:20	Welcome	Duncan Akporiaye, Centre leader
09:20	00:15	09:35	National Transport Plan	Sollie Ole Kristian, Vegvesen
09:35	00:25	10:00	International Advisory Board	Prof. Patricia Thornley, Univ. Manchester
10:00	00:25	10:25	International Advisory Board	Prof. Kristiina Kruus, VTT
10:25	00:25	10:50	International Advisory Board	Dr. David Dayton, RTI International
10:50	00:40	11:30	Coffee	
Bio4Fuels Value Chain				Presenter
11:30	00:15	11:45	Status of Biofuels Research in Norway	Trond Værness, Research Council of Norway
11:45	00:20	12:05	Regional Development and planning	Cecilie Agnalt, Østfold fylkeskommune: On behalf of Østfold; Akershus; Hedmark; Oppland; Sør-Trøndelag;
12:05	00:20	12:25	New developments in enzymes research	Vincent Eijsink, NMBU
12:25	00:25	12:50	Biofuels End Use	Ingemar Magnusson, Volvo Group
12:50	00:25	13:15	Economics of two Biofuels Value Chains	Raf Roelant, PDC
13:15	01:15	14:30	Lunch	
14:30	04:00	18:30	Site visit to Biokraft AS and Norske Skog Skogn	

Timeline for Site visit to Skogn

- 14:30 Buss from Værnes: Arrival Skogn 15:15
- 15:30 – 16:30 Technical Presentations
 - Norske Skog Skogn's papermill.
 - Biokrafts biogas unit.
- 16:30 – 18:30 Site Visit
 - Biokraft
 - Norske Skog Skogn
- 18:30 Bus return Værnes
- (20:00) Dinner Værnes

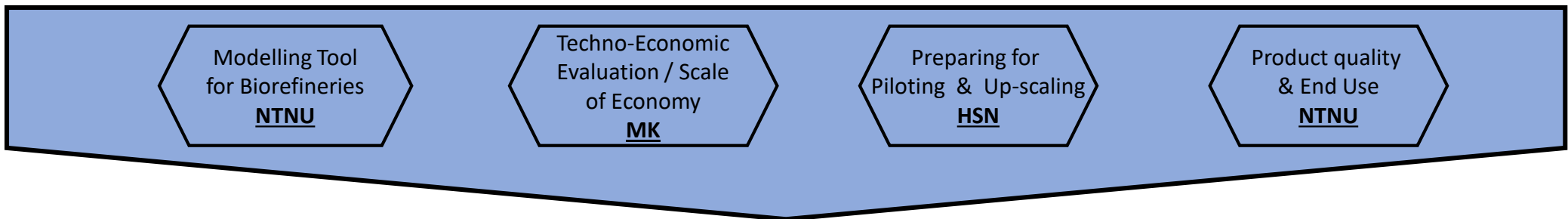


**Bio-resources
(SP1)**

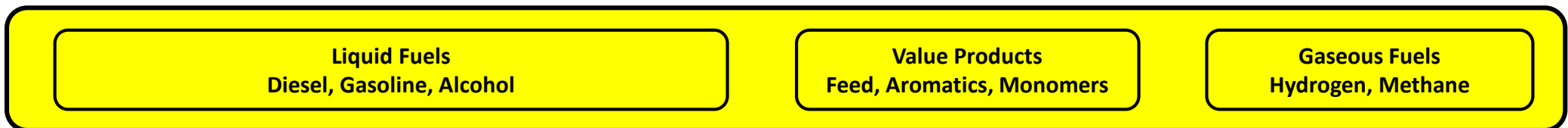


**Primary
Conversion
(SP2)**

**Secondary
Conversion
& Upgrading
(SP3)**



**Process Design
& End Use
(SP4)**



Bio4Fuels Day 2 – 3rd November

09:00	01:30	10:30	Development of Workplan 2018	
			Cluster 1: Biochemical Processing	Aniko Varnai
			Cluster 2: Thermochemical Processing	Per Carlsson
			Cluster 3: Sustainability and Process Design	Bernd Wittgens
			Cluster 4: Stakeholder Engagement	Odd Jarle Skjelhaugen
10:30	00:30	11:00	Coffee	
11:00	01:30	12:30	Development of Workplan 2018	
			Cluster 1: Biochemical Processing	Tormod Briseid
			Cluster 2: Thermochemical Processing	Edd Anders Blekkan
			Cluster 3: Sustainability and Process Design	Francesco Cherubini
			Cluster 4: Stakeholder Engagement	Duncan Akporiaye
12:30	01:00	13:30	Lunch	
13:30	01:00	14:30	Plenary presentation of draft workplan	
	15		Cluster 1: Biochemical Processing	
	15		Cluster 2: Thermochemical Processing	
	15		Cluster 3: Sustainability and Process Design	
	15		Cluster 4: Stakeholder Engagement	
14:30	00:20	14:50	Input from the International Advisory Group	
14:50	00:10	15:00	Closing remarks	

EXPECTATIONS FROM BIO4FUELS DAYS

Involvement of Stakeholders ~ 50



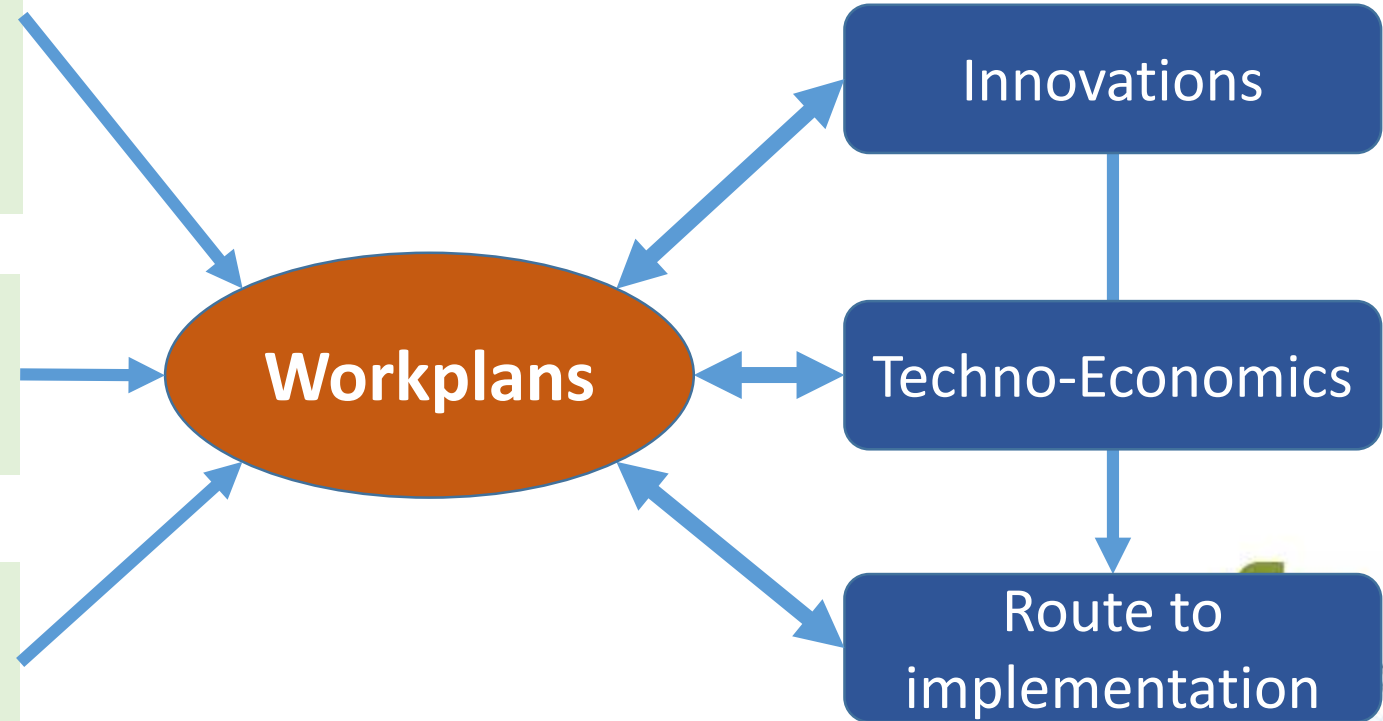
Expectations from the Bio4Fuel days

Perspective of the State of the art and challenges that need to be addressed

- National, Nordic, European, USA

Ambitions and Expectations from the User partners

Ambitions and Expectations from the Research partners





bio4fuels@nmbu.no