# WHAT IS NTNU ENERGY TRANSITION?



## WHEN?

In 2014 the Rector at NTNU initiated a dialogue with major industrial companies in Norway, with the purpose of establishing and financing new world leading research groups at NTNU which could deliver research at the highest international standard. Following from this, Equinor and NTNU agreed in 2015 to develop such a research group on energy transition strategies, which they named NTNU Energy Transition Initiative (NETI).

## WHY?

The energy transition ahead of us is vital for a sustainable future. NTNU Energy Transition Initiative was established to deliver world leading research on energy transition strategies to achieve the Paris ambitions in an efficient and realistic way. The Initiative shall give knowledge-based advice to corporate and governmental decision makers on how to transform the energy system to support transition to a sustainable society.

As the whole energy system is changing, we believe that an interdisciplinary approach to the transition is key, including industry, economy, technology, social science and the role of the consumer, among others.

## WHAT?

#### **MISSION STATEMENT**

The NTNU Energy Transition Initiative is a research portfolio on the future energy mix, and energy systems transition with knowledge-based contributions to societal debate. We aim to be trusted advisors to Norwegian and European decision makers in their pursuit of achieving the goals of the Paris Agreement.

#### **CORE VALUES**

#### **OPEN**

- to new science
- to new people
- to new technologies
- to change
- for feedback

#### CONSTRUCTIVE

- solution-oriented
- technology-neutral
- multidisciplinary
- effective
- valuable

#### **OBJECTIVES**

#### NTNU Energy Transition Initiative aims to:

- · be a research and fact base for decision makers and policy
- participate and help define public debate
- create dialouge between academia, policy, industry and government
- be visible to the Norwegian and European public

#### TARGET AUDIENCE

PRIMARY

**POLICY** 

**ACADEMIA** 

INDUSTRY AND GOVERNMENT







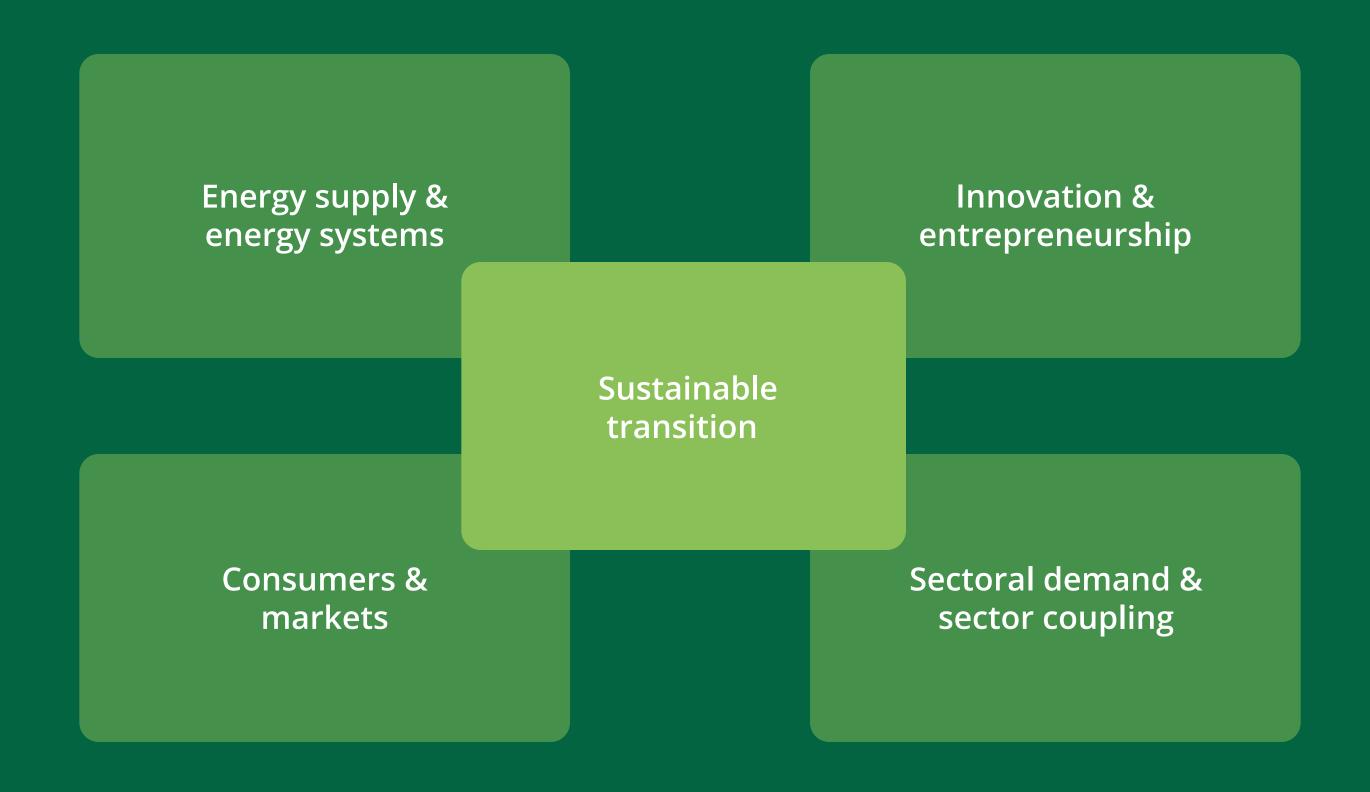
**SECONDARY** 

The Norwegian and European public

# NTNU ENERGY TRANSITION



#### RESEARCH AREAS



# WHO?

Board



Director Asgeir Tomasgard Strategic management

#### Management team



International

advisory committee



Administrative coordinator Hege Nakstad



Research director Anne Neumann



EU Coordinator Raquel Santos Jorge



Communication

Martin Hansen



Innovation
Vivek Sinha



Energy Transition Week
Rita D'Oliveira Bouman



Researcher Pedro Crespo del Granado Faculty of economics and technology management



Researcher Paolo Pisciella



Researcher

Stepan Vesely



Researcher Steffen J. Bakker

Faculty of economics and technology management



Director Industrial Relations Astrid Sørensen



Director International Relations Pål Rasmussen



Faculty of Humanities

Researcher

Julius Wesche



Faculty of social sciences and education



Rita D´Oliveira Bouman

Faculty of economics and technology management

Researcher

#### Professor Anne Neumann

Regulation, industrial organization and energy markets

#### Professor Magnus Korpås

Integration of renewable energy in the energy system

#### Professor Marianne Ryghaug

Interface between public participation, innovation and technology development, energy and climate policy

#### Professor Arild Gustavsen

Smart cities, zero emission neighbourhoods and buildings

Professor Ruud Egging-Bratseth

Energy systems, markets and infrastructure

#### Professor Christian Klöckner

Social innovation and sustainability

#### STRATEGIC MANAGEMENT

Professor Asgeir Tomasgard

NTNU Energy Transition Initiative Director

Research interests

Professor Roger Sørheim

Innovation

#### Professor Terese Løvås

Gasification, alternative fuels and thermodynamics

# Professor

Stein-Erik Fleten

Professor

Ann Mari Svensson

Batteries and storage

Power markets and renewable energy

#### Professor Anders Hammer Strømman

Industrial Ecology and life cycle assessment

#### **BOARD**

The Director of the NTNU Energy Transition Initiative reports to the board.

#### The board shall:

- ensure that the activities in the work plan are completed within the defined period
- monitor the implementation of NTNU Energy Transition Initiative as well as the deliverables
- assess the compliance with the work plan and communication plan
- act as a discussion partner for the Director on strategic choices
- approve major changes to the work plan and communication plan
- guide the management team in revisions of the work plan and communication plan

#### The NTNU Energy Transition Initiative board consists of:

- Johan E. Hustad, Chair, Director NTNU Energy
- Tor Ulleberg, Deputy Chair, Equinor
- Ane Torvanger Brunvoll, NVE
- Marie Bysveen, Sintef Energy
- Sverre Gotaas, Herøya Industripark as
- Bjørn Holsen, Statkraft
- Alfred Skår Hansen, Gassco
- Jan Fredrik Stadaas, Equinor
- Pål Kristian Moen, Statkraft

#### INTERNATIONAL ADVISORY BOARD

- Jae Edmonds, PNNL
- Nick Eyre, University of Oxford
- Carolyn Fischer, Resources for the Future
- Steven Gabriel, University of Maryland & NTNU
- Richard Green, Imperial College
- Christian von Hirschhausen, TU Berlin
- Franziska Holz, DIW Berlin & NTNU
- Volker Krey, IIASA & NTNU

- Mark O'Malley, NREL
- Reinhard Madlener, RWTH Aachen University & NTNU
- Henrik Madsen, NTNU
- David Newbery, University of Cambridge
- Sergey Paltsev, MIT
- Michael Pollit, University of Cambridge
- Frank O'Sullivan, MIT

#### INTERNATIONAL NETWORK























#### INTERNATIONAL ADJUNCT PROFESSORS

International adjunct professors to facilitate the cooperation between NTNU Energy Transition Initiative and the international institutions



Dr. Franziska Holz, DIW Berlin & NTNU



Dr. Reinhard Madlener, RWTH Aachen University & NTNU



Dr. Steven A.
Gabriel,
University of
Maryland & NTNU



Dr. Volker Krey, IIASA & NTNU

## HOW?

#### **ENERGY TRANSITION WEEK**

The Energy Transition Week is a key meeting point to facilitate dialogue and debate challenges and solution for the transition to a future sustainable energy system. It is a yearly event hosted from Trondheim, gathering international speakers, expert panelists and more than 1000 attendees from policy makers, government, industry and academia. It includes the Energy Transition Conference, the Trondheim Tech Port Conference and a series of workshops.

#### **WORKSHOPS**

Every year NTNU Energy Transition Initiative organizes workshops with Norwegian and international academic and industry experts. This is an important arena for dialogue and research dissemination.

#### **POLICY BRIEFS AND REPORTS**

Based on ongoing and completed research, NTNU Energy Transition Initiative develops policy briefs and reports on important research and political issues, in collaboration with research institutions and industry partners.

#### **OTHER**

Additionally, activities are distributed through a podcast series, publications, social media, newsletters and external media outlets. Visit ntnu.edu/energytransition/ for more information.