

ENERGY TRANSFORMATION & INNOVATION

Works in Collaboration with



Climate-KIC is supported by the EIT, a body of the European Union



Our Vision

Climate-KIC Australia is a Knowledge and Innovation Community dedicated to creating a climate resilient, liveable and thriving Australia for all with a zero carbon, circular economy.

New Pathways to transition are already available

- Energy Transition Commission Mission Possible
- Climateworks Decarbonisation Futures
- Decaprio, UTS, UOM, DLR One Earth Climate Model
- A2EP Value Chain Research



Transformative Change is Required

Continuing to work through gradual, incremental changes will not be enough. What is needed now is a fundamental transformation of economic, social and financial systems that will trigger exponential change in decarbonisation rates and strengthen climate resilience.



Need to abate the hard things as well!



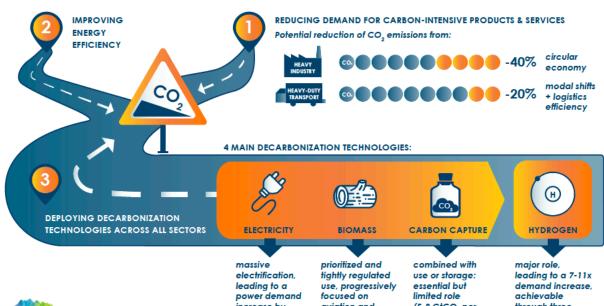




ECONOMICALLY

It will cost less than 0.5% of global GDP.

THERE ARE THREE MAIN ROUTES TO DECARBONIZATION







increase by 4-6x

aviation and plastics feedstock (5-8 GtCO, per annum)

through three production routes

WHY ENERGY EFFICIENCY AND **DEMAND MANAGEMENT MATTER**

IN THE HARDER-TO-ABATE SECTORS, ENERGY EFFICIENCY IMPROVEMENTS AND DEMAND MANAGEMENT CAN:

REDUCE CO2 EMISSIONS



REDUCE COST

of decarbonizing harder-to-abate sectors:

EG CEMENT	PLASTICS	STEEL	SHIPPING	AVIATION	TRUCKING
			-45%		
Total cost for the economy, mid-century			US\$0.8tn		US\$1.5tn

REDUCE THE SCALE AT WHICH DECARBONIZATION TECHNOLOGIES NEED TO BE DEPLOYED



-25,000TWh/year of electricity



















-45_{EJ/year} of biomass

















-2Gt/year of carbon capture



















EIT Climate-KIC Deep Demonstration Projects

- Deep Demonstrations of Just Transition for Europe's Heavy Industrial and Coal Regions
- Healthy Cities; Maritime Hubs; Circular Economy; Finance;
 Carbon Sinks; Resilient Regions.
 - Demand Led
 - Systems innovation Approaches matching demand with innovation communities and tackling multiple levers of change
 - Identify the fastest pathways to change.



DEEP DEMONSTRATIONS DESIGN PROCESS

IDENTIFY AND ENGAGE PROBLEM OWNERS OR COHORT OF PROBLEM OWNERS

WORK WITH PROBLEM GUA JAU20, 27FKWO UNUSUAL ACTORS TO MEATE, EXPLORE ENCACE

CO-DESIGN WITH PROBLEM OWNERS. SELECTED DESIGN PARTINGRS AND OPTION TEAMS

WORK WITH PROBLEM OWNERS, SENSE-MAKING PARTHERS AND OPTION TEAMS

WHY

WHERE WHAT

MAKE CHOICES

How

DESIGN OPTIONS

· CO-DESIGN AND

DEVELOP INDIVIDUAL

SO WHAT

AGREE INTENT

EXPLORE, IDENTIFY AND AGREE THE SYSTEMS TO WORK ON AND STRUCTURAL CHANGES TO ADDRESS OR WORK TOWARDS

· SCOPE POSTIONS TO TAKE

AND WHAT COMBINATION TO WORK ON = PORTFOLIO EFFECT · EXPLORES LOOK FOR WHO IN THE WORLD IS DOING SOME-THING IN THESE POSITIONS PREPARE THE GROUND

· CONDUCT DUE DILIGENCE

ON PROSPECTIVE OPTIONS

· ENSURE AGREEMENTS IN

PLACE WITH POSSIBLE PARTHUSS

PROJECTS AND THE PORTFOLIO AS A WHOLE = GIVE SHAPE

MANAGE PORTFOLIO

· PROJECT MANAGE INDIVIDUAL PROJECTS . USE PORTFOULD

COMPOSITION TO REVIEW

MAKE SENSE · EXTRACT INSIGHT THROUGH CONTINUOUS SEN SE MAKING

· CENTERATE ACTIONABLE INTELLIGENCE FOR POLICY & DECUSION SUPPORT

CAPTURE LEARNING

· INSIGHT CARDS AND INTELLISENCE REPORTS LOADED TO EXAPTIVE

· DRAW UP AN MOU WITH PROBLEM OWNER(S)

· SUPE SPECIAL PURPOSE VENICLES AND DESIGN

· SET UP SPECIAL PURPOSE YELLCLE

CLIMATE **AUSTRALIA**

FIVE STEPS

TO INNOVATION



Bring key players together





Identify needs





Find ideas





Turn ideas into viable solutions





Connect solutions with investors





Thank you CLIMATE