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# Developing the EU Long-Term Climate Strategy

# Key messages

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1. **EU needs a new long-term climate strategy**
2. **Many choices, that all have political implications**
3. **Different audiences and political processes require different, but consistent, strategic guidance**
4. **A coordinated sequence of three strategy documents (broad Vision + concise UNFCCC submission + detailed Roadmap)**
5. **Key considerations:**
  - Adequate Ambition
  - Transparency and stakeholder involvement
  - Urgency
  - Combine market and regulatory approaches

# 1. The project

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- Bruegel and ICTSD/ERCST
- Funding from Denmark, France, Germany and Sweden, Climate-KIC, EdF, ENEL, the European Climate Foundation, and Shell
- 5 stakeholder workshops in MS capitals + 2 in Brussels
- 100 p technical report + 10 p Policy Paper

## 2. EU needs a long-term climate strategy (1)

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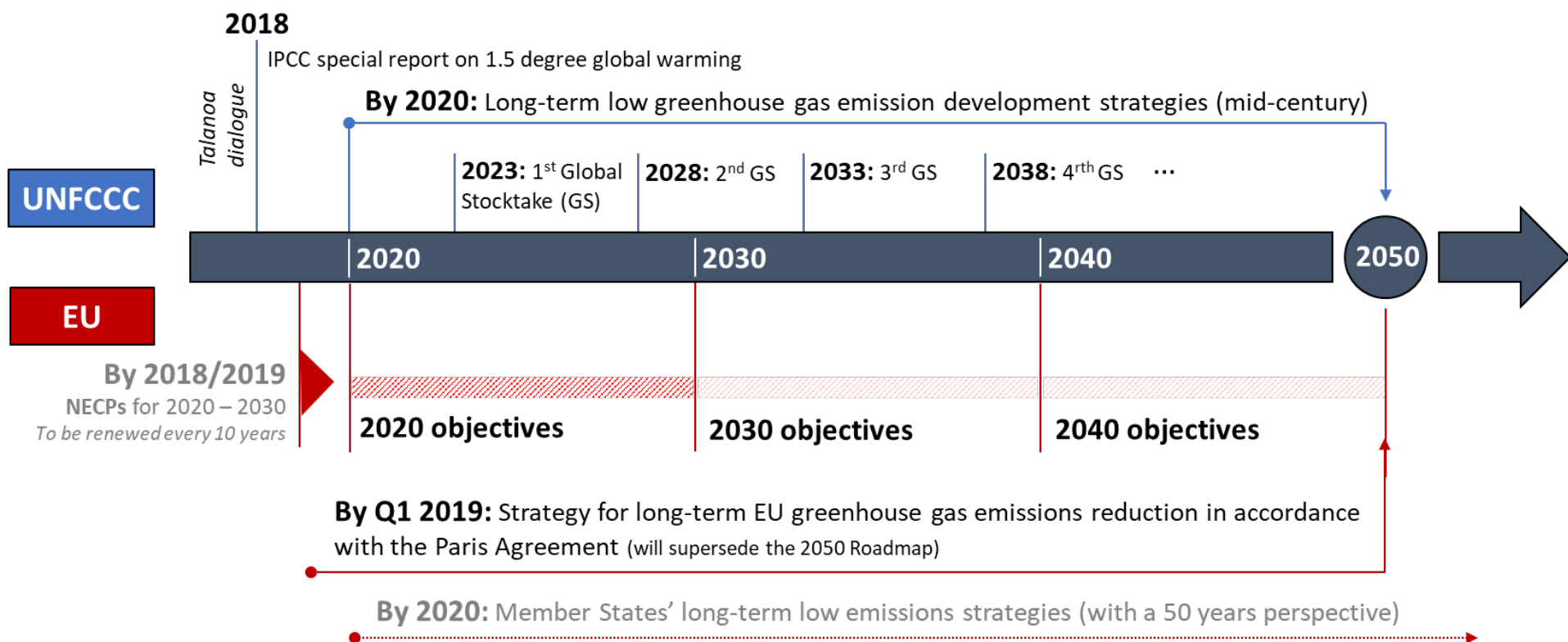
- Paris Agreement (1.5-2 °C)
- New EU carbon commitments

	Coverage	Reduction of all covered countries	EU reduction
<b>Kyoto</b>	18% of global emissions	4-5% from 1990 to 2012	2012: 8%
<b>Doha</b>	11% of global emissions	18% from 1990 to 2020	2020: 20%
<b>Paris</b>	100% of global emissions	carbon neutrality at some point after 2050	2030: 40%* 2050: tbd

- Science of climate change evolved (IPCC, UNEP Gap)

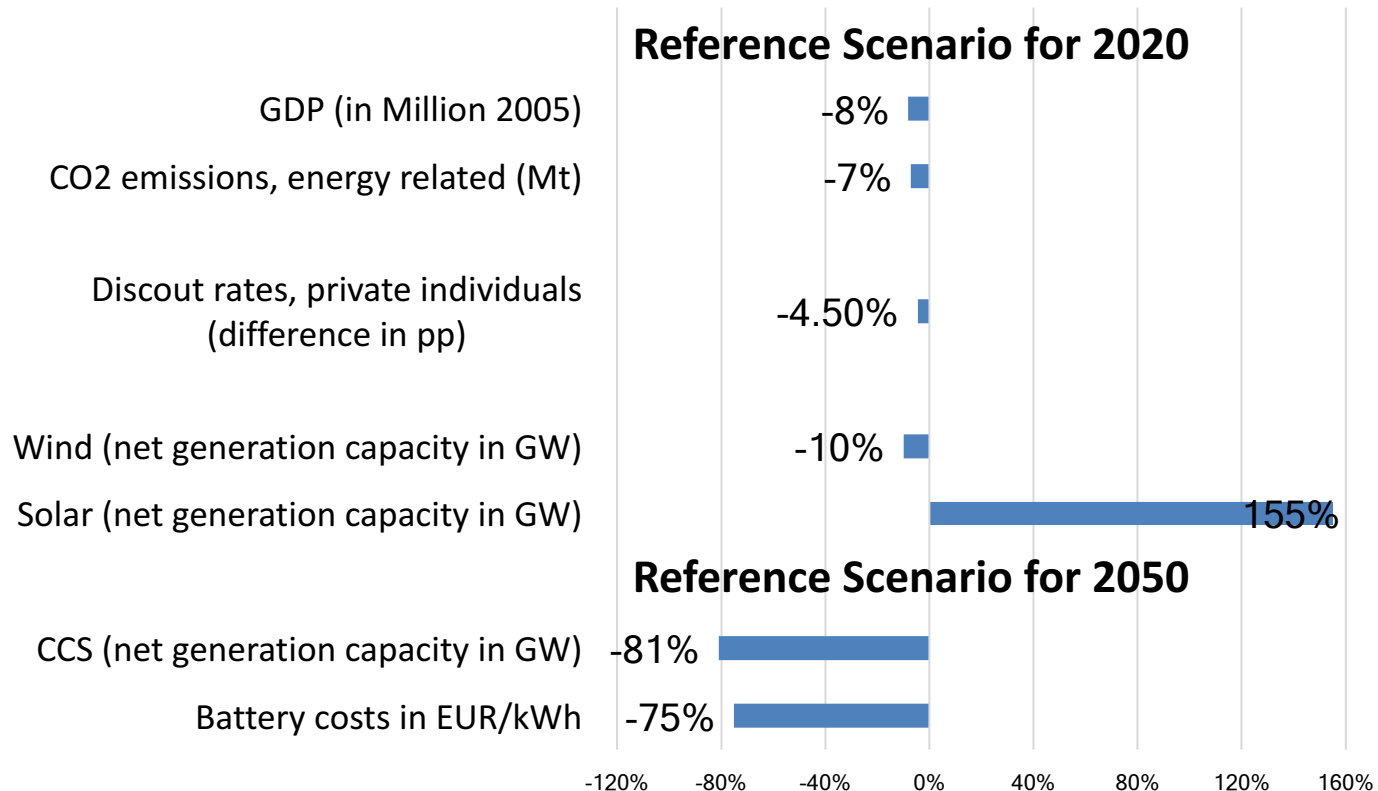
## 2. EU needs a long-term climate strategy (2)

### Coordination with UNFCCC and Energy Union:



## 2. EU needs a long-term climate strategy (3)

Figure 2. Change in expectations 2011 vs. 2016/17



# 3. Structure of the Technical Paper (1)

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## 1. Introduction

- 1.1 Background to the EU 2050 Roadmap
- 1.2 Impact of the EU 2050 Roadmap
- 1.3 Need for a new EU long-term climate strategy
- 1.4 Assumptions for EU 2050 Roadmap have changed
- 1.5 About the project

**34 choices under  
five headings**

## 2. Purpose, need and audience

- 2.1 What needs does the LTCS aim to fulfil?

## 3. Type of document

- 3.1 What is the political ownership of the LTCS?
- 3.2 Role of the LTCS in the overall climate and energy architecture
- 3.3 Type of document
- 3.4 Role of the LTCS in the public debate on long-term climate action

# 3. Structure of the technical paper (2)

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## 4. Scope of document

- 4.1 Scope of modelling
- 4.2 Attribution of emissions: at sources vs. embedded
- 4.3 Climate change as the driver for decarbonisation
- 4.4 General focus of the LTCS
- 4.5 General focus of the LTCS : transition
- 4.6 Sectoral focus of the LTCS

## 5. Technical decisions

- 5.1 Is technology neutrality an appropriate assumption for the LTCS?
- 5.8 Granularity of the analysis
- ...

## 6. Process

- 6.1 How should the consultation process be organised?
- 6.3 Model choice process
- ...



## 4.1 Example: Type of document

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### **Option 1. One-off document**

Document that is published once, not reviewed and intended to focus on current issues

### **Option 2. Regularly reviewed and updated document**

Regularly updated document that takes into account new information.

Could follow the 5-year review cycle of the Paris Agreement, or be linked to the EU Energy Union governance process.

### **Option 3. Constantly updated content in a fixed structure**

Living document in which individual pieces of new information are added when they become available.

## 4.2 Example: Geographic granularity

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### **Option 1: Decarbonisation pathways only for EU as a whole**

One aggregate pathway for the entire region, to avoid inconsistencies between modelling results and national realities/plans/constraints.

### **Option 2: Decarbonisation pathways for individual member states**

National pathways to inform national debate on what different EU decarbonisation will require. Provides a benchmark for the consistency of national strategies with the overall EU decarbonisation pathway (->Energy Union governance process)

## 5. Different audiences and political processes require different, but consistent, strategic guidance

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### Purposes:

- (i) guide the EU and its Member states energy and climate policies in line with the goals of the Paris Agreement,
- (ii) deliver a long-term low greenhouse gas emission development strategy to the UNFCCC,
- (iii) ensure synchronization with the governance of the Energy Union process,
- (iv) inform the business community in its investment decisions,
- (v) provide a vehicle for engaging EU citizens and stakeholders in decisions over the decarbonisation of society.

# 6. A coordinated sequence of three strategy documents (1)

	Name	Vision 2100	Roadmap 2.0		UNFCCC submission
			Sectoral pathways	EU Energy and Climate Plan	
1	Short Description	A short document laying out the broad strategic approach to decarbonize in this century, providing general guidance.	An update of the 2011 Roadmap. Key difference is that it also explicitly discusses how policies interact	An update of the 2011 Roadmap. Key difference is that it breaks down results to the MS level to assess the NECPs.	A concise official document outlining the EU's pathway towards net-zero emissions by mid-century.
<b>Purpose and need, audience</b>					
2	Main Purpose	Guidance for EU policy-makers on broad vision	Break down the overall ambition level to the sectoral level to guide EU and MS policies	EU document to "benchmark" the National Energy and Climate Strategies	Mid-century strategy required by the Paris Agreement
3	Audience, beyond policy actors	- Communicate with citizens	- Communicate with citizens - early guidance for investors	- Communicate with citizens	- Communicate with citizens - early guidance for investors
<b>Type of document</b>					
4	Legal Status	Commission Communication	Commission Communication		Approved in Council
5	Role in overall climate framework	visionary guidance for other strategy documents	Integrated long-term strategy, that includes LTCS, an energy strategy, transport strategy...		Pathway serves as guidance for other strategies
6	Governance / Cycle	one-off	one-off	repeated in line with NECPs	one-off
7	Type of document	in the order of 10-20 pages	20-30 page document + impact assessment + modelling documents		5-15 page official communication with modelling annex
8	Role in the Debate	Initiator of debate	Integrates contributions from stakeholders	Integrates contributions from stakeholders in a continuous process	Integrates contributions from stakeholders
<b>Scope of document</b>					
9	Scope of modelling	socio-technical analysis	techno-economic and policy modelling	techno-economic modelling	techno-economic modelling
10	relative emphasis of climate vs. other objectives	focus on climate objectives	other objectives are treated as side-benefits		focus on climate objectives
<b>Technical decisions</b>					
11	reaction to international developments	The LTCS should consider the uncertainty of the level of delivery of the Paris Agreement	achieve EU targets irrespective of int'l developments		present EU pathway under the implicit assumption that others also contribute to the Paris ambition
12	time-horizon of analysis	- no discrete intermediate time-steps - outlook towards the end of the century	2040 (possibly new RES&EE targets) 2050	in line with NECPs	"mid century"
13	geographic granularity of analysis	focus on EU level, with emphasis on developments beyond the EU	analysis on the EU level	analysis on the MS and the EU level	analysis on the EU level
14	sectoral granularity of analysis	no quantitative sectoral pathways, but possibly qualitative differentiation of sectors	sectoral break-down in order to prioritise policies	No sectoral break-down	No sectoral break-down
<b>Process</b>					
15	stakeholder process	wide consultation - incl. with citizens	normal consultation process on document; increased opening of the modelling process		?

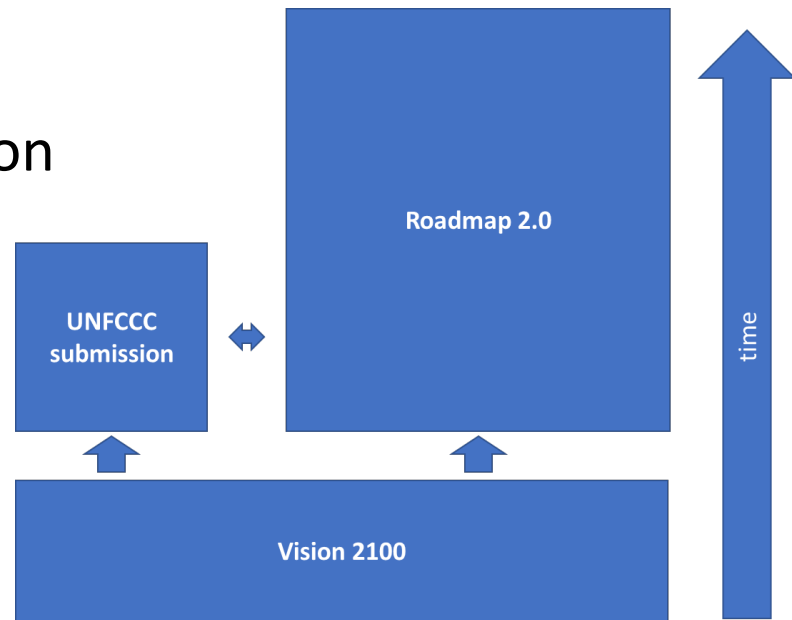
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## 6. A coordinated sequence of three strategy documents (3)

We suggest the following sequence to meet all purposes in time in a coherent way:

- 1) Broad long-term Vision
- 2) Concise UNFCCC submission
- 3) Detailed Roadmap



## 7. Key considerations

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- Transparency and Participation
  - Decarbonisation needs to involve a wide array of stakeholders, already early in the process
  - European Commission needs to go significantly beyond its past exercises
  - Modelling exercises should be opened up
- Ambition, as defined by the Paris Agreement
- Urgency, underpinned by science and IPCC
- LTCS should allow, both, market and non market approaches where appropriate (flexibility and efficiency / market failures)

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