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# Funding mechanisms in the EU ETS

## What is known and issues for discussion and clarification

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- Four funding mechanisms for the 4<sup>th</sup> Phase of the EU ETS
  - Update of two existing mechanisms
    - Solidarity Provision
    - Article 10c Derogation
  - Introduction of two new mechanisms
    - Innovation Fund (successor of NER 300)
    - Modernisation Fund

- 3 of these funding mechanisms are interlinked, and Member States can decide to move allowances between them.
  - Transfer allowances from Article 10c to Modernisation Fund
  - Transfer allowances from Solidarity Mechanism to Modernisation Fund
  - Transfer allowances from Solidarity Mechanism to Article 10c
    - Only possibly if a Member State moves allowances from the Solidarity Mechanism to the Modernisation Fund.
    - Cannot be higher than the amount of allowances transferred from the Solidarity Mechanism to the Modernisation Fund (but can of course be lower).
    - This transfer may only increase the amount of allowances used for Article 10c to a maximum of 60% of the total amount of allowances to be auctioned by the Member State.

# Interlinkages: overview

- $\leq$  to amount going to Modernisation Fund
- Max. increase Article 10c derogation to 60% of allowances to auction

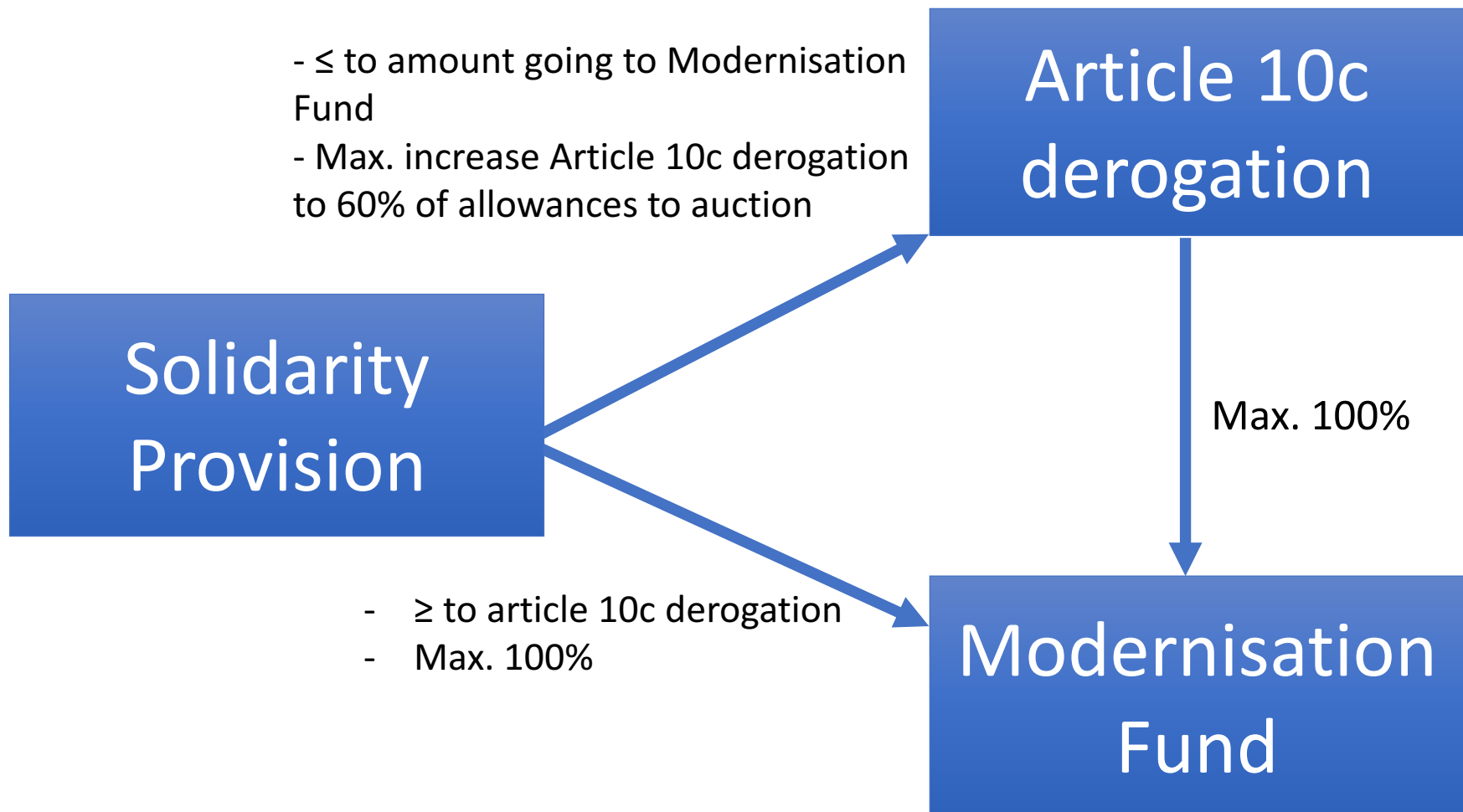
**Solidarity Provision**

**Article 10c derogation**

Max. 100%

- $\geq$  to article 10c derogation
- Max. 100%

**Modernisation Fund**



# 1. Solidarity Provision



- 10% of the total quantity of allowances to be auctioned from 2021 onwards are distributed among eligible Member States for "the purpose of solidarity, growth and interconnections within the Union".
- **Eligibility:** Member States with a domestic product per capita at market prices equal to or below 90% of the Union average in 2013.

# 1. Solidarity Provision: amount

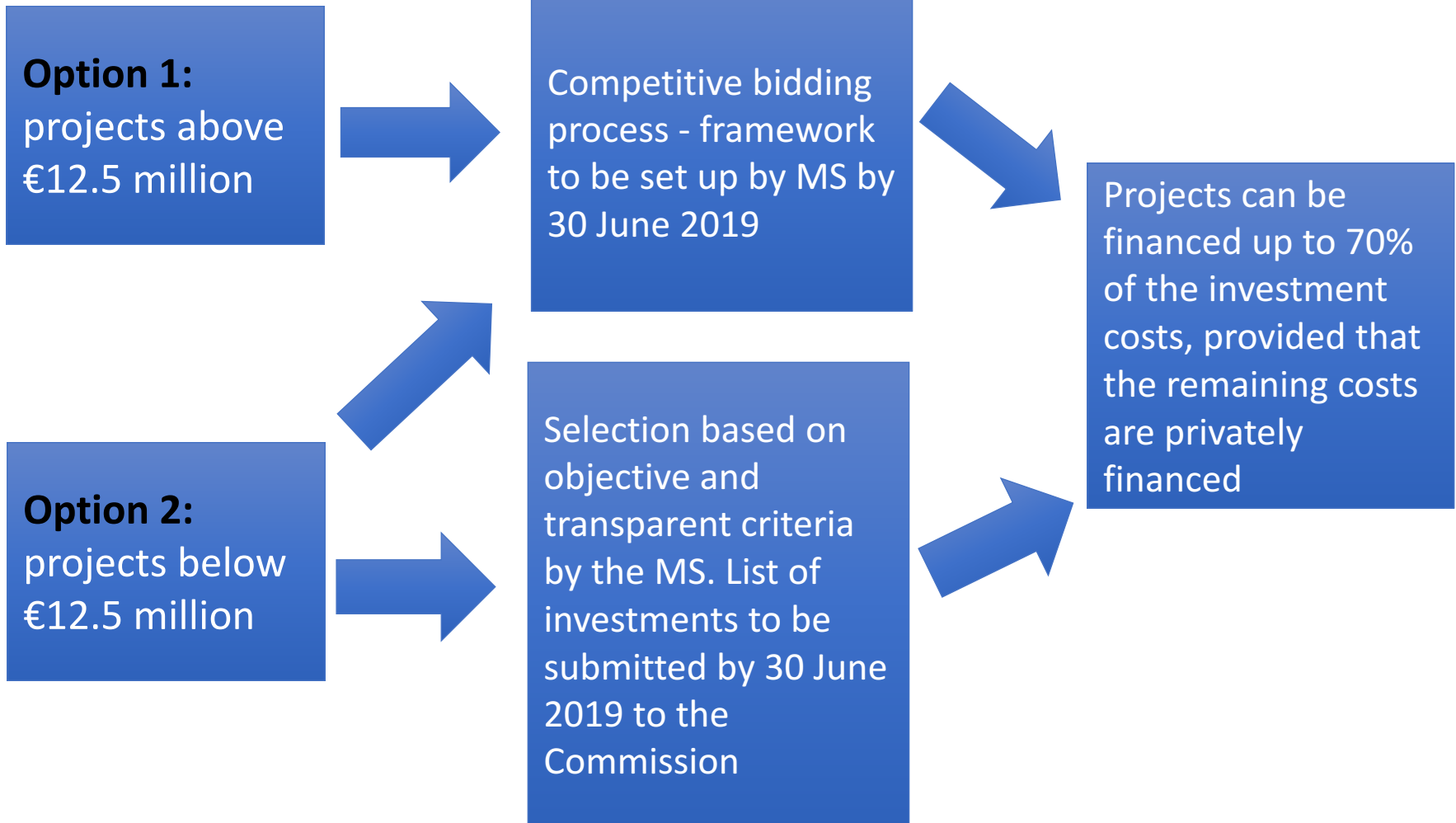


Member State	Percentage increase of allowances to be auctioned ( <i>Annex IIa</i> )	Estimated amount of additional allowances (millions)	Estimated value over Phase 4 (millions of Euro – €20/EUA)
Bulgaria	53%	69.93	1,398.61
Croatia	26%	11.90	237.94
Cyprus	20%	3.53	70.65
Czech Republic	31%	88.36	1,767.11
Estonia	42%	18.88	377.69
Greece	17%	40.83	816.53
Hungary	28%	24.78	495.61
Latvia	56%	5.43	108.68
Lithuania	46%	10.23	204.59
Malta	23%	1.55	30.90
Poland	39%	272.46	5,449.25
Portugal	16%	19.63	392.52
Romania	53%	124.24	2,484.81
Slovakia	41%	34.84	696.73
Slovenia	20%	6.09	121.88
Spain	13%	80.39	1,607.74
<b>Total</b>		<b>813.06</b>	<b>16,261.25</b>

## 2. Article 10c Derogation

- Member States may give transitional free allocation to installations for electricity generation for the purpose of ‘modernisation, diversification and sustainable transformation of the energy sector’
  - These allowances will be deducted from the Member State’s quantity of allowances to be auctioned.
- Two types of investments, financed up to maximum 70% of relevant costs:
  - Projects over €12.5m – competitive bidding process
  - Projects below €12.5m – option for Member States to select themselves based on ‘competitive and transparent criteria’

## 2. Article 10c Derogation





## 2. Article 10c Derogation: eligibility



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- Member States with a domestic product per capita at market prices below 60% of the Union average in 2013 may make use of Article 10c Derogation.
- Certain requirements for the competitive bidding process to be set up:
  - explicit limits on eligibility of projects (*e.g. only projects that contribute to diversification of energy mix, modernisation of infrastructure, clean technologies, etc.*)
  - selection criteria that can rank project should be adopted (*e.g. emission reduction, additionality, best value for money, etc.*)

## 2. Article 10c Derogation: eligibility



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- Hardly any requirements set out in the Directive for the ‘objective and transparent criteria’ that should be used to select smaller projects. However:
  - List of selected projects has to be made available for public comment.
  - Multiple investments within the same installation have to be assessed as a whole.
- **Phase-out obligation** for all investments: if investments lead to additional electricity generation, a corresponding amount of electricity-generation capacity with higher emission intensity needs to be faced out.

## 2. Article 10c Derogation: amount



- **Base scenario:** max 40% of allowances to be auctioned over Phase 4.
  - Maximum 660 million allowances = €13.2 billion at prices of €20/EUA
- **Maximum scenario:** move allowances from Solidarity Provision to increase the amount to maximum 60% of allowances to be auctioned over Phase 4.
  - Maximum 965 million allowances = €19.3 billion at prices of €20/EUA

## 2. Article 10c Derogation: amount



Country	Amount of projected emissions in power sector 21-30 (mton CO2)	40% Base Scenario (million allowances)	% free allocation compared to projected emissions	60% Maximum Scenario (million allowances)	% free allocation compared to projected emissions
Bulgaria	204.67	52.89	25.84	79.34	38.76
Croatia	33.11	18.34	55.41	24.3	73.41
Czech Republic	524.58	114.26	21.78	158.53	30.22
Estonia	99.41	18.02	18.13	27.04	27.20
Hungary	65.71	35.48	53.99	47.9	72.89
Latvia	15.45	3.89	25.17	5.83	37.76
Lithuania	24.36	8.91	36.59	13.37	54.89
Poland	1,546.96	280.06	18.10	416.58	26.93
Romania	201.90	93.97	46.54	140.96	69.82
Slovakia	62.32	34.06	54.65	51.09	81.98
<b>Total</b>	<b>2,778.47</b>	<b>659.89</b>	<b>23.75</b>	<b>964.94</b>	<b>34.73</b>

## 2. Article 10c Derogation: Unused allowances from Phase 3



- Member States have to decide what to do with their unused allowances leftover from Phase 3 Article 10c:
  - Auction in 2020
  - Bank and use for Phase 4 Article 10c derogation (*counts towards the 60% limit*)
  - Split between auctioning and banking
- How many allowances will remain unused? Between 2013-2016, 90.5 million allowances remained unused.

# 2. Article 10c Derogation: Implementation timeline



- By 30 June 2019:
  - Member States set out national framework for the competitive bidding process.
  - Member States publish list of smaller investments and submit to the Commission

# Issues for discussion and clarification

- How will the use of Article 10c affect the division between free allocation and auctioning of allowances?
  - In the maximum scenario, if fully used, the amount of allowances to be auctioned will be decreased by almost 12% over Phase 4.
  - What implications will this have? Will it influence market behaviour? Will it influence hedging behaviour of the power sector in eligible countries?
- What will the competitive bidding processes look like?
  - What selection criteria should/will be adopted?
  - How will different selection criteria influence the use of Article 10c?

# Issues for discussion and clarification

- Implications of banking/auctioning unused allowances from Phase 3.
  - How might auctioning of these allowances in 2020 influence the market?
  - Can banked allowances also be moved to the Modernisation Fund? (*the answer seems to be yes*)
- What will happen to unused allowances after Phase 4 has ended?
  - Will Member States again have the choice to bank them (*if Article 10c is again continued*) or auction them?
  - Might they be cancelled or put into the MSR?



# 3. Modernisation Fund

- Support investments proposed by the eligible Member States, ‘including the financing of small-scale investment projects, to modernise energy systems and improve energy efficiency’.
- Important role for the European Investment Bank:
  - Auction allowances and manage revenues.
  - Decide whether proposed investments are ‘priority projects’ (*based on areas listed in Article 10d(2)*) or not.

# 3. Modernisation Fund: selection



- EIB decides whether a proposed investment is a priority project (*financed up to 100% of costs\*, minimum 70% of Modernisation Fund used for these investments*) or not.
- If not a priority project, the Investment Committee will assess the proposal and issue recommendations.
  - If approved, Member State may finance the project up to 70%
  - The Investment Committee consists of 15 representatives (*Commission, EIB, ten beneficiary Member States and three representatives of other Member States*)
    - Makes decisions by simple majority, or, if the EIB does not endorse a non-priority project, by 2/3<sup>rd</sup> majority without counting the EIB and the Member State that proposed the investment.

\*Note the difference with Article 10c Derogation, which can only be used to finance an investment to a maximum of 70% of the costs.

# 3. Modernisation Fund: selection

## Procedure 1

MS presents the investment proposal to the EIB and the investment committee

**EIB:**  
investment falls into areas listed in Art. 10d (2)

MS may proceed to finance the project up to 100% of the relevant costs



MS submit an annual report to the Commission with:

- \* Information on investments financed.
- \* Assessment of added value in terms of energy efficiency or modernisation of the energy system achieved through the investment.

## Procedure 2

**EIB:**  
investment DOES NOT fall into areas listed in Art. 10d (2)

The Committee assesses the proposal and issues a recommendation

**Investment accepted:**  
MS may proceed to finance the project up to 70% of the relevant costs



**Investment not accepted:**  
MS may not finance the project

# 3. Modernisation Fund: eligibility



- Member States with a domestic product per capita at market prices below 60% of the Union average in 2013 may make use of the Modernisation Fund.
- Projects can be financed if they fall in the following Areas:
  - **Area 1** (*Priority – financed up to 100%*): investments in renewables, energy efficiency (excluding solid fossil fuels), energy storage and networks, interconnections between Member States, just transition, and energy efficiency in transport, buildings, agriculture or waste.
  - **Area 2** (*non-priority – financed up to 70% if endorsed by investment committee*): need to be consistent with the EU 2030 climate and energy policy framework and the long-term objectives of the Paris Agreement; cannot be given to energy generation facilities that use solid fossil fuels, except for district heating in Romania and Bulgaria.

# 3. Modernisation Fund: amount

- **Base Scenario:** 2% of total allowances over Phase 4

Country	Percentage of Modernisation Fund (Annex IIb)	Base Scenario (million of allowances)	Estimated value over Phase 4 (millions of Euro – €20/EUA)
Bulgaria	5,84 %	18.43	368.62
Croatia	3,14 %	9.91	198.20
Czech Republic	15,59 %	49.20	984.04
Estonia	2,78 %	8.77	175.47
Hungary	7,12 %	22.47	449.42
Latvia	1,44 %	4.54	90.89
Lithuania	2,57 %	8.11	162.22
Poland	43,41 %	137.00	2,740.05
Romania	11,98 %	37.81	756.18
Slovakia	6,13 %	19.35	386.93
<b>Total</b>	<b>100%</b>	<b>315.60</b>	<b>6,312.02</b>

### 3. Modernisation Fund: amount

- **Maximum Scenario:** 2% + 0.5% of the total number of allowances if the free allocation buffer is not fully used + moving all allowances from Solidarity Provision and Article 10c to the Modernisation Fund

Country	Maximum Scenario (million of allowances)	Estimated value over Phase 4 (millions of Euro – €20/EUA)
Bulgaria	146.01	2,920.23
Croatia	264.31	5,286.21
Czech Republic	47.91	958.25
Estonia	42.65	853.00
Hungary	15.02	300.33
Latvia	29.30	586.01
Lithuania	88.40	1,768.06
Poland	724.37	14,487.37
Romania	265.74	5,314.85
Slovakia	93.16	1,863.11
<b>Total</b>	<b>1,716.87</b>	<b>34,337.43</b>

# 3. Modernisation Fund: Implementation timeline



- Implementing Act that will operationalise the Modernisation Fund is expected to be adopted in the first half of 2019.
- By 31 December 2024, the Commission is expected to review the conditions for Priority Investments (Area 1), and propose updates if necessary.

# Issues for discussion and clarification

- How will the monetisation of allowances take place in practice – what is the mandate for the EIB? (*e.g. use predictable schedules? Monetise in pre-determined tranches over Phase 4?*)
  - The mandate will influence the market as well as the amount of money ultimately available in the Modernisation Fund.
- How will investments be initially selected by the Member States?
  - Will certain additional criteria be adopted on how Member States should initially select these investments (*e.g. procedural or material requirements set out by the Commission*)?
- Will additional criteria (*besides the list of Priority projects in Article 10d(2)*) be adopted for the EIB to judge projects against? Will additional criteria be adopted for the Investment Committee's assessment and recommendations?



# Issues for discussion and clarification

- Contrary to Article 10c Derogation, there is no requirement to ‘rank’ investment proposals based on certain criteria – will the Modernisation Fund operate on a ‘first come first serve’ basis?
- Will there be constraints on the investment schedule adopted?  
*(e.g. only result-based finance, ex-ante or ex-post, spread out over time?)*
- What will happen to leftover funds after Phase 4 has ended?

# 4. Innovation Fund

- Support innovation in low-carbon technologies and processes.
- Can cover up to 60% of relevant costs of projects, out of which up to 40% need not be dependent on verified avoidance of greenhouse gas emissions.

# 4. Innovation Fund: eligibility



- Projects in all Member States can be eligible.
- Criteria not clearly defined as of yet:
  - Projects would have to be located in ‘geographically balanced locations’.
  - Projects will be selected based on ‘objective and transparent criteria’.
  - Projects will have to contribute ‘significantly’ to achieving emissions reductions ‘well below the benchmarks’.
- Meant to support technologies that are not yet commercially available, yet mature enough to be ready for demonstration at a pre-commercial scale.

# 4. Innovation Fund: eligibility



- No list of projects is included, but the Directive does envisage certain types of projects to be financed:
  - Low carbon technologies and processes in sectors covered by the ETS;
  - environmentally safe carbon capture and utilisation ('CCU') that contributes substantially to mitigating climate change;
  - products substituting carbon intensive products of sectors covered by the ETS
  - environmentally safe capture and geological storage ('CCS') of CO<sub>2</sub>;
  - and innovative renewable energy and energy storage technologies.

# 4. Innovation Fund: amount



- At least 450 allowances, consisting of:
  - 325 million allowances from the free allocation pool
  - 75 million allowances from the auctioning pool
  - 50 million unallocated allowances from the MSR
- Might be increased by additional allowances from:
  - Unspent allowances from NER300
  - Up to 50million allowances if free allocation buffer is not fully used
- 450 million allowances = roughly €9 billion at price levels of €20/EUA.

# 4. Innovation Fund: Implementation timeline



- A public consultation has been held in the first quarter of 2018.
- Expert group is being established.
- Draft delegated act is expected by the end of 2018.
- Launch of the Innovation Fund is foreseen in 2020.

# Issues for discussion and clarification

- Some types of technologies are envisaged to be financed, but there exists currently no exhaustive list.
  - Will such a list be adopted?
  - Alternatively, will certain selection criteria be adopted?
- On what basis will decisions be made regarding the eligibility of projects, and who will make them?
  - What does ‘on the basis of objective and transparent criteria’ mean? How will it be operationalised?
- How will available funds be distributed, both among countries and projects?
  - What is implied by ‘in geographically balanced locations within the territory of the Union’?
  - There is no requirement to ‘rank’ projects - will there be? Alternatively, will the Fund operate on a ‘first come first serve’ basis?

# Issues for discussion and clarification

- How will the monetisation of allowances take place in practice? (*e.g. maximise profits, use predictable schedules?*) – Who will monetise the allowances? – Where will they be monetised? (*using the common auction platform or potentially on the secondary market?*)
- Will there be constraints on the investment schedule adopted? (*e.g. only result-based finance, ex-ante or ex-post, spread out over time?*)
- What will happen to leftover allowances or funds after Phase 4 has ended?
  - Will they be able to be banked/cancelled/put into the MSR/auctioned?
  - What will happen to allowances that have already been monetised but remain unused?



# Overlapping issue for clarification

- Member States have to decide by 30 September 2019 the respective amount of allowances they intend to use under a) the Solidarity Provision, b) Article 10c Derogation and c) the Modernisation Fund over Phase 4.
- However, two factors can influence the available amount of allowances to be used in these three funding mechanisms:
  - The impact of the MSR
  - The use of the free allocation buffer\* *(note that this will also influence the amount of allowances available for the Innovation Fund)*
- These factors are still unclear or unknown – how will these uncertainties be taken into account by Member States when making their decision by 30 September 2019?

# Overview Funding Mechanisms



Funding Mechanism	Estimated amount of allowances for maximum scenarios without using flexibility* (in millions)	Estimated value over Phase 4 (billions of Euro – €20/EUA)	Estimated value over Phase 4 (billions of Euro – €35/EUA)
<b>Solidarity Provision</b>	813.06	16.26	28.46
<b>Article 10c Derogation</b>	659.89	13.2	23.1
<b>Modernisation Fund</b>	394.5	7.89	13.81
<b>Innovation Fund</b>	500	10	17.5
<b>Total</b>	<b>2367,45</b>	<b>47.35</b>	<b>82.86</b>

\* With the assumption that the free allocation buffer is not fully used and the innovation fund is increased by 50m allowances and the Modernisation Fund is increased by 0.5% of the total number of allowances