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Funding mechanisms in the EU ETS

What is known and issues for discussion and clarification

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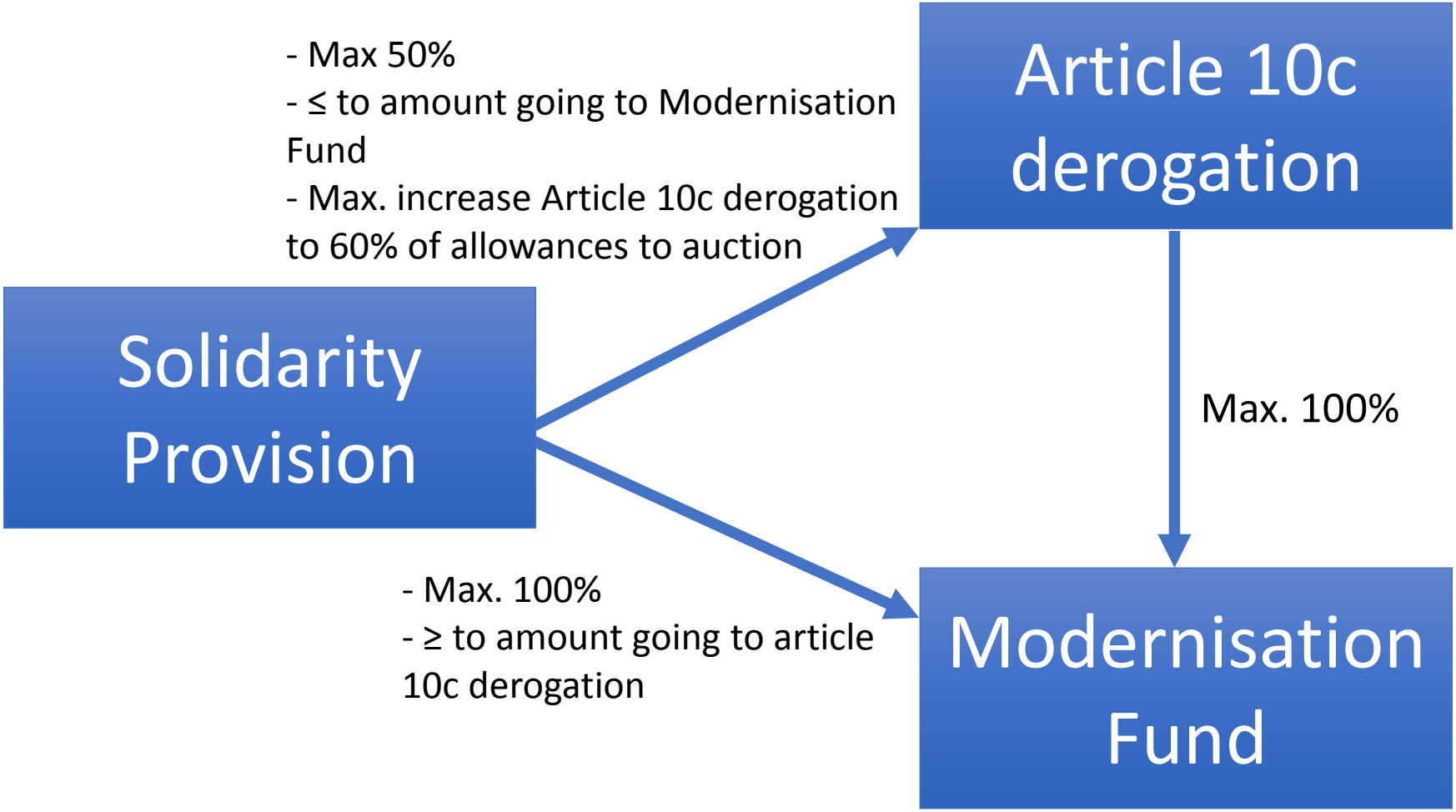
Introduction

- Four funding mechanisms for the 4th 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

Interlinkages

- 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
    - *Cannot be higher than the amount of allowances transferred from the Solidarity Mechanism to the Modernisation Fund (but can 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



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 (Annex IIa)	Estimated amount of additional allowances (millions)	Estimated value over Phase 4 (millions of Euro) – €20/EUA
Bulgaria	53%	69.93	1398.61
Croatia	26%	11.90	237.94
Cyprus	20%	3.53	70.65
Czech Republic	31%	88.36	1767.11
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	5449.25
Portugal	16%	19.63	392.52
Romania	53%	124.24	2484.81
Slovakia	41%	34.84	696.73
Slovenia	20%	6.09	121.88
Spain	13%	80.39	1607.74
Total		***813.06***	***16261.25***

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.

2. Article 10c Derogation: amount

- **Base scenario**: max 40% of specific MS 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 specific MS 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 cumulated emissions in power sector 21-30 (mton CO2)	Base Scenario (million allowances)	% projected emissions covered by free allocation	Maximum Scenario (million allowances)	% projected emissions covered by free allocation
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	1546.96	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
Total	***2,778.47***	***659.89***	***23.75***	***964.94***	***34.73***

2. Article 10c Derogation: eligibility

- 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

- Two types of investments, financed up to maximum **70% of 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

Option 1:
projects above €12.5 million

Option 2:
projects below €12.5 million

Competitive bidding process - *framework to be set up by MS by 30 June 2019*

Selection based on objective and transparent criteria by the MS. List of investments to be submitted by 30 June 2019 to the Commission

Projects can be financed up to 70% of the investment costs, provided that the remaining costs are privately financed

2. Article 10c Derogation: eligibility

- No requirements set out in the Directive for the '**objective and transparent criteria**' that should be used to select smaller projects.
- **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: Unused allowances from Phase 3

- Member States have to decide by September 30 2019 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 2013-2017, 119.6 million allowances remained unused (94.7% - Poland).
  - Poland has decided that it would auction 55.8 million of these allowances in 2019.

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 is expected to decrease 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?

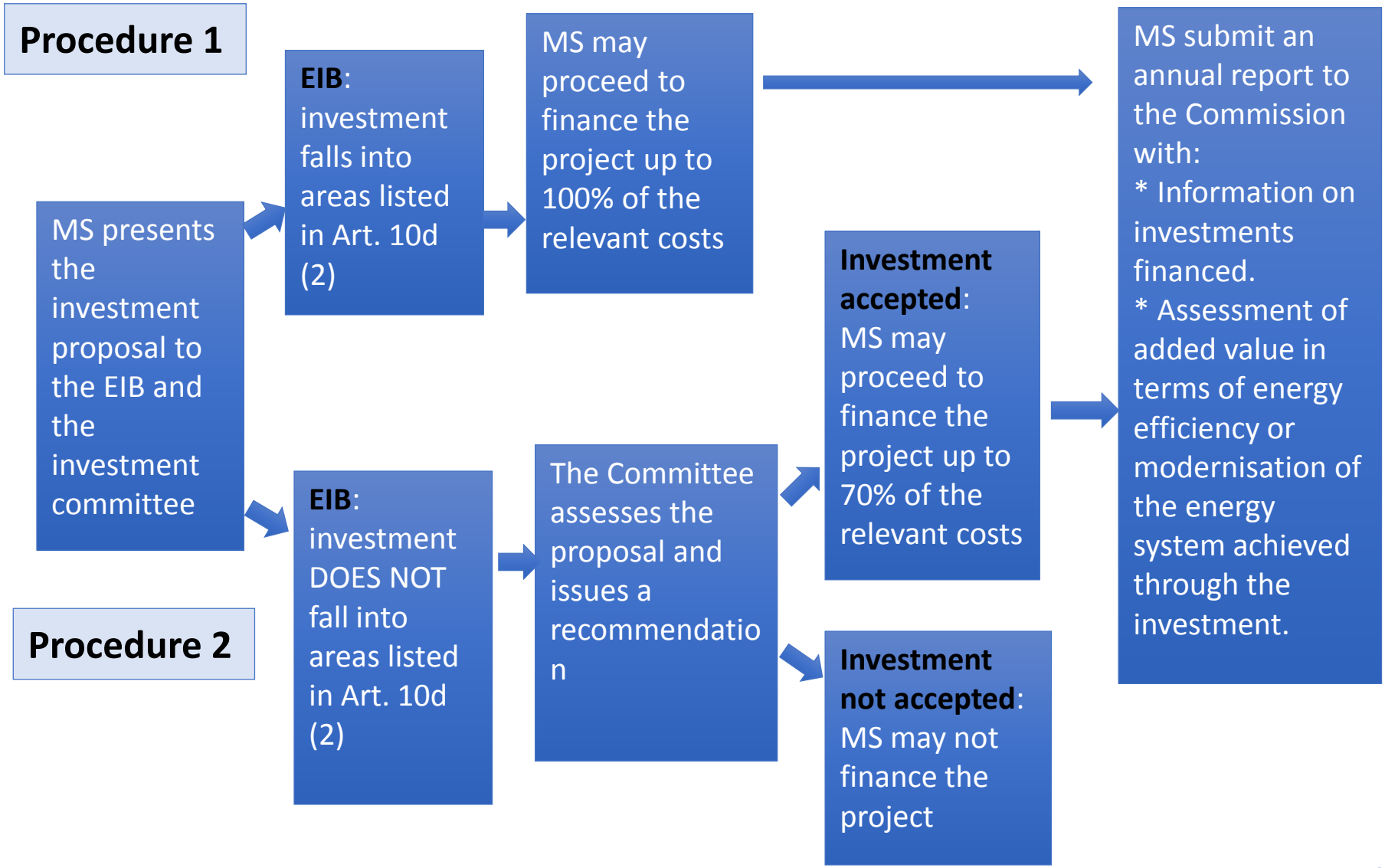
Issues for discussion and clarification

- 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? 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 on the Common Auction Platform and manage revenues.
    - In principle, 2% of allowances to be auctioned each year will be used for the Modernisation Fund
  - Decide whether proposed investments are ‘priority projects’ *(based on areas listed in Article 10d(2))* or not.

3. Modernisation Fund: selection



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 recommandations**.
  - 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 2/3rd 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: 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*

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	2740.05
Romania	11,98 %	37.81	756.18
Slovakia	6,13 %	19.35	386.93
Total	***100%***	***315.60***	***6312.02***

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	Percentage of Modernisation Fund (Annex IIb)	Max Scenario (million of allowances)	Estimated value over Phase 4 (millions of Euro) – €20/EUA
Bulgaria	5,84 %	146.01	2920.23
Croatia	3,14 %	42.65	958.25
Czech Republic	15,59 %	264.31	5286.21
Estonia	2,78 %	47.91	958.25
Hungary	7,12 %	88.40	1768.01
Latvia	1,44 %	15.02	300.33
Lithuania	2,57 %	29.03	586.01
Poland	43,41 %	724.37	14487.37
Romania	11,98 %	265.74	5314.85
Slovakia	6,13 %	93.16	1863.11
Total	***100%***	***1716.87***	***34337.43***

3. Modernisation Fund: Implementation timeline

- Implementing Act that will operationalise the Modernisation Fund is expected to be adopted in **Q4 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

- Which issues will be decided in the implementing act, and which are left to the discretion of the Member States and decided at national level?
  - The Commission made it clear that Member States will be the driving force for the Modernisation Fund.
  - The scope of the implementing act will most likely be limited to elements such as:
    - Provisions on how and when allowances are to be monetised;
    - establishing a decision-making framework for the Investment Committee;
    - provisions to ensure transparency, including reporting requirements for Member States.

➔ **Member States will largely have the liberty on how they initially select investments or subsidy mechanisms.**

Issues for discussion and clarification

- How will investments be **initially selected** by the Member States?
- 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?
- 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
    - Similar to Innovation Fund (*evenly distributed over the year*)?

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.
- Commission delegated regulation **adopted on February 26**
    - EC has to evaluate the Innovation Fund in 2025 and every 5 years thereafter

4. Innovation Fund: amount

- At least 450m allowances, consisting of:
  - 325 million allowances from the free allocation pool
  - 75 million allowances from the auctioning pool
  - 50million unallocated allowances from the MSR
- Might be increased by additional allowances from:
  - Unspent funds 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: eligibility

- Projects in all Member States can be eligible.
- Selection criteria:
  1) Effectiveness in terms of GHG avoidance potential
  2) Degree of innovation compared to state of the art
  3) Project maturity *(planning, business model, etc.)*
  4) Technical and market potential for widespread application
  5) Efficiency: relevant costs over GHG avoided/energy produced/energy stored/CO2 stored in first 10 years
- Criteria 1-3 decisive in selection procedure.
  - First list of projects is set up based on these 3 criteria, which are invited to submit a full application – projects that submit application will then be evaluated and ranked based on all 5 criteria
- *"additional criteria aimed at achieving a geographically balanced distribution may also be applied for the purposes of project selection"*

4. Innovation Fund: eligibility

- Phase 4 Directive envisages 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 CO2;
  - and innovative renewable energy and energy storage technologies.
- The act only includes a table of 'illustrative examples of potential projects' in the explanatory memorandum

4. Innovation Fund: Governance

- The Commission has direct management over the Innovation Fund + ensures auctioning of allowances and management of revenues.
- **However**: EC may delegate monetisation + revenue management to the **European Investment Bank +** can designate an implementing body *(also EIB?)* for the direct management
  - Includes management of call for proposals, disbursement of support and monitoring of implementation

4. Innovation Fund: Governance

- Role of Member States
  - Have to be consulted by EC on:
    - List of pre-selected projects, prior to award of the support
    - Draft EC decisions for call of proposals, decision for blending operations, or support disbursed in a form other than grants
    - Maximum amount made available for the project development assistance
  - EC has to keep MS informed
    - Report on implementation of call for proposals
  - EC may ask MS for advise and assistance

4. Innovation Fund: Call for proposals

- ‘regular calls for proposals up to 2030’ – no predetermined timing. **First call before end of 2020**
  - Has to specify **amount of support available** for the call
  - Has to specify the **types of solicited projects or sectors**
  - Has to include detailed information on the **selection procedure**, including methodology for evaluation and ranking *(not determined by the act!)*
  - Must specify if **additional selection criteria** for achieving geographical balance are used
  - Can reserve a part of the support for **small-scale projects** (below €7.5m)

4. Innovation Fund: disbursement

- Can cover up to **60% of relevant costs** of projects.
  - **Relevant costs** = (CAPEX + OPEX – benefits of 10y period) compared with same calculation for a 'conventional production'
  - "Shall be disbursed upon reaching pre-determined milestones."
  - Up to 40% can be provided as **upfront funding at financial close**
  - Remaining 60% provided after financial close – may be partially disbursed before entry into operation, and in **annual instalments** after entry into operation.
  - Additional milestones can be defined
    - This amount disbursed after financial close is dependent on the avoidance of GHG, verified on the basis of annual reports (3-10 years).
- **Project development assistance** also possible (up to 100% covered)
- **Special recovery rules**
  - If amount of GHG avoided < 75% expected to be avoided → amount of money paid is reduced/recovered proportionally.

4. Innovation Fund: disbursement

- Support can be **combined** with other types of support, as long as they do not cover the same costs.
- EC can decide to disburse support through contributions to **blending operations** under the investment support instrument (e.g. InvestEU Fund)
- EC may decide to disburse support in a form other than grants, as laid down in the Financial Regulation.

4. Innovation Fund: monetization

- Auctioning regulation amended to allow for 50m allowances of the Innovation Fund to already be auctioned in 2020 on the Common Auction Platform, evenly distributed over the auctions that year
    - Remainder of Innovation Fund monetization spread out over Phase 4 in equal tranches: ± 50m allowances per year

Issues for discussion and clarification

- Some types of technologies are envisaged to be financed, but there exists no exhaustive list + lists are determined for each individual call for proposals.
  - Uncertainty for project developers whether they will be able to apply for funding?
- Potential for variety between calls for proposals + a number of 'unknowns' remain
  - Methodology for evaluation and ranking unknown and can change for each call for proposals → uncertainty?
  - Types of solicited projects or sectors?
  - Selection criteria aimed at achieving a 'geographically balanced distribution'?

Issues for discussion and clarification

- Governance is still not 100% clear:
  - who will be responsible for what? (European Commission – 'implementing bodie(s)' – EIB)
  - How large will the role of Member States be?
- 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** *(which will also influence the amount of allowances available for the Innovation Fund)*
- 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)
Solidarity Provision	813.06	16.26	28.46
Article 10c Derogation	659.89	13.2	23.1
Modernisation Fund	315.60	6.31	11.05
Innovation Fund	500	10	17.5
Total	***2376.66***	***45.77***	***80.11***

Survey: main takeaways

- Survey sent out to Member State representatives and 70 companies/associations
- Questions related to design and priorities of the different funding mechanisms
- Answers:
  - 39 Companies
    - Out of which 26 with activities in MS eligible for Article 10c derogation and Modernisation Fund
    - 16 mainly power generation and distribution vs 23 mainly industrial production
  - 6 eligible (10c derogation and Modernisation Fund) Member States
  - 7 other Member Sates

Survey: main takeaways - Companies

- Q: Which mechanism will be most effective in triggering new investments?
  - Overall: 60% Modernisation Fund
  - However a split is visible:
    - Power generation and distribution: opinion divided
    - Industry: 80% thinks Modernisation Fund will be most effective
  - Reasons given:
    - For Article 10c:
      - Wider application (wide range of fuels and thermal projects) = more flexibility
    - For Modernisation Fund:
      - “up to 100% of costs can be financed”
      - ”Simple governance - fast-track option available for priority projects”
      - “no phase-out obligation is attractive”

Survey: main takeaways - Companies

- Q: Does your company see a need for Member States to use the flexibility mechanisms to move allowances?
  - Overall: 68% answered yes
    - Power generation and distribution: opinions divided
    - Industry: Almost 90% answered yes
  - Reasons for using flexibility:
    - Allows to accommodate for different national priorities and national circumstances
    - Concentration of funds in one mechanism will allow for larger projects to be financed
    - One mechanism = simplification of administration

Survey: main takeaways - Companies

Question	Article 10c	Modernisation Fund	Innovation Fund
Type of investments?	- Efficient go-generation and biomass (47%) - CO2 capture and storage/use (47%) - Smart grids and electricity storage (33%)	- PV (50%) - Onshore wind (42%) - Renovation of distribution grids (42%) - Efficient co-generation and biomass (33%) - CO2 capture and storage/use (33%)	- Low-carbon technologies and processes (79%) - Innovative renewable energy and energy storage (58%) - Carbon capture and utilisation (48%)
Technology-specific tendering?	Split: 44% yes – 56% no	Preference for no: 77%	Split: 57% yes – 43% no
Investment schedule?	One-time, up front preferred (46%) followed by spread-out over time based on milestones (23%)	One-time, up front preferred (46%) followed by spread-out over time based on milestones (23%)	One-time, up front preferred (33%) followed by spread-out over time based on milestones (24%) and decided case by case (24%)

Survey: main takeaways - Companies

- Other takeaways:
  - Small-scale projects (below €12.5m) under Article 10c will likely be important
    - 86% of respondents say they plan to invest in such projects – mainly important for energy efficiency investments
  - Current drivers for low-carbon investments (ranked)
    1. Prospective EUA price
    2. Explicit decarbonisation measures
    3. Decreasing costs of RES and other low-carbon technologies
    4. Other forms of state support/subsidies
    5. Rising demand for low-carbon goods
    6. ***Support from the existing EU ETS funding mechanisms in Phase 3***

Will the funding mechanisms in Phase 4 be a more important factor?

Survey: main takeaways – eligible MS

- Half of respondents do not intend to use Article 10c Derogation
  - 2 of those MS indicate they will move those allowances to the Modernisation Fund
  - The other MS indicates it will just auction the 10c allowances
- 4 respondents indicate that they will at least move some allowances from both 10c and the solidarity mechanism towards the Modernisation Fund
- Most respondents unwilling to answer questions related to:
  - Design of the competitive bidding process for 10c;
  - Type of subsidy scheme that would be created under the Modernisation Fund
  - Selection of one-off investments under the Modernisation Fund;
  - Preference for (additional) procedures/criteria for the decision-making process to determine if a project is a 'priority' or not under the Modernisation Fund;
  - Preference for procedures/criteria for the investment committee to assess other projects under the Modernisation Fund.

Survey: main takeaways – eligible MS

- Questions related to the Modernisation Fund:
  - Respondents **priority areas to invest** in:
    - Generation and use of electricity from renewables and the improvement of energy efficiency
    - Non of the respondents indicate they plan to use any of the funds for Just Transition purposes
  - Only 1 respondent indicated they would add funds from the Modernisation Fund to an existing national subsidy scheme
    - The other 5 indicate they will create a **new subsidy scheme**
  - 4 respondents also indicated they would use the Modernisation Fund to **finance one-off investments**

Modernisation Fund likely to serve multiple purposes within one MS?