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COVER NOTE	
Subject:	Mission-oriented Policy: principles, typology and practices - Powerpoint presentation (Informal videoconference of the Research WP members 27.01.2022)

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## MISSION-ORIENTED POLICY: PRINCIPLES, TYPOLOGY AND PRACTICES

Réunion du Groupe de travail Recherche du Conseil de l'UE

27 Janvier 2022

Philippe Larrue, OECD Directorate for Science, Technology and Innovation





- 1. Definition, functions and design principles
- 2. Typology of mission oriented policies
- 3. 3 examples of mission-oriented policy
- 4. Challenges and opportunities
- 5. Implications for EU missions





### DEFINITION, FUNCTIONS AND DESIGN PRINCIPLES



A co-ordinated package of initiatives (policy, regulatory, platforms,...) tailored specifically to mobilise science, technology and innovation in order to address a societal challenge.

- is aimed towards ambitious and concrete goals...
- Š
- ... to be met in a defined time-frame
- spans several stages of the innovation cycle from research to demonstration and market launch
- crosses various policy fields (interministerial, cross-agency, etc.)
- uses various instruments (supply-side and demand-side; topdown and bottom-up)





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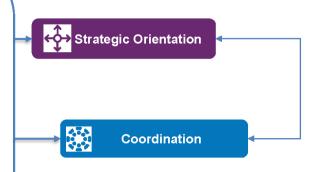
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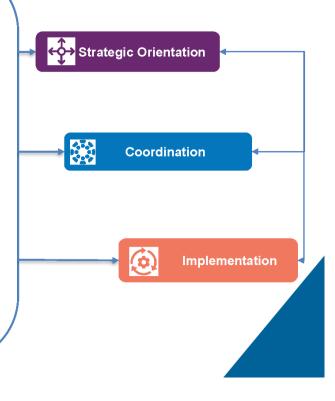


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#### What are Mission-oriented innovation policies?

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Integrated and tailored-made approach for A co-ordinated package of initiatives (policy, regulatory, platforms,...) each mission tailored specifically to mobilise science, technology and innovation in order to address a societal challenge. ↔ Strategic Orientation This co-ordinated package : Ø is aimed towards ambitious and concrete goals... Coordination ... to be met in a defined time-frame Š spans several stages of the innovation cycle from research to  $\mathcal{L}$ demonstration and market launch crosses various policy fields (interministerial, cross-agency, etc.) Implementation 0 uses various instruments (supply-side and demand-side; top-× down and bottom-up)



↔ Strategic orientation

How to create a broad consensus on selected societal challenges, their transcription in clear and bold objectives and the way to address them?



**Co-creation of the mission** (and derived roadmaps, strategic innovation agendas, etc





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How to align the plans and commitments of public and private actors beyond disciplinary, sectoral and policy silos around the commonly agreed missions?



Setting of a dedicated structure of governance and leadership (e.g. interdepartmental coordination group, dedicated mission manager, etc.)





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Policy implementation

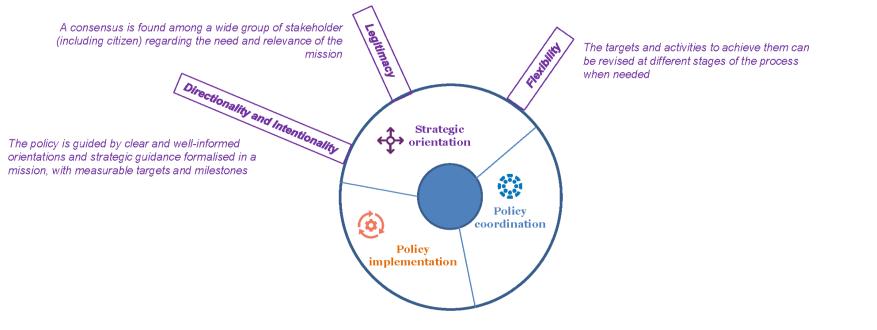
How to implement bundles of complementary policy and regulatory instruments to achieve the commonly agreed mission?



Implementation of a tailor-made policy mix (drawing on / using various instruments, funding streams,..)

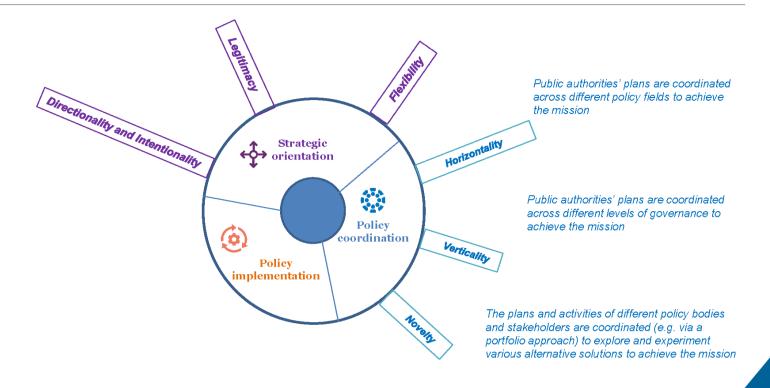


Quels sont les principes qui doivent guider la conception des politiques orientées mission?

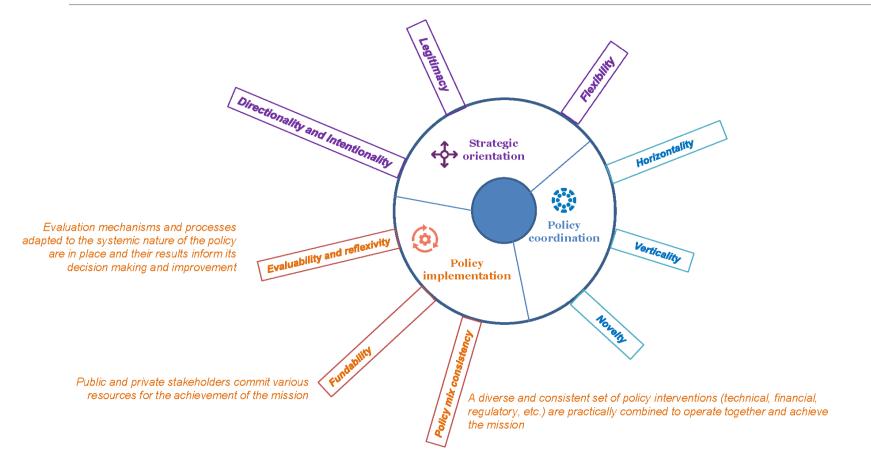




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#### TYPOLOGY OF MISSION ORIENTED POLICIES



Туре	Selected cases
Overarching mission-oriented strategic frameworks	<ul> <li>Horizon Europe's missions [EU]</li> <li>Mission-driven Top Sectors policy [NL]</li> </ul>





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	Ecosystem-based mission programmes	<ul><li>Vision-Driven innovation milieus [SE]</li><li>Growth engines [FI]</li></ul>



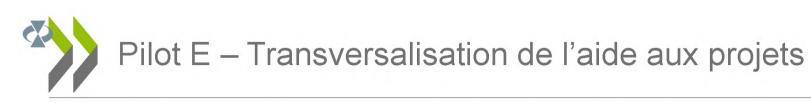
#### 3 EXAMPLES OF MISSION-ORIENTED POLICY



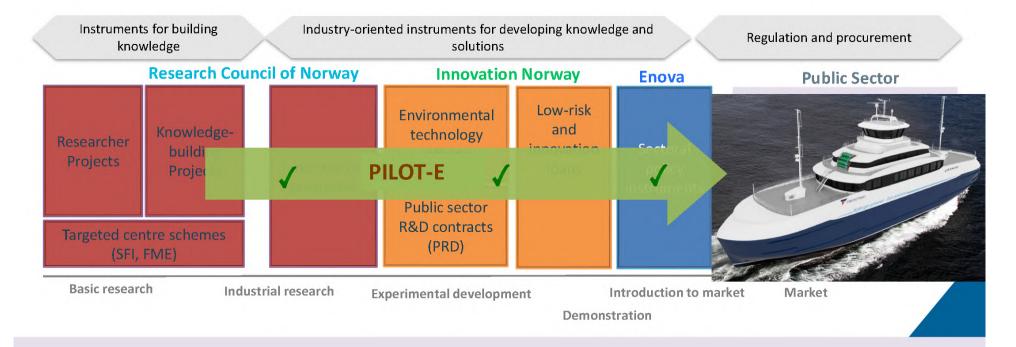


- Les principes de base
  - Lancée depuis 2016, développement de technologies/véhicules à faible ou zéro émission
  - 3 agences: développement des AAP en commun, coordination tripartites, monitoring et évaluation collectif
  - Sélection de projets incluant la composante demande
- Avantages pour les bénéficiaires
  - Accélération (fast track) des projets de la recherche au déploiement
  - Approche plus stratégique (hands-on) au niveau des portefeuilles de projets
  - Guichet unique virtuel
  - Projets intégrant l'ensemble des composantes de la chaine d'innovation (connaissances, produits, infrastructure, marché)
  - Synergies entre les financements
- Modèle répliqué dans d'autres domaines (Pilot-H, Pilot-T, Biooeco initiative, Green innovation Platform)

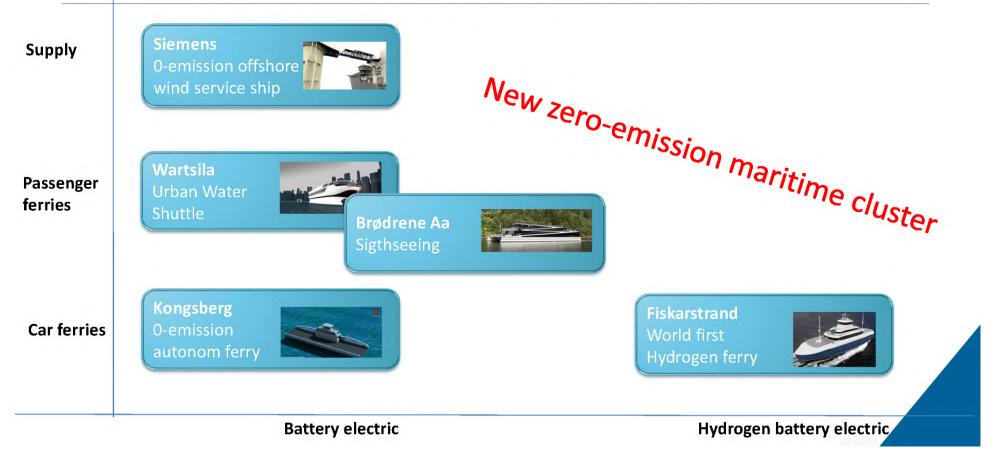








Pilot E - Portefeuilles stratégiques de projet pour développer des écosystèmes innovants



### Les Challenge research programmes de Science Foundation Ireland

- Les principes de base
  - 5 Prix innovants lancés: 'Artificial Intelligence for Societal Good Challenge', 'Zero Emissions Challenge', 'Plastics Challenge'
  - Projets interdisciplinaires, couvrant les aspects techniques et sociétaux
  - Participation des utilisateurs des résultats de R&I
- Avantages pour les bénéficiaires
  - Implications des acteurs et utilisateurs de la recherche dans la définition des challenges
  - Focus sur les résultats et impacts, y compris sociétaux (« Societal Impact Champion")
  - Couvre le développement des prototypes et démonstration
  - Approche graduelle et interactive (3 phases et proximité avec les financeurs)



Les Challenge research programmes de Science Foundation Ireland - Exemples de projets



Recyclage total des batteries lithium cobalt batteries

#### Praise for Carbery's Zero C farm plan

The dairy industry's drive towards carbon-neutral farms



The Carbery processing plant: the Group's emphasis has now turned to suppliers' dairy farms, and to reducing their carbon emissions.

Des fermes 'Net-Zéro'



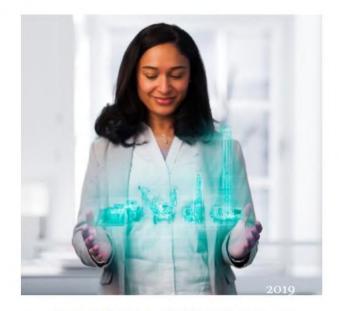


# Les Strategic Innovation Programmes

- Les principes de base
  - depuis 2012
  - Co-création des feuilles de route stratégique par les acteurs des eco-systèmes
  - Processus en 2 étapes (développement des feuilles de route / mise en œuvre des projets pour réaliser la feuille de route)
- Avantages pour les bénéficiaires
  - implications de l'ensemble des acteurs dans la définition des feuilles de route
  - engagement de l'état à financer les projets selon les feuilles de route co-construites
  - approche long terme
  - chaque SIP a sa propre structure de gouvernance et management, avec implication des acteurs de l'écosystèmes
  - gestion des AAP par chaque programme (avec les agences concernées)
  - mobilisation de l'écosystème, approche collective

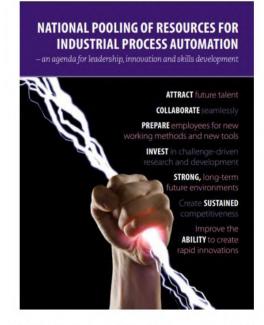






STRATEGISK FORSKNINGS- OCH INNOVATIONSAGENDA för svensk gruv- och mineralindustri samt metallutvinnande industri

Soutien à l'innovation pour un développement soutenable de l'industrie minière

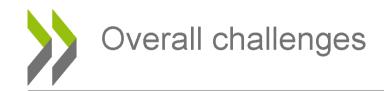


Renforcement de la capacité d'innovation des sous-traitants de l'industrie de transformation suédoise



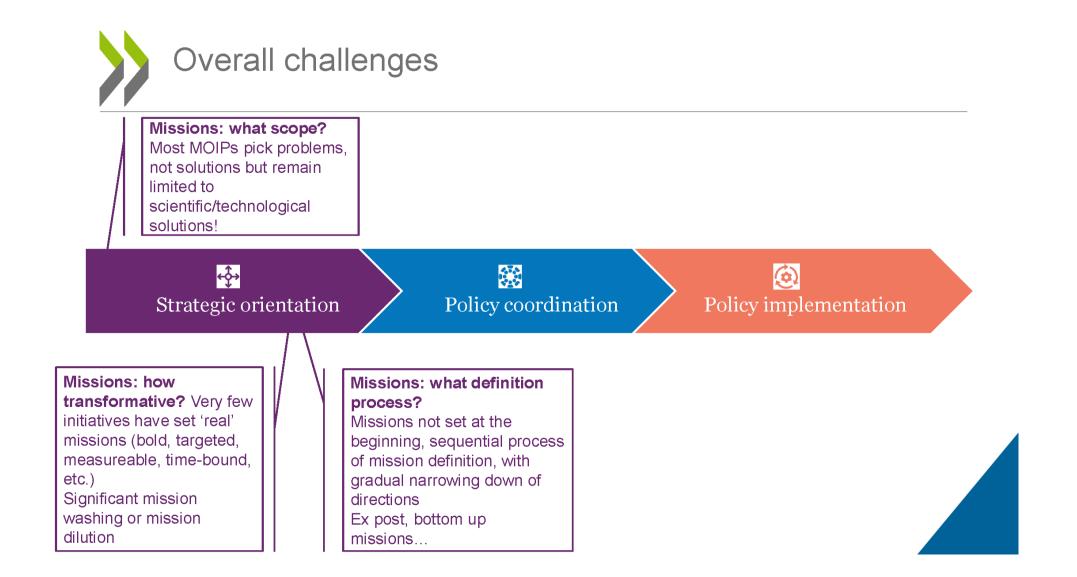


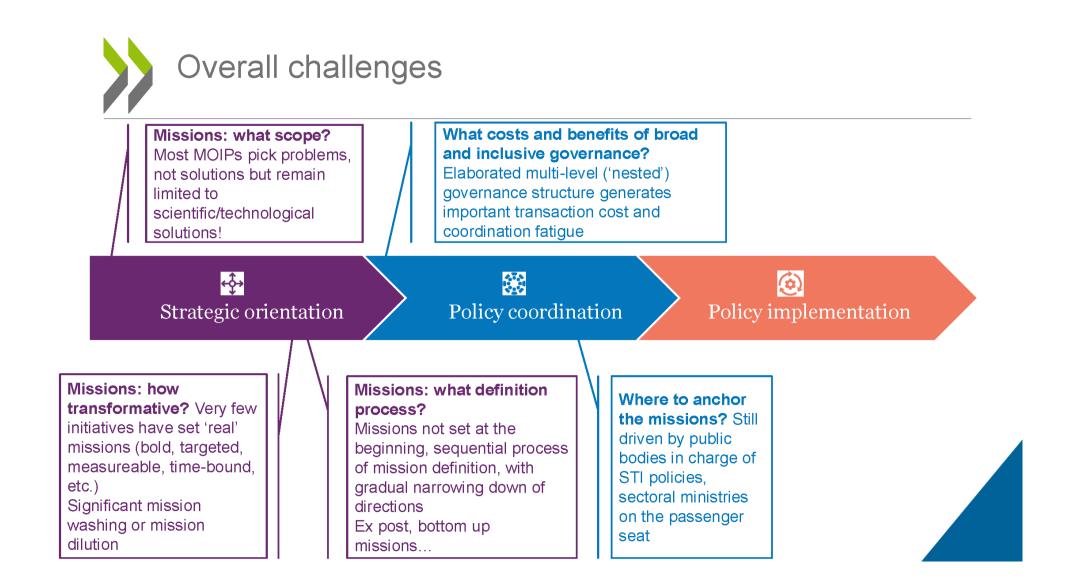
## CHALLENGES AND OPPORTUNITIES

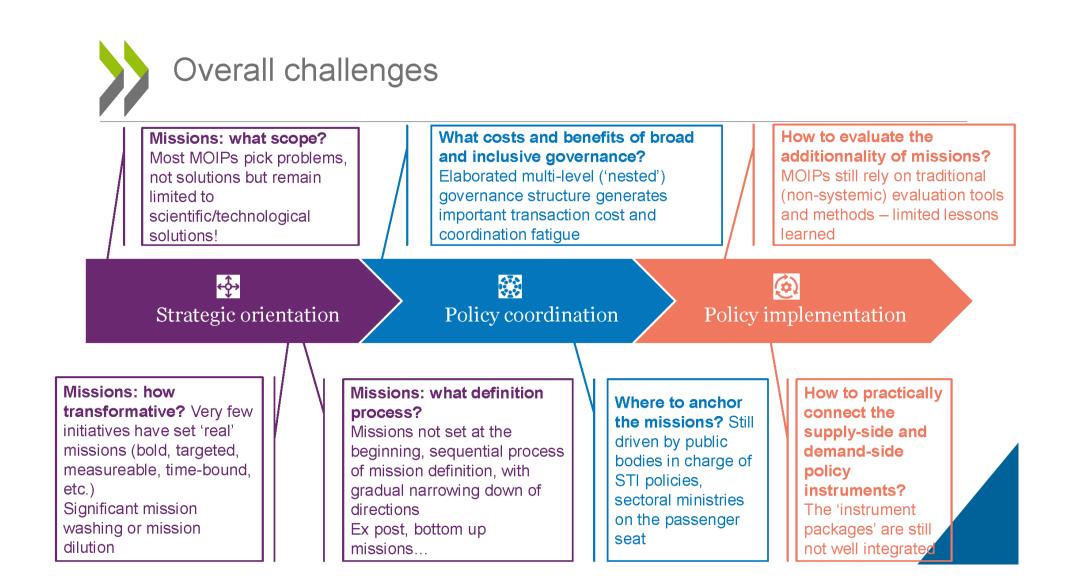














## IMPLICATIONS FOR EU MISSIONS



#### Implications for EU missions

- What scope for EU missions?
  - R&D or overall system?
  - Implications in terms of 'transformative potential'
- Where to anchor EU missions?
  - implications in terms of mission leadership and research funding
- What linkages with different partnerships, IPCEIs and other EU collective action initiatives?
  - Mind mission over-coordination : risk of transaction costs, mission dilution, inflexibilities..
- How to implement missions within a EU Framework Programme setting?
  - Project portfolio management (<-> project management) requires different resources, procedures and capabilities
  - How to fit missions in calls for proposal?
  - How to connect missions with demand-side support instruments?
- How to evaluate the additionnality of missions?
  - Need adapted evaluations to learn and convince about this new policy approach (cf. FP6's IPs et NoEs)



Strategic orientation

Policy coordination

Policy implementation

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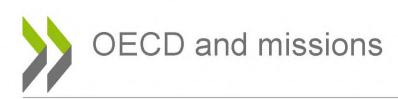




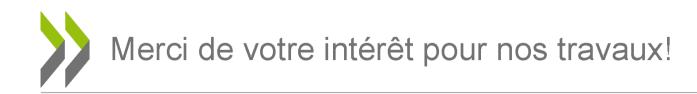
- MOIPs offer a *dedicated* and *tailor-made* space for collective action to tackle a specific challenge:
  - co-create the objectives and targets (the 'mission')
  - set up a specific structure of governance
  - design and implement an intentional policy mix











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