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# **Building Back Better: Innovation-enhancing Procurement** for Sustainable Development

Note by the secretariat

### I. Introduction

- 1. This note presents good practices and policy recommendations on Innovation-enhancing Procurement (IEP) for sustainable development. It is based on the session "Building Back Better: Innovation-enhancing Procurement for Sustainable Development" of the informal consultations of the Team of Specialists on Innovation and Competitiveness Policies, held through a webinar on 23 October 2020.¹ The good practices and the recommendations reflect and benefit from the experiences of all participating stakeholder groups, including national governments and procurement agencies, academic institutions, the business sector, think tanks, civil society groups and international organisations.
- 2. Innovation<sup>2</sup> is central to the shift towards more sustainable production and consumption post COVID-19 and the transition to a circular economy. New technologies, product design, digital platforms and innovative business models are the enablers for a circular economy.
- 3. The United Nations Sustainable Development Goals (SDGs) recognize a strong link between innovation, sustainable development, and public procurement. In fact, one of the targets under the SDG 12 on Responsible Consumption and Production focuses specifically on "promot[ing] public procurement practices that are sustainable, in accordance with national policies and priorities".<sup>3</sup>
- 4. Public procurement is an important part of economic activity, on average accounting for 10-15 per cent of Gross Domestic Product (GDP) in most countries.<sup>4</sup> In addition to the primary function of acquiring goods, works and services, policy makers worldwide



<sup>&</sup>lt;sup>1</sup> The presentations can be found here.

<sup>&</sup>lt;sup>2</sup> Innovation is part of UN SDG 9: Industry, Innovation and Infrastructure, as well as a key dimension of other SDGs and their targets. See https://sdgs.un.org/goals.

<sup>&</sup>lt;sup>3</sup> UN, Sustainable Development Goal 12, available at https://sustainabledevelopment.un.org/sdg12.

<sup>&</sup>lt;sup>4</sup> See WTO, WTO and government procurement, available at https://www.wto.org/english/tratop\_e/gproc\_e/gproc\_e.htm.

increasingly see public procurement as an important tool to achieve broader sustainable development objectives and to Build Back Better after COVID-19.

- 5. Public procurement, with the right strategic policy support, can become a key instrument to enhance innovation for sustainable development. IEP, carries the potential to stimulate broad experimentation with new ideas and technologies in the public and the private sector and to attain economic, social, and environmental objectives.
- 6. This note provides an overview of the role of IEP in supporting sustainable development and shifting to a circular economy post COVID-19. Following this introduction, the second section presents the concept of IEP vis à vis traditional public procurement and underscores its strategic importance and potential; the third section explores central elements of the IEP concept; the fourth section explores how IEP can be used to build a more productive, sustainable and resilient economy post COVID-19. The fifth section looks at the challenges in implementing IEP, and the sixth section offers policy recommendations under four groups of actions to successfully implement IEP; the last section concludes.

# II. Why Innovation-enhancing Procurement

- 7. Public procurement is the process by which public authorities, such as government departments, regional and local authorities or bodies governed by public law, purchase works, goods or services from companies.<sup>5</sup> It is essential for governments to ensure their provision.
- 8. By procuring innovative goods, works and services, governments can make their own operations more productive and sustainable and can serve citizens and companies better. Procurement can thus make a significant contribution to innovation inside the public sector. This in itself is a major consideration because the public sector overall often accounts for a third to one half of GDP, and the goods, services and infrastructure it provides are a critical input for private sector economic activity.<sup>6</sup>
- 9. Beyond the remit of the public sector's own operations, IEP can encourage innovation in the private sector for instance by articulating the specifications of the demanded product or service, by signalling the existence of unmet needs, and facilitating interaction between users and producers.
- 10. Public procurement can provide a "lead customer" or "lead market" for an innovative product, service or process<sup>7</sup> through early stage large purchases. Procurement contracts also act as an incentive for developers of new technologies, who may not receive support from traditional R&D subsidies.
- 11. Policy makers can use IEP not only to stimulate innovation in general, but also for mission-oriented innovation, i.e. to steer innovation into directions that help attain broad economic, social, and environmental objectives, including the transition to the circular economy and to Build Back Better after the COVID-19 pandemic.
- 12. IEP is and should be considered as a strategic policy tool. By helping governments to better meet their policy objectives, well-governed public procurement contributes directly to greater public trust, enhanced well-being and more prosperous and inclusive societies.<sup>8</sup>

<sup>&</sup>lt;sup>5</sup> http://ec.europa.eu/growth/index\_en

<sup>&</sup>lt;sup>6</sup> UNECE (2017), Innovation in the Public Sector, United Nations, New York-Geneva. http://www.unece.org/index.php?id=47160

<sup>&</sup>lt;sup>7</sup> OECD (2016) Public Procurement for Innovation. Good Practices and Strategies. OECD, Paris.

<sup>&</sup>lt;sup>8</sup> OECD Ibid.

#### Table 1

#### Why Innovation-enhancing Procurement?

Benefits IEP can bring:

Can be used **to satisfy human needs and/or solve societal problems**, that are not met or solved yet

Can **stimulate and promote innovation** by creating demand for innovation and steering the market towards innovative solutions

Can **be a strategic policy** tool for achieving economic, social and environmental objectives including the circular economy

Source: UNECE.

### III. What is IEP and how it works

- 13. IEP can be defined as a demand-side policy instrument, whose purpose is to satisfy human needs and/or to solve societal problems by stimulating new solutions to an unmet policy need or challenge.
- 14. According to the definition of the European Commission, "innovation procurement" refers to any procurement that has the following characteristics: (i) buying the process of innovation R&D with (partial) outcomes and/or (ii) buying the outcomes of innovation created by others (innovative goods or services).
- 15. In the first case, the public buyer buys the research and development services for products, services or processes, which do not exist yet. The public buyer prompts businesses and researchers to develop innovative products, services or processes to meet the need they have specified. In the second case, the public buyer acts as an early adopter and buys a product, service or process that is new to the relevant market and contains substantially new characteristics.
- 16. The OECD defines public procurement for innovation as "any kind of public procurement practice (pre-commercial or commercial) that is intended to stimulate innovation through research and development and the market uptake of innovative products and services.<sup>10</sup>
- 17. In a recent study<sup>11</sup> the OECD reports that in 36% of the cases presented, the product or service procured was new or catered to a group that had not used it before; in 30% of the cases the innovation was related to new approaches used to design or deliver a product that had existed before. The remaining cases related to innovation in communicating with users or innovation in reorganizing the work in the institution.
- 18. IEP thus entails tendering for a good, service or technology that does not exist yet as well as procuring existing best-in-class goods, services, works or technologies that are new to the public sector or a group of users. The latter is particularly relevant for countries with economies in transition, who are often not yet at the global technology frontier and could make rapid progress at a reasonable cost by adopting existing best-in-class products and services. However, procuring innovations that do not yet exist requires specialized tools and processes which are demanding in terms of governance and management capacity in the

<sup>&</sup>lt;sup>9</sup> See Innovation Procurement Platform, available at https://innovation-procurement.org/why-buy-innovation/; European Commission, Commission notice: Guidance on Innovation Procurement, C (2018) 3051 final of 15 May 2018, available at

https://ec.europa.eu/transparency/regdoc/rep/3/2018/EN/C-2018-3051-F1-EN-MAIN-PART-1.PDF. For additional detail see Box 2, below.

OECD (2017) "Public Procurement for innovation: good practices and strategies", OECD Public Governance Review.

<sup>11</sup> Ibid.

public sector (section IV below). While this is a challenge for all countries, it may be a particularly pronounced constraint in many economies in transition.

- 19. Both the procurement of completely new goods and services and the procurement of existing best-in-class goods and services require a shift from defining detailed parameters to leaving economic operators the space to propose solutions, according to strategic goals. This requires flexibility in the underlying legal frameworks on at least two fronts:
- (a) Allowing the selection of successful bidders based on total cost over the life cycle of the good or service being procured (which may be lower for best-in-class goods and services), rather than only based on the lowest upfront cash cost (which are typically lower for traditional products and services); and
- (b) Allowing specification of the good or service to be procured in functional terms<sup>12</sup> (e.g. heating an office building to 22 degrees, at zero net greenhouse gas emissions), rather than in technical terms (e.g. a gas-powered central heating unit with a given capacity). This allows different bidders to compete by proposing either entirely new or existing best-in-class solutions that meet the specifications, rather than restricting the competition to those able to offer the pre-specified existing solution at a low price.
- 20. Procurement aiming to stimulate innovation that is new to the world (rather than just new to the public sector or the country) requires additional policy instruments to (i) facilitate the process of discovering what is within the reach of technological possibilities, and to (ii) support and share the risks of the necessary R&D.
- 21. The process of discovering technological possibilities can be facilitated through socalled competitive dialogues with industry, in which the public procurement agency and the relevant industry players clarify what the need is, where the limits are of what existing bestin-class technology can deliver, as well as the prospects of developing a new superior solution.
- 22. In addition to competitive dialogues, procurement agencies may also engage in socalled pre-commercial procurement, where they issue tenders for R&D that may result in proofs of concept or prototypes for possible new solutions to an unmet need.<sup>13</sup>
- 23. These tenders are typically open not only to large established companies, but also to start-ups and teams of researchers. Pre-commercial procurement is a way for the government to (i) (co-)finance R&D in areas critical for achieving its strategic objectives, (ii) share the risk of such frontier R&D with the private sector, and (iii) stimulate the potential entry into the market of new players.
- 24. Although winning a pre-commercial procurement tender does not entail any guarantee of winning the tender for the actual good or service to be procured, the results may still prove to have useful applications elsewhere and thus have a positive effect for the economy at large.

Table 2 **How IEP boosts innovation and technology** 

IEP	boosts	innovation	and new	technology	through:

Competitive dialogues with industry	<ul> <li>To clarify what the needs are</li> <li>To identify limits of existing best in class technology</li> <li>To explore prospects to develop new superior solutions</li> </ul>
Pre-commercial procurement	<ul> <li>To (co)-finance R&amp;D in areas critical for achieving its strategic objectives</li> <li>To share the risk of frontier R&amp;D with the private sector</li> </ul>

<sup>&</sup>lt;sup>12</sup> Functional specifications define what functionalities the purchased good or service has to provide.

European Commission (2006) Pre-commercial Procurement. Public sector needs as a driver of innovation. European Commission, September 2006.

IEP boosts innovation and new technology through:

To stimulate the potential entry into the market of new players

Source: UNECE based on EU Commission and OECD definitions.

# IV. IEP and the circular economy<sup>14</sup>

- 25. The circular economy may be broadly construed as a system where the value of products, materials and resources is maintained in the economy for as long as possible. What is considered waste in the traditional linear economy is turned into an asset or resource in the circular economy. The circular economy is restorative and regenerative by design, enhancing and preserving natural capital, optimising resource yields and minimising system risks by managing stocks and renewable flows.<sup>15</sup>
- 26. In the circular economy, the ultimate goal is to decouple global economic growth from the consumption of finite resources. It therefore offers a systemic paradigm to bring together sustainable production and consumption.
- 27. Innovation is already driving the move to the circular economy and to sustainable consumption and production patterns. There are numerous examples of new technologies, processes, services and business models that are re-shaping product life cycles from design through production and usage on to disposal and re-cycling. New forms of sustainable consumption, such as sharing platforms, appear in transport, housing, and other areas. <sup>16</sup>
- 28. Advances in technology create more ways to shift to circular economy models; many allow more efficient collaboration and knowledge sharing, better tracking of materials, improved product design and materials, and increased use of renewable energy.
- 29. However, the transition to the circular economy is still at an early stage in most of the ECE region, and the potential of innovation to make production and consumption fully sustainable is far from being fully exploited. More policy support is needed, and public procurement can be a key policy tool.
- 30. Increasingly governments are shifting to sustainable public spending and implementing related policies.<sup>17</sup> Through Sustainable Public Procurement (SPP), governments can stimulate better environmental and social performance of products and build circularity in their economies. Some jurisdictions separately focus on green public procurement and/or circular public procurement as part of the broader approach to sustainability (see Table 3, for detailed definitions of the concepts).
- 31. The European Union Action Plan for the Circular Economy (2015)<sup>18</sup> recognises public procurement as a driver in the transition towards the circular economy, and it sets out several actions which the European Commission will take to facilitate the integration of circular economy principles into public procurement. The European Commission defines circular procurement as "the process by which public authorities purchase works, goods or services that seek to contribute to closed energy and material loops within supply chains, whilst

The 69th session of Economic Commission for Europe session on 26 - 27 April 2021 is dedicated to the topic "Circular economy and the sustainable use of natural resources".

Definition by Ellen MacArthur Foundation: https://www.ellenmacarthurfoundation.org/circular-economy/concept

UNECE Team of Specialists on Innovation and Competitiveness Policies, Policy paper on "Towards the circular economy: innovation policy for sustainable production and consumption", 2017.

UNEP, Building Circularity into Our Economies Through Sustainable Procurement, 2018, available at

https://wedocs.unep.org/bitstream/handle/20.500.11822/26599/circularity\_procurement.pdf?sequence =1&isAllowed=y.

http://ec.europa.eu/environment/circular-economy/index\_en.htm

minimising, and in the best case avoiding, negative environmental impacts and waste creation across their whole life-cycle". 19

- 32. In 2013, the Dutch Government established the Circular Procurement Green Deal to accelerate the transition to a circular economy. The programme brought together 45 public and private parties, tasked with carrying out two circular procurement initiatives. In three years, 80 circular procurement pilots were conducted, and their lessons shared. As a result, the Dutch Government placed special emphasis on circular procurement and the consideration of life-cycle costs in its 2016 Roadmap to a Circular Economy. It also pledged to raise the proportion of circular procurement to 10% by 2020.<sup>20</sup>
- 33. By applying the tools of IEP to promote and use SPP, public agencies can make a difference in facilitating the transition to the circular economy.<sup>21</sup> They can provide industry with real incentives for developing sustainable technologies and goods not only by providing the necessary funding but encouraging innovation in this field by:
- (a) Clearly attaching evaluation criteria and payment streams to performance indicators;
- (b) Formulating tenders around the impact envisaged, allowing margins for bidders to come up with different solutions to achieve it;
  - (c) Including circular economy aspects in procurement criteria.

Table3

#### Sustainable, Green, Circular and Innovation-enhancing Procurement

Sustainable Public Procurement	Public authorities seek to purchase goods, services, works and utilities in a way that achieves value for money on a whole lifecycle basis in terms of generating benefits not only to the organization, but also to the society and the economy, whilst significantly reducing negative impacts on the environment. <sup>22</sup>
Green Public Procurement	Public authorities seek to purchase goods, services or works with a reduced environmental impact throughout their life-cycle compared to goods, services and works with the same primary functions which would otherwise be procured. <sup>23</sup>
Circular Public Procurement	Public authorities seek to purchase goods, services or works that contribute to closed energy and material loops within supply chains, whilst minimising, and in the best case avoiding, negative environmental impacts and waste creation across their whole lifecycle. <sup>24</sup>
Innovation- enhancing Procurement	1.Public authorities purchase the process of innovation (R&D) with (partial) outcomes: the public buyer buys the R&D services for products, services or processes, which do not exist yet. The public buyer describes its need, prompting businesses and researchers to

European Commission, "Public Procurement for a circular economy – Good practice and Guidance", 2017

http://www.scpclearinghouse.org/sites/default/files/eng\_green\_deal\_circular\_procurement\_magazine.pdf.

<sup>&</sup>lt;sup>21</sup> Liesbeth Casier, "The Three Challenges to Innovative Public Procurement", IISD blog 2018.

<sup>&</sup>lt;sup>22</sup> UNEP, above note 16.

European Commission, Green and Sustainable Public Procurement, available at https://ec.europa.eu/e https://wedocs.unep.org/bitstream/handle/20.500.11822/26599/circularity\_procurement.pdf?sequence =1&isAllowed=ynvironment/gpp/versus\_en.htm.

European Commission, Public Procurement for a Circular Economy: Good Practice and Guidance, 2017, available at https://ec.europa.eu/environment/gpp/pdf/CP\_European\_Commission\_Brochure\_webversion\_small.p df.

develop innovative products, services or processes to meet the need.

2. Public authorities buy the outcomes of innovation created by others (innovative goods or services): the public buyer, instead of buying off-the-shelf, acts as an early adopter and buys a product, service or process that is new to the relevant market or public entity and contains substantially novel characteristics.<sup>25</sup>

Source: UNECE based on definitions from UNEP and the EU Commission.

# V. IEP Challenges

- 34. A recent OECD survey indicates that around 80% of its member States support IEP; 50% have developed an action plan for IEP, either as part of a broad national strategy or a separate dedicated initiative. Measures to support IEP include: policy and legal instruments; comprehensive programmes tailored to R&D and dedicated financial instruments.<sup>26</sup>
- 35. The Build in Canada Innovation Program for instance helps innovators bridge the precommercialisation gap by helping them move their innovations from the lab to the marketplace through testing in operational environments across government. It awards contracts to entrepreneurs with pre-commercial innovations through an open, transparent, competitive and fair procurement process for their testing within the Canadian federal government.
- 36. In Ireland the Small Business Innovation Research (SBIR) which acts as a national innovation pre-commercial procurement initiative, aims to drive innovation across all sections of the Irish Public Sector via robust engagement with technology rich companies and organizations.
- 37. Despite examples such as the above, IEP is currently used only for a fraction of public procurement, covering mostly developed economies. Innovative solutions are not widely mainstreamed in public service and delivery in transition and developing economies.
- 38. The benefits of IEP and its potential multiplier effect of advantages have not been realized or fully realized because procurement is still broadly considered an administrative function of government. As a result, a large part of public procurement remains very compliance-driven and not very innovative.
- 39. Countries have recognized risk aversion and resistance to change, the lack of political leaderships, the lack or inadequacy of a robust legal and regulatory framework, poor management and coordination, lack of financial support and fragmentation as some of the main challenges to overcome.<sup>27</sup>
- 40. Although some countries in the ECE region are fairly advanced in their legal frameworks for IEP, its correct implementation comes with several challenges, especially considering that innovation itself is characterized by risks and uncertainty. The challenges faced by economies in transition are even higher, particularly when it comes to governance and management capacities.
- 41. The complexities of running a competitive process in IEP adds to the list of the above-mentioned challenges. Competitive dialogues require a high level of administrative capacity, knowledge and skills, and only few countries have managed to fully implement them. This pertains to the management of pre-commercial procurement, competitive dialogues, the actual procurement of innovative goods and services, and the management of procurement contracts over their life cycle.
- 42. Public procurers need to be able to engage in an open dialogue with potential suppliers to learn about the best available solutions. However public procurers have a natural risk

<sup>&</sup>lt;sup>25</sup> European Commission above note 24.

OECD above note 11.

OECD, "Public procurement for innovation: good practices and strategies" OECD 2017.

aversion in this regard, based on fear of allegations of corruption. Fighting corruption and maintaining competitive and transparent processes is a governance challenge in the implementation of IEP.<sup>28</sup>

- 43. While public procurement tenders are open to all bidders, including foreign ones, sometimes in practice there seems to be little competition, and most tenders attract few bidders. SMEs often struggle to compete for public tenders, and many do not participate at all.<sup>29</sup>
- 44. Finally, procuring services rather than goods and awarding tenders based on life-cycle costing requires the capacity to measure and monitor performance over the life of the procurement contract and to take corrective action in case of under-performance. This requires measurement systems and information technology tools. Sound measurement systems require robust data and indicators and are crucial for the evaluation of innovation procurement strategies and improving the return on investment.

Table 4 **IEP challenges** 

Implementing IEP:	challenges to	overcome
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Leadership	<ul> <li>Procurement is broadly considered an admin function of government</li> <li>Large part of procurement is compliance driven and not innovative</li> </ul>
Institutions and governance	<ul> <li>Lack of political leaderships</li> <li>Lack of a robust legal and regulatory framework on IEP</li> <li>Risk aversion and resistance to change</li> <li>Poor management and coordination</li> <li>Lack of financial support and fragmentation</li> </ul>
Management	<ul> <li>Difficulties in ensuring a competitive process</li> <li>Poor measuring systems and IT tools</li> <li>Lack of capacity to measure and monitor performance over the life of the procurement contract</li> <li>Risk aversion and fear of allegation</li> </ul>
Capacity and skills	<ul> <li>Lack of administrative capacities</li> <li>Lack of knowledge and specific skills</li> <li>Difficulties in the management of pre-commercial procurement and competitive dialogues</li> </ul>

Source: UNECE based on OECD, EU Commission, IISD and discussions at ToS ICP 2020.

# VI. Approaches and Policy Recommendations

45. IEP is demanding in terms of the governance of the process, the skills needed at procurement agencies, and the risks that need to be managed.

<sup>&</sup>lt;sup>28</sup> As highlighted by experts at the informal consultations of ToS ICP in October 2020.

<sup>&</sup>lt;sup>29</sup> As stated at the informal consultations of ToS ICP in October 2020.

- 46. IEP can be used as a strategic policy lever. Should governments wish to implement IEP, they should consider strengthening the legal basis for public procurement as a driver of innovation and align public procurement practices and procedures with strategic national innovation, sustainable development and circularity priorities.
- 47. We can identify four set of actions to successfully implement IEP:
- (a) Adopting a strategic approach;
- (b) Reviewing and aligning legal frameworks and specifications;
- (c) Building capacities;
- (d) Strengthening cooperation and partnerships.
- 48. The adaptation to the conditions and needs of each different country is nevertheless required.

# A. Adopting a strategic approach

- 49. IEP should be part of broader national environmental and digital strategies linked to innovation, sustainable development and the promotion of the circular economy.
- 50. A clear political mandate is needed as well as strong political commitment. IEP needs to be regarded as a key and necessary stage of policy formulation and implementation (i.e. readiness to risk sharing). It should be deployed strategically in coordination with other policy areas.
- 51. The government entities requesting the procurement should learn to understand the market, as well as defining their own needs clearly, in cooperation with procurement agencies and in a dialogue with the business sector. Technology foresight exercises can be part of this.

#### B. Reviewing and aligning the legal frameworks and specifications

- 52. Legal frameworks should include the principles of transparency, value-for-money, fair competition and non-discrimination. They should also allow procurement agencies the flexibility to mainstream environmental, circular economy-related and social objectives when tendering for and evaluating projects and set the ground for IEP.
- 53. The EU Public Procurement Directive (2014) is considered one of the international good practices. It outlines different procedures of market engagement—such as competitive dialogue and competitive procedures with negotiation and it introduces Innovation Partnerships for the purchase of R&D and the application of that R&D to public needs.<sup>30</sup>
- 54. Legal frameworks should allow tenders to be awarded based on a life-cycle-cost approach rather than on the basis of the lowest price of the good or service procured. Public procurement decisions taken on the basis of the price of acquisition or the capital cost only, often do not fully reflect the real cost to society because of externalities. Where the nature of the good or service to be procured requires a long-term perspective, the use of life-cycle costs as an award criterion should be made mandatory so as to counteract the incentives often built into public budgets to minimize current expenditures.
- 55. Legal frameworks should allow the use of functional<sup>31</sup> rather than technical specifications of the selection criteria in tenders (e.g. percentage reduction in energy costs of a building), rather than which specific good or service to buy (such as a new central heating unit). Potential providers could thus propose innovative solutions that meet the specifications.
- 56. When it is not possible to engage in innovative tendering procedures, pre-defined technical specifications on circularity properties can be included among the award criteria. For instance, the European Commission created public procurement criteria for more than 20 product groups with a focus on circularity aspects. Criteria are separated into core criteria

<sup>30</sup> https://eur-lex.europa.eu/eli/dir/2014/24/oj.

<sup>&</sup>lt;sup>31</sup> Functional specifications define what functionalities the purchased good or service has to provide.

(suitable for use by any contracting authority for addressing environmental impact) and comprehensive criteria (targeted at purchasing the best environmental products available on the market).<sup>32</sup>

57. Technical specifications supporting circular economy procurement can include promoting product eco-design and design for recyclability, extended producer responsibility, waste prevention, packaging material and sharing, collaborative economy, reuse and refurbishment.<sup>33</sup>

#### The WTO Agreement on Government Procurement (GPA)

The GPA promotes international best procurement practices, such as non-discrimination, transparency, procedural fairness and anti-corruption conduct. Adherence to these rules and associated governance reforms is likely to facilitate innovation procurement. More concretely, the GPA also provides an option to use environmental standards in technical specifications and it facilitates access to foreign innovative solutions, which might have positive spill-over effect domestically through technology transfer. It can also support IEP approaches through encouragement to incorporate e-procurement, which stimulates demand for innovative digital technology solutions.

Source: UNECE based on the World Trade Report, WTO 2020

### C. Building capacities

- 58. Even in advanced economies, where provisions for IEP exist in procurement strategies or legal frameworks, implementation is frequently still lagging far behind potential.
- 59. Government agencies need to improve the skills and capacities of public procurement officials, enhance data collection and monitor results and risk-management. A central government agency could be tasked with systematically monitoring, policy evaluation and policy learning on IEP.
- 60. Government agencies should establish skilled multi-disciplinary teams and encourage sound management, as well as promote the professionalization of staff with the provision of specific training. Qualified staff should have expert knowledge of measures, tools, regulations and directives related to IEP (e.g. life-cycle-costing approach, total cost of ownership, procedures and directives).
- 61. Public buyers should engage with the market, consult the market and know the market (market intelligence). They should engage with innovation eco-systems and have a clear understanding of their own needs well before a public procurement tender is launched.
- 62. To facilitate this, Governments should consider setting up intermediaries, such as innovation agencies, to bring together buyers and suppliers as well as national and local competences in a one stop shop. These intermediaries could also play a role in raising awareness and creating a knowledge sharing platform, ensuring early stakeholders' engagement.

### D. Strengthening cooperation and partnerships

63. New forms of partnerships and cooperation both at the national level between buyers and suppliers, and at regional and international level, are crucial to overcome IEP challenges.

<sup>32</sup> European Commission, "Public Procurement for a circular economy – Good practice and Guidance", 2017.

<sup>33</sup> Ibid.

- 64. Government agencies should establish an Innovation Procurement Service-network from national to regional to international levels and include a service-portfolio for the entire innovation procurement process.
- 65. They should also establish knowledge networks with other countries, to mutually learn and improve their policies and approaches.
- 66. The exchange of international good practices and mutual learning should be encouraged in international and regional fora.

# Table 5 Actions

Policy actions to implement IEP

### Adopting a strategic approach

- Include IEP into national, environmental and digital strategies linked to innovation and sustainable development
- Ensure a clear political mandate and strong political commitment
- Understand the market and define needs clearly

# Reviewing and aligning the legal frameworks and specifications

- Include principles of transparency, value for money, fair competition and non-discrimination
- Allow flexibility to mainstream environmental, circular economy and social objectives
- Award tenders based on a life-cycle cost approach
- Allow the use of functional specifications of the selection criteria in tenders
- Include technical specifications on circularity properties when innovative tenders are not possible.

#### **Building capacities**

- Professionalize staff and provide specific training
- Establish skilled multi-disciplinary teams and encourage sound management
- Conduct market intelligence and engage with innovation eco-systems
- Set up a one-stop-shop, such as innovation agencies
- Raise awareness and create a knowledge sharing platform
- Carry systematic monitoring evaluation and policy learning

# Strengthening cooperation and partnerships

- Establish new forms of partnerships and cooperation at national, regional and international level
- Establish an Innovation Procurement Service Network at national, regional and international level
- Establish international knowledge networks

Policy actions to implement IEP

• Exchange best practices and mutual learning

Source: UNECE.

# VII. Conclusions

- 67. IEP is a strategic policy tool that can help governments to better meet their policy objectives, economic, social and environmental ones, including the transition to the circular economy.
- 68. Governments may consider strengthening the legal and regulatory basis for public procurement and align it with strategic national innovation and sustainable development priorities.
- 69. Numerous are still the challenges to implement IEP, particularly in the transition economies.
- 70. UNECE is promoting international policy dialogue and the identification of best practices on IEP through the work of its Team of Specialists on Innovation and Competitiveness Policies. The work of the Team of Specialists will feed into the 69<sup>th</sup> session of the Commission dedicated to the topic "Circular economy and the sustainable use of natural resources" on 26-27 April 2021.
- 71. UNECE also assists governments in the actions to implement IEP through the recommendations on IEP of the national Innovation for Sustainable Development Reviews and national capacity building programmes tailored on these recommendations.<sup>34</sup>

<sup>&</sup>lt;sup>34</sup> For example, see the UNECE Innovation for Sustainable Development Review of Georgia, UNECE 2020.