

EN Annex 2

Memorandum of Understanding for the Co-programmed European Partnership for Batteries: Towards a competitive European industrial battery value chain (Batt4EU)

The Batteries European Partnership Association BEPA Aisbl, representing the partners other than the Union (its constituent entities¹), the registered offices of which are in Avenue Adolphe Lacomble 59/8, 1030 Brussels, Belgium, hereafter referred to as the “Partners other than the Union”, and the European Union, represented by the European Commission, (jointly hereinafter referred to as “the Partners”),

Considering that:

- Parts of Horizon Europe – the Framework Programme for Research and Innovation (‘Horizon Europe’) ² – may be implemented through Co-Programmed European Partnerships, on the basis of a Memorandum of Understanding between Partners determined to support the development and implementation of research and innovation activities of strategic importance to enable the Union to address global challenges and maintain its competitiveness in line with EU priorities, including the Sustainable Development Goals;
- The Strategic Plan for Horizon Europe³ has identified a candidate for a Co-Programmed European Partnership for Batteries: Towards a competitive European industrial battery value chain (Batt4EU), considered instrumental to deliver scientific, economic and societal impact in line with the Horizon Europe objectives;
- The proposal received from the Partners other than the Union has been positively assessed by the European Commission in that it fulfils the new ambition and the selection criteria referred to in Article 10 and Annex III of Regulation (EU) 2021/695 of the European Parliament and of the Council⁴ (‘Horizon Europe’);
- The implementation, monitoring and evaluation of the European Partnerships will comply with the criteria referred to in Annex III of Horizon Europe, including an

¹ Constituent entities are the members of the Association.

² Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination (OJ L 170, 12.5.2021, p. 1–68.)

³ <https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/3c6ffd74-8ac3-11eb-b85c-01aa75ed71a1>

⁴ OJ L 170, 12.5.2021, p. 1–68.

alignment with Horizon Europe monitoring and evaluation provisions, set out in Article 50 and Article 52, as well as Annex V on Key Impact Pathways;

- The multi-annual Strategic Research and Innovation Agenda (SRIA) agreed by the Partners will provide the basis for the development of the co-operation under this Memorandum of Understanding, and for defining the annual priorities in line with the Strategic Plan for Horizon Europe;
- Regulation (EU) 2020/852⁵ establishes the general framework for determining whether an economic activity qualifies as environmentally sustainable for the purposes of defining sustainable investments. It creates a common reference that investors, banks, industry and researchers can use when investing in projects and economic activities that have a substantial positive impact on climate and environment and no significant harm on any of them. It is the reference for green investments in the Union;
- Funding sources other than Horizon Europe (other Union programmes as well as external funding sources, including those from Member States) will be explored in order to contribute to the achievement of objectives of the Co-programmed European Partnership in line with Horizon Europe objectives;
- Driven by the ongoing clean energy transition and the uptake of zero emission mobility, demand for batteries is growing rapidly, making this market an increasingly strategic one at global level. In October 2017, the European Commission launched the European Battery Alliance (EBA) and in May 2018 adopted a Strategic Action Plan on Batteries as part of the Europe on the Move mobility package. The Action Plan aims to put Europe on a steady path towards leadership in this key industry, supporting jobs and growth in a circular economy, while ensuring cleaner mobility and an improved environment and quality of life for EU citizens.
- As one of the key actions in the Strategic Action Plan on Batteries, the Commission proposed to explore the feasibility of a public-private partnership to accelerate European battery R&I.
- In the European Green Deal⁶, and its implementation through the Circular Economy Action Plan⁷, the Commission announced that it would “continue to implement the Strategic Action Plan on Batteries”, of which the Batteries European Partnership is an integral part.
- Pursuant to Article 3 of the Statutes of BEPA, the Partners other than the Union engage in the European Partnership Batt4EU with the European Commission to promote, facilitate and carry out the research, innovation, dissemination and other activities aiming at market, regulatory and societal uptake, including workforce training, necessary to achieve the objectives specified in Section 1 below;
- This Memorandum of Understanding constitutes an agreement in which the Partners will undertake all efforts necessary to achieve the objectives. It is not legally binding and does

⁵ Regulation (EU) 2020/852 of the European Parliament and the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (OJ L 198, 22.6.2020, p. 13).

⁶ COM(2019) 640 final.

⁷ COM(2020) 98 final.

not, and will not, create any contractual or pre-contractual obligations under any law or legal system. Nothing in this Memorandum of Understanding will be construed as creating any liability, rights, waiver of any rights or obligations for any Partner or as releasing any Partner from its legal obligations. Neither Partner should be liable under this Memorandum of Understanding towards the other Partner;

Have agreed the following:

1 Establishment, general, specific and operational objectives

The Co-programmed European Partnership for Batteries: Towards a competitive European industrial battery value chain(Batt4EU), hereinafter referred to as “the Co-programmed European Partnership”, is agreed between the Partners, to be implemented in an open, transparent, efficient and flexible way.

This Memorandum of Understanding sets out a cooperative relationship for the duration of the Co-programmed European Partnership with a long-term common vision, and the Partners pledge to pursue this common vision throughout the duration of this Partnership. It will contribute to the objectives of Horizon Europe, and the Strategic Plan.

The general objectives of the Co-programmed European Partnership are defined as follows:

GO1 Contribute to making Europe the **first climate-neutral continent by 2050** by widespread adoption of e-mobility and stationary electrical energy storage;

GO2 Enable **European leadership in the battery industry** across the value chain, creating **economic growth and quality jobs in a circular economy**, by supporting the development of an innovative, competitive and sustainable battery manufacturing industry and a skilled workforce in Europe;

GO3 Contribute to achieving a **zero-pollution ambition for a toxic-free environment**, by providing safer and more sustainable batteries and processes in the context of the circular economy (along the whole value chain, including recycling).

The specific objectives are the following:

SO1 Support the development of differentiating technologies in battery materials, cell design and manufacturing and battery recycling, leading to demonstrations of new chemistries, cells, production lines and proof of concept of recycling logistics and methods.

SO2 Accelerate the development and deployment of sustainable and affordable battery solutions for clean mobility, by building a strong innovation ecosystem with downstream partnerships leading to joint demonstrations in different transport modes.

SO3 Enable a cost-effective integration of renewable energy sources in the power grid, by developing affordable batteries for stationary energy storage applications, leading to demonstrations of different scales of storage systems.

The operational objectives are the following:

A: By 2030, achieve the following **technical and scientific targets**⁸:

- a) increase battery energy density (+60% compared to 2019 values) (SO1,2)
- b) increase battery power density and charging rate (SO1,2,3)
- c) improve cycle lifetime (at least by a factor of 2 compared to 2019 state-of-the-art values) (SO1,2,3)
- d) reduce battery cost (-60% compared to 2019 values) (SO2,3)
- e) ensure battery safety in the different targeted application sectors (SO2,3)
- f) implement worldwide Best Available Technologies in manufacturing and recycling operations (SO1)
- g) enhance the sustainability of the main supply chains of battery raw materials and achieve the lowest possible carbon footprint of the supply chain from raw materials extraction through battery manufacturing, use and recycling. (SO1,2,3)

B: Throughout the life span of the Partnership, achieve the following **functional targets**:

- a) promote the involvement of relevant stakeholders in the activities of the partnership, including by appropriate geographical representation, gender balance and increasing the membership of private side association;
- b) establish close working relationships with the other partnerships listed in section 5.4;
- c) support the related standardisation activities in close cooperation with standardisation bodies;
- d) provide scientific input for informed regulation and related Union policies;
- e) ensure a wide communication and dissemination of activities and results;
- f) contribute to the education of future workers and the public awareness.

2 Contributions and activities by the Partners

Any Union contribution, provided through the Horizon Europe Framework Programme to the Co-programmed European Partnership, will be used to fund research and innovation activities, implemented as indirect actions following open calls for proposals and contests. These activities will be subject to the Horizon Europe Rules for Participation and Dissemination.

The European Commission envisages to dedicate up to EUR 925 million to actions within the scope of the Co-programmed European Partnership⁹.

The Partners other than the Union will provide input and advice to the European Commission in order to contribute to the identification of priorities of research and innovation activities and the definition of call topics to be included in the Horizon Europe Work Programmes **within the scope of the Co-programmed European Partnership's activities**.

⁸ These targets were jointly developed within Implementation Working Group 6 of the Strategic Energy Technology (SET) Plan, and further elaborated within the European Technology & Innovation Platform Batteries Europe.

⁹ The maximum Union contribution may be increased in duly justified cases (e.g. with contributions to Horizon Europe from third countries if available) and when agreed by the Partners and matched by contributions from the Partners other than the Union.

Furthermore, **the Partners other than the Union envisage¹⁰ to dedicate up to EUR 925 million** for the period 2021 - 2030¹¹ in research, innovation and other activities in the area of the Co-programmed European Partnership, engaging their constituent and affiliated entities¹² to make such investments. These contributions will complement the Union contribution and will at least match the Union contribution.

Contributions by the Partners other than the Union^{13 14 15} will take the form of:

- a. **In-kind contributions to the Actions funded by the Union**, consisting of eligible costs in accordance with the Horizon Europe rules minus the Union contribution;
- b. **In-kind contributions to Additional Activities** that are in the scope of the Strategic Research and Innovation Agenda (SRIA) and addressed in the annual Additional Activities Plan, which is approved by the Partnership Board. In-kind Additional activities are those activities which contribute to achieving the objectives of the Co-programmed European Partnership, including R&I at higher Technology Readiness Level (TRL) and/or to ensure demonstration, market, regulatory and societal uptake, which are in the scope of the SRIA but are not covered by Union funding;

For the in-kind contributions generated in Actions with lower funding rates than the maximum funding rates under Horizon Europe, the funding rate will be defined individually per call topic in the Horizon Europe Work Programme. This will range from the standard funding rate for R&I actions, to reduced funding rates for certain R&I actions and for Innovation actions in line with Article 34 of Horizon Europe. The selection of topics with reduced funding rates will be discussed in the Partnership Board.

In addition, the Partners other than the Union intend to make **Investments in operational activities** that go beyond the work foreseen in the SRIA, that contribute to achieving the

¹⁰ The undertaking and contribution by the Association covers only the in-kind contributions to be provided by its constituent entities and their affiliated entities (and not any contributions to be provided by its non-constituent entities or by a non-affiliated entity).

¹¹ The longer timeline for contributions from Partners other than the Union takes into account the fact that that the contributions will materialise over a longer period.

¹² Entities are affiliated when they have a link with the beneficiary, in particular a legal or capital link, which is neither limited to the action nor established for the sole purpose of its implementation, in accordance with Article 187(1) of the Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union.

¹³ In line with Annex III of Horizon Europe and referred as co-investment in Annex V of Horizon Europe.

¹⁴ Where applicable, funding from state resources must be compliant with State aid rules.

¹⁵ The European Partnership may consider the 'Do No Significant Harm Principle' pursuant to Article 17 of Regulation (EU) 2020/852 and take into account the provisions of that Regulation to improve access to sustainable finance, where relevant.

objectives of the Co-programmed European Partnership and where there is a clear link between the investment and the activities of the Co-programmed European Partnership (e.g. investments in building production facilities, in training programmes for workers potentially upscaled thanks to the European Social Fund Plus (ESF+), and in other activities required for producing and putting on the market the product/service resulting from the R&I performed as part of the Co-programmed European Partnership). These Investments in operational activities are however not included in the abovementioned contributions intended by the Partners other than the Union, but they should be taken into account as leverage.

3 Governance

The Partners should convene in the form of a Partnership Board as the main forum for dialogue and steering to reach the objectives set out in this Memorandum of Understanding. Through the Partnership Board, the representatives of the Partners should agree on all issues concerning the cooperation for the Co-programmed European Partnership. The Partners through their participating representatives are considered as ‘Members’ of the Partnership Board.

The Partners agree on the composition and size of the Partnership Board, while respecting the following principles:

- Adequate representation of the European Commission services, including through acting as co-chair when meeting in the format of the Partnership Board;
- Adequate representation of SMEs;
- Adequate gender balance;
- Adequate geographical coverage.

Participation in the Partnership Board may be on a rotating basis, except for the representatives of the European Commission.

In addition, the chairperson of the European Technology and Innovation Platform ETIP “Batteries Europe”¹⁶ and of its group known as the National and Regional Coordination Group may participate in the Partnership Board as observers.

In addition, the Partnership Board may agree to invite, or nominate as observers to its meetings representatives of other European Partnerships, civil society organisations, standardisation bodies, certification bodies, regulators, public procurers as well as experts in the area of the Co-programmed European Partnership.

The Partnership Board will be co-chaired by the European Commission, represented by the lead service in charge of the Co-programmed European Partnership, and a co-chair from the Partners other than the Union, selected among their members nominated to the Partnership Board.

¹⁶ https://ec.europa.eu/energy/topics/technology-and-innovation/batteries-europe_en

The Partnership Board may lay down its Rules of Procedure, based on a harmonised proposal provided by the European Commission, covering inter alia rules on confidentiality, transparency and avoidance of conflicts of interests.

In order to address strategic issues, the Partners may also convene at a higher level¹⁷ to review the work of the Partnership Board, take stock of the progress by the Co-programmed European Partnership in achieving its objectives, adjust priorities and activities according to changing market or policy needs or based on results from monitoring and evaluation activities, and discuss further ways to enhance collaboration between European Partnerships and synergies with other Programmes. The implementation of results and proposals from such high-level meetings may be subject to approval by the Partnership Board.

The Partnership Board will meet at least once a year with the Governing Board of ETIP Batteries Europe, who will advise on the priorities to be addressed, in line with the Strategic Research and Innovation Agenda and the Horizon Europe strategic planning, and suggest, in view of the progress of the Co-programmed European Partnership, adjustments or re-orientations to the Partnership Board, where necessary.

The Partnership Board convenes the meetings with Batteries Europe Governing Board.

The Partnership Board will also meet at least once a year with the National and Regional Coordination Group of ETIP Batteries Europe.

The National and Regional Coordination Group of ETIP Batteries Europe should advise and actively support the achievement of objectives of the Co-programmed European Partnership and ensure complementarity with national policies, priorities and programmes. They may review information and provide opinions on the progress of the Co-programmed European Partnership towards its scientific, economic and/or societal impacts at national and regional level.

The National and Regional Coordination Group of ETIP Batteries Europe may provide information to, and act as an interface with the Co-programmed European Partnership on the following matters:

- a) The status of activities performed under national or regional policies, priorities and research and innovation programmes which are relevant to the Co-programmed European Partnership and identification of potential areas of cooperation, including concrete actions taken or envisaged for the deployment of relevant technologies and innovative solutions at the national or regional level;
- b) Specific measures taken at national level or regional level to maximise the impacts of the results achieved, in particular dissemination events, dedicated technical workshops and communication activities;

¹⁷ For example, between the President of the Association and a Director-General from the European Commission.

- c) Content and dissemination of training programmes for the battery value chain workforce, [curricula and modules for undergraduate level and lifelong learning programmes](#);
- d) Specific measures taken at national or regional level to support the exploitation, deployment and/or scale-up of the results achieved within the Co-programmed European Partnership.

The National and Regional Coordination Group of ETIP Batteries Europe may also make proposals to the Partnership Board on the above matters.

The Partnership Board convenes the meetings of the National and Regional Coordination Group of ETIP Batteries Europe.

The Partners other than the Union may arrange their own governance structures, providing that these do not contradict this Memorandum of Understanding. They may invite a European Commission representative as observer to meetings of their governance structure on subjects related to the Co-programmed European Partnership. The European Commission services may participate as observers to meetings of technical groups set up by the Partners other than the Union that are relevant for the Co-programmed European Partnership.

4 Activities and commitments of the European Commission

The European Commission undertakes to duly take into account the input and advice from the Partners other than the Union when identifying and defining call topics for research and innovation activities in the scope of and linked to the Batt4EU Partnership to be included in the Horizon Europe Work Programmes. For this purpose, the European Commission undertakes to consult and maintain a regular dialogue with the Partners other than the Union during the preparation of the Work Programmes. The call topics will be subject to Horizon Europe comitology procedures.

The European Commission may support and contribute to the regular monitoring of the Co-programmed European Partnership, including through its participation in the Partnership Board and in other activities, in line with the Horizon Europe monitoring provisions (Article 50). The European Commission shall also carry out in a timely manner the interim and final evaluation of the Co-programmed European Partnership feeding into Horizon Europe evaluations, as specified in Article 52 of Horizon Europe. These evaluations will inter alia be fed by a self-assessment provided by the Partners other than the Union on the achievement of objectives and how their commitments have been fulfilled and contributions made throughout the lifecycle of the Co-programmed European Partnership.

The evaluations will examine how the Co-programmed European Partnership fulfils its mission and objectives, cover all its activities and evaluate its European added value, effectiveness,

efficiency, including its openness and transparency, the relevance of the activities pursued and their coherence and/or complementarity with relevant regional, national and Union policies, including synergies with other parts of Horizon Europe (such as missions¹⁸, clusters or thematic/specific programmes). The evaluations will take into account the views of stakeholders, at both European and national level. The evaluations will include, where relevant, an assessment of the most effective policy intervention mode for any future action, as well as the relevance of any possible renewal of the Co-programmed European Partnership given the overall policy priorities and the research and innovation support landscape, including the coherence and positioning against other initiatives supported through the Framework Programme, in particular European Partnerships or missions.

5 Activities and commitments of the Partners other than the Union

5.1 Activities

The Partners other than the Union undertake to provide inputs and advice to the European Commission in order to achieve the objectives of the Co-programmed European Partnership. In particular, they may provide input and advice to the European Commission in order to contribute to the identification of priorities of research and innovation activities and the definition of call topics to be included in the Horizon Europe Work Programmes, in view of financial support for indirect actions following calls for proposals and contests. This is without prejudice to the outcome of the Horizon Europe comitology procedures.

The Partners other than the Union also undertake to make the following In-kind Additional Activities and Investments in operational activities in support of the objectives set out in Section 1 of this Memorandum of Understanding:

- a) Scope of In-kind Additional Activities. In-kind Additional Activities may include:
 - i. activities contributing to strategic and operational alignment, coordination and synergies with other partnerships and initiatives at EU/national/regional or international level;
 - ii. activities contributing to the development of Battery R&I ecosystems at EU/national/regional or international level;
 - iii. communication, networking and outreach activities, including matchmaking and brokerage services on the calls for proposals, and activities ensuring dissemination and exploitation of results of R&I activities in the scope of the SRIA of the Co-programmed European Partnership;
 - iv. activities promoting, facilitating or accelerating innovation uptake in the market, including via financing opportunities provided by the European Investment Bank or venture capital funds;

¹⁸ Should missions be confirmed. Hereinafter, missions are mentioned under the condition that they are confirmed.

- v. scaling-up of technologies at higher TRL and uptake of results from Partnership projects, such as pre-commercial trials, proof of concept, improvement of existing production lines for up-scaling or building new production facilities;
 - vi. activities supporting regulations and standards activities, especially on safety and sustainability aspects;
 - vii. Complementary side/upstream projects not funded by the EU, including
 - 1. low-TRL research activities, feeding into Partnership projects;
 - 2. R&I Activities within the scope of the SRIA but not funded by the Partnership;
 - viii. activities addressing training and skills development, including contributing to the identification of gaps and needs, and the definition of joint training programmes.
- b) Scope of Investments in operational activities. Investments in operational activities may include:
- i. investments in research infrastructures and test facilities;
 - ii. investments in building production facilities;
 - i. investments in training programmes for workers and the development of curricula that have the potential to be scaled up;
 - iii. investments in other activities required for putting on the market the product/service resulting from R&I activities performed as part of the Co-programmed European Partnership.

The planning and reporting of In-kind Additional Activities and Investments in operational activities will respect confidentiality requirements.

5.2 Openness and transparency

An appropriate level of openness is necessary to achieve the objectives of the Co-programmed European Partnership. Thus, the Partners other than the Union undertake to put in place measures that ensure:

- a) An open and transparent process for consulting their constituent entities and other relevant stakeholders as well as Member States and Associated Countries on the identification of the priorities of the Co-programmed European Partnership and the design of its activities, which results in an appropriate involvement of all relevant stakeholders;
- b) A governance structure that results in a high level of openness and transparency, including publishing information on the functioning of the Co-programmed European Partnership (composition of partnership structures, decisions made by the Partnership Board etc.);
- c) A growing participation in and contribution to the Co-programmed European Partnership, supported by an open policy to membership in the Association and an appropriate level of information and, if necessary, assistance to all constituent entities of the Partners other than the Union.

In particular, the Partners other than the Union undertake to ensure that the In-kind Additional Activities that they contribute are, to the extent possible, open for participation to non-members of the Co-programmed European Partnership (e.g. dissemination and exploitation activities, etc.) and based on equal treatment.

Also, the Partners other than the Union undertake to put in place appropriate measures for informing SMEs, civil society and other relevant stakeholders about the Co-programmed European Partnership and promoting their participation.

5.3 Dissemination and communication

The Partners undertake to communicate and disseminate their activities and results broadly and through various channels, in order to ensure that any necessary information in the area of the Co-programmed European Partnership is available to all possible stakeholders, all along its duration. The Partners undertake to engage in information, communication, publicity and dissemination and exploitation activities of the Co-programmed European Partnership by applying mutatis mutandis Article 51 of Horizon Europe.

This communication and dissemination will also ensure that the EU support to the Co-programmed European Partnership is visible.

5.4 Coherence and coordination with other European Partnerships and beyond

The Partners undertake to set up and maintain a clear strategy and plan for the interfaces and joint activities of the Co-programmed European Partnership with the other relevant European Partnerships, as well as with the broader European research and innovation system and communities.

The Partners other than the Union will establish a formal and regular collaboration with the following other European Partnerships:

- a) European Partnership Towards zero-emission road transport (2ZERO);
- b) European Partnership Clean Aviation;
- c) European Partnership for Zero-emission Waterborne Transport;
- d) European Partnership Europe's rail;
- e) European Partnership Clean Hydrogen;
- f) European Partnership Key Digital Technologies;
- g) European Partnership for Clean Energy Transition;
- h) EIT InnoEnergy¹⁹;
- i) EIT Raw Materials;
- j) EIT Manufacturing;

¹⁹ The Partnership will cooperate with EIT InnoEnergy amongst others on activities addressing training and skills development as well as with other EITs, such as the Raw Materials EIT.

- k) Other European Partnerships whenever deemed necessary by their respective Partnership Boards.

The SRIA sets out further details, as appropriate, on coherence and collaboration with other European Partnerships, synergies with other Union programmes, Union bodies and national, international, and intergovernmental programmes and policies, and the relevant parts of Horizon Europe (including missions).

The Partners other than the Union may furthermore establish a formal and regular collaboration with other relevant research and innovation initiatives to secure an optimum level of interconnections and ensure effective synergies, inter alia to overcome potential implementation barriers at national level and to increase cost-effectiveness. Priorities for collaboration are the following other initiatives and/or missions:

- a) S3 inter-regional platform on advanced materials for batteries
- b) IPCEIs in the field of batteries

The Partners other than the Union will report specifically on their collaboration with other European Partnerships and initiatives in their annual reporting.

5.5 Fulfilment of commitments

The Partners other than the Union undertake to put in place measures that ensure that the contributions agreed are provided in full, and on time.

The Partnership Board may monitor, throughout the life of the Co-programmed European Partnership, the contributions reported by the Partners.

If the contribution by the Partners other than the Union is significantly lower than the overall estimation agreed in the Annual Additional Activities Plan, the Partnership Board may make recommendations to the Partners other than the Union on adjustment measures.

If the action taken is not sufficient to reach the contribution originally agreed, the Partnership Board may recommend the European Commission to adjust its own contribution to match the contribution *de facto* made by the Partners other than the Union.

6 Monitoring and reporting

The activities of the Co-programmed European Partnership will be subject to continuous monitoring and periodic reporting in accordance with Article 50, Annex III and Annex V of Horizon Europe. The outcomes of monitoring and reporting will feed into the evaluations of the Co-Programmed European Partnerships as part of Horizon Europe evaluations. It will feed into the biennial monitoring of the European partnerships in the context of the Strategic Coordinating Process.

The continuous monitoring and periodic reporting by the Partners will be carried out at least annually for the duration of the Memorandum of Understanding. There will be a simplified reporting over one year and a full reporting every second year.

The full reporting, every second year, should cover all points listed below (a-e). The simplified reporting, every one year, should focus on elements where data can be extracted from the Commission or other databases, for points a to c.

The periodic reporting from Partners other than the Union will include:

- a) The progress of the Co-programmed European Partnership towards its objectives (based on the Key Performance Indicators (KPI)) and the expected scientific, economic and societal impacts (following the Horizon Europe Key Impact Pathways). This reporting should also contain a qualitative assessment of the KPI for the past year.
- b) Information on the functioning of the Co-programmed European Partnership, including on openness, transparency, collaboration and synergies with other European Partnerships and initiatives, etc. in line with the implementation criteria for European Partnerships.
- c) Agreed and actually provided contributions.
- d) Investments in operational activities undertaken by the Partners other than the Union, and leverage including additional public and private investment mobilised to exploit or scale-up partnership results.
- e) Structured and representative “impact case studies”²⁰ that will be used to highlight lessons learned from specific projects/activities, their drivers and barriers to impact, and their possible follow-up with the appropriate instruments, including other forms of support outside the Co-programmed European Partnership, such as training and skills development.

The monitoring and reporting will be done on the basis of evidence provided by Partners, respecting confidentiality of information and avoiding anti-competitive behaviour. To the extent possible, Partners will provide monitoring data in close to real-time following Horizon Europe, in particular management and implementation data. To the extent possible, the indicators and methodologies used to monitor the progress of the Partnership towards its objectives and scientific, economic and societal impacts should be harmonised and aligned with the monitoring framework of Horizon Europe (Key Impact Pathways), and the monitoring criteria of European Partnerships.

With due regard to their respective competencies, institutional settings and operational frameworks, the Partners may regularly inform and consult each other on the results of the monitoring, including to assess the contributions of the In-kind Additional Activities and Investments in operational activities undertaken by the Partners other than the Union.

²⁰ i.e. high potential project outcomes that can be fast-tracked towards further investment and rapid development.

The monitoring and reporting should allow for an assessment over time of their results and progress towards impacts, their visibility and positioning in the international context, and potential needs for adjustment measures.

Upon request, the Partners other than the Union engage to provide the European Commission with additional necessary information for the assessment of the achievements of the Co-programmed European Partnership in the context of the overall Horizon Europe evaluation, respecting confidentiality of information, and in the context of the Strategic Coordinating Process for European Partnerships (e.g. input to the biennial monitoring of the European Partnerships).

6.1 General systems

The Partners undertake to set up and implement an effective reporting and monitoring system that allows the Co-programmed European Partnership as well as the European Commission to track progress over time towards the stated objectives and impacts, as well as to provide implementation and management data.

The information provided should include, among others:

- a) Detailed information on the calls for proposals in the Horizon Europe Work Programme, the proposals received, the grants resulting from these calls, the beneficiaries and participants, the results achieved by individual projects and their overall progress towards impact, or any other information deemed necessary for developing, implementing, monitoring and evaluating Union policies or programmes. Such access to information is limited to non-commercial and non-competitive use and will comply with applicable confidentiality rules. The primary means of collecting information will be through European Commission's reporting systems for management of the Horizon Europe programme;
- b) Activities and fulfilment of contributions by the Partners other than the Union, progress towards objectives, deliverables and KPIs, visibility and positioning in the international context, the results, impacts and leverage. The primary means of collecting information on will be through annual and biennial²¹ reporting by the Partners other than the Union and through European Commission's reporting systems for management of the Horizon Europe programme. Information collection will be based on a common methodology specified by the Commission services in consultation with the Partners other than the Union.

²¹ i.e. once every two years.

6.2 Reporting method for In-Kind Contributions to Additional Activities and Leverage

There are three categories related to contributions and activities that Partners other than the Union will be reporting on:

- a) In-kind contributions to the Actions funded by the Union²². At the level of the projects, reporting will be done continuously through European Commission's reporting systems for management of the Horizon Europe programme;
- b) In-kind contributions to the additional activities, foreseen in the Additional Activities Plan. At the level of the partnership, reporting will be done annually by the Partners other than the Union and continuously through European Commission's reporting systems for management of the Horizon Europe programme²³;
- c) Investments in operational activities foreseen beyond the SRIA, and leverage including other investment mobilised to exploit or scale-up partnership results. At the level of the partnership, reporting will be done biennially²⁴ by the Partners other than the Union and continuously through European Commission's reporting systems for management of the Horizon Europe programme²⁵.

The value of the in-kind contributions reported by the Partners other than the Union will be calculated on the basis of a common methodology in line with Annex V of Horizon Europe. The Partners may keep an anonymised record of these contributions from its constituent entities, which provides the basis for periodic reporting of the total value by the Partners other than the Union of in-kind contributions to the partnership's activities.

6.3 Key Performance Indicators (KPIs)

The following Key Performance Indicators are defined for the Co-programmed European Partnership and will be included in monitoring and reporting.

For **general objectives**:

- **GO1**
 - EU Sales of EV's for different transport modes using batteries manufactured in Europe
 - EU installed capacity of EU manufactured battery energy storage systems connected to the grid
- **GO2:**

²² Contributions from beneficiaries that are not members or affiliates of the partners other than the Union cannot be considered as a contribution from partners but these will be considered as part of quantitative leverage effect.

²³ For example, project reporting will include fields about 'Further investment mobilised to exploit or scale-up project' that could be used for the partnership-level reporting.

²⁴ i.e. once every two years.

²⁵ For example, project reporting will include fields about 'Further investment mobilised to exploit or scale-up project' that could be used for the partnership-level reporting.

- EU Battery manufacturing capacity competitive with respect to the rest of the world
- Creation of new jobs and skills
- **GO3:**
 - % of improvement of environmental impact in terms of CO2 and toxic material
 - % of recycled materials

For **specific objectives:**

- **SO1:**
 - Number of projects on novel chemistries at TRL 4 or higher
 - Number of projects on cell architectures at TRL 4 or higher
 - Number of demonstrations of production lines
 - EU Recycling capacity (tonnes/year)
- **SO2:**
 - Number of joint demonstration projects addressing different transport modes
- **SO3:**
 - Number of demonstration projects for stationary electricity energy storage

For **operational objectives:**

- a) % of battery energy density increase (target +60% compared to 2019 baseline)
 - b) % of battery power density and charging rate increase (target below 20 min for 80% delta for passenger vehicle)
 - c) % of cyclability and lifetime increase (target factor >2 increase)
 - d) % of cost reduction (-60% compared to 2019 values)
 - e) Development and adoption of safety assessment methodologies (target EUCAR safety level 4 for automotive, level 2 for aviation and waterborne)
 - f) Number of innovative manufacturing and recycling processes demonstrated
 - g) Recycling efficiency in %
 - h) CO2 footprint of batteries over their full life cycle
- (Functional objectives in SRIA are detailed further in the SRIA.)

The SRIA sets out further details, as appropriate, on the monitoring framework for the Co-programmed European Partnership.

7 Application of this Memorandum of Understanding

Any issues related to the interpretation and implementation of this Memorandum of Understanding may be decided upon in consultation by the Partners in the Partnership Board. In case of ultimate disagreement, any of the Partners may request an early end of the Memorandum of Understanding.

Adaptations to this Memorandum of Understanding may be requested by any of the Partners by registered letter.

8 Duration and Review

The starting date for the Partnership is *[insert date of signature]* and its end date is 31.12.2030. The last calls for proposals can be launched up until 31.12.2027, so the last three years of the partnership should be used to conclude remaining activities.

Any of the Partners may communicate by a registered letter at any time the motivated intention to end this Memorandum of Understanding. In the absence of renewal, appropriate measures may be taken to ensure phasing-out of Framework Programme funding according to the conditions and timeline agreed with the Partners ex-ante, without prejudice to possible continued transnational funding by national or other Union programmes, and without prejudice to private investment and on-going projects. This phasing-out plan may be prepared by the Partnership Board before the interim evaluation of Horizon Europe.

The periodic monitoring and reporting will inform the interim and final evaluations of Horizon Europe evaluations referred to in Article 52 of Horizon Europe. The evaluations will be taken into consideration in the phasing out or possible renewal of the partnership.

On the basis of these reviews and the evaluations, any of the Partners may propose adaptations to this Memorandum of Understanding, or decide for it to be ended.

Done in duplicate at ... on XX.XX.202X,

FOR THE EUROPEAN COMMISSION	FOR THE BATTERIES EUROPEAN PARTNERSHIP ASSOCIATION