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REINFORCE

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D8.14 PLAN FOR COORDINATION AND SYNERGIES

WP8 – Communication, Dissemination & Exploitation

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Keywords	Synergies, coordination, cooperation			

The PARIS REINFORCE project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 820846.

EC Summary Requirements

1. Changes with respect to the DoA

No changes with respect to the work described in the DoA.

2. Dissemination and uptake

This deliverable will serve as a reference document among consortium partners (experts and non-experts), to be aware of and kept up to date with the project's plan for coordination and synergies with other projects.

It can also be used by individuals outside the consortium, including policymakers and scientists, as a documentation of the efforts planned and made towards ensuring synergies and collaborations with other research projects; as well as by the consortia of the research projects and other actions mentioned, including the PARIS REINFORCE sister projects (ENGAGE, NAVIGATE, and LOCOMOTION) and other initiatives, as a reference document of the expectations and ideas for joint actions and collaborations.

3. Short summary of results (<250 words)

Cooperation and coordination are key to combatting climate change: climate action can only be meaningful and effective in a globally coordinated, cooperative, Talanoa-spirit manner. This is also reflected in the global stocktake, which is expected to take stock of the global efforts towards achieving the Paris Agreement goals, not only in terms of the type and extent of mitigation and adaptation actions but also in the context of adequately transferring knowledge, technology, funds and policy lessons.

This notion of enhanced cooperation, in terms of climate policy, is reflected in the project, in the envisaged analyses of current/future action pledges of the European countries, major emitting countries outside Europe as well as of selected less emitting and/or less developed countries; in the incorporation of finance, policy and technological exchange and of different international cooperation and coordination scenarios and mechanisms in the modelling analyses; and the ongoing stakeholder dialogue, along with the establishment of the respective Stakeholder Council body. But it is also reflected, in terms of cooperation in science: in the development of the I^2AM PARIS platform; and in the synergies that the project will actively seek to create with relevant scientific efforts and research projects.

Synergies can come in many forms and have multiple aims, but given the objectives, scope and framework of the PARIS REINFORCE project, two axes of synergies are distinguished, both aimed at delivering high-quality, relevant and robust policy prescriptions: (a) joining scientific forces to promote science; and (b) broadening outreach to promote inclusiveness and stakeholder participation.

4. Evidence of accomplishment

This report.

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Preface

PARIS REINFORCE will develop a novel, demand-driven, IAM-oriented assessment framework for effectively supporting the design and assessment of climate policies in the European Union as well as in other major emitters and selected less emitting countries, in respect to the Paris Agreement. By engaging policymakers and scientists/modellers, PARIS REINFORCE will create the open-access and transparent data exchange platform I^{2}AM PARIS, in order to support the effective implementation of Nationally Determined Contributions, the preparation of future action pledges, the development of 2050 decarbonisation strategies, and the reinforcement of the 2023 Global Stocktake. Finally, PARIS REINFORCE will introduce innovative integrative processes, in which IAMs are further coupled with well-established methodological frameworks, in order to improve the robustness of modelling outcomes against different types of uncertainties.

NTUA - National Technical University of Athens	GR	
BC3 - Basque Centre for Climate Change	ES	
Bruegel - Bruegel AISBL	BE	
Cambridge - University of Cambridge	UK	
CICERO - Cicero Senter Klimaforskning Stiftelse	NO	
CMCC - Fondazione Centro Euro-Mediterraneo sui Cambiamenti Climatici	IT	
E4SMA - Energy Engineering Economic Environment Systems Modeling and Analysis	IT	
EPFL - École polytechnique fédérale de Lausanne	CH	
Fraunhofer ISI - Fraunhofer Institute for Systems and Innovation Research	DE	
Grantham - Imperial College of Science Technology and Medicine - Grantham Institute	UK	
HOLISTIC - Holistic P.C.	GR	
IEECP - Institute for European Energy and Climate Policy Stichting	NL	
SEURECO - Société Européenne d'Economie SARL	FR	
CDS/UnB - Centre for Sustainable Development of the University of Brasilia	BR	
CUP - China University of Petroleum-Beijing	CN	
IEF-RAS - Institute of Economic Forecasting – Russian Academy of Sciences	RU	
IGES - Institute for Global Environmental Strategies	JP	
TERI - The Energy and Resources Institute	IN	

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Executive Summary

Cooperation and coordination are key to combatting climate change: climate action can only be meaningful and effective in a globally coordinated, cooperative, Talanoa-spirit manner. This is also reflected in the global stocktake, which is expected to take stock of the global efforts towards achieving the Paris Agreement goals, not only in terms of the type and extent of mitigation and adaptation actions but also in the context of adequately transferring knowledge, technology, funds and policy lessons.

This notion of enhanced cooperation, in terms of climate policy, is reflected in the PARIS REINFORCE project, in the envisaged analyses of current and future action pledges of the EU (and Member States), of major emitting countries outside the EU as well as of selected less emitting and/or less developed countries; in the incorporation of finance, policy and technological exchange and of different international cooperation and coordination scenarios and mechanisms in the modelling analyses; and the ongoing stakeholder dialogue, along with the establishment of the respective Stakeholder Council body. But it is also reflected, in terms of cooperation in science: in the development of an open access, multi-model, data exchange platform, I^2AM PARIS; and in the synergies that the project will actively seek to create with relevant scientific efforts and research projects.

Synergies can come in many forms and have multiple aims, but given the objectives, scope and framework of the PARIS REINFORCE project, we distinguish two axes of synergies, both aimed at delivering high-quality, relevant and robust policy prescriptions: (a) joining scientific forces to promote science; and (b) broadening outreach to promote inclusiveness and stakeholder participation. There are research projects that are offered for establishing synergies in the first axis, projects offered for coordinating efforts in the second axis, and others that can be reached for both types of cooperation.

This report outlines a plan for establishing ties with such projects. It initially sets out the purposes, assumptions and principles of this plan, and then presents opportunities for synergies and coordination among the four LC-CLA-01-2018 sister projects (PARIS REINFORCE, ENGAGE, LOCOMOTION and NAVIGATE) as well as between PARIS REINFORCE and projects outside the LC-CLA-01-2018 spectrum, before presenting an action plan, as a synergy roadmap for the duration of the project.

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1 Introduction

The main objective of PARIS REINFORCE is to underpin climate policymaking with authoritative scientific processes and results and to enhance the science-policy interface, in light of the Paris Agreement and associated challenges. Towards this notion, project activities revolve around a novel, demand-driven and robust Integrated Assessment Models (IAM)-oriented analysis framework for effectively supporting the design of climate policies in the EU as well as in other major emitters and selected less emitting/developed countries, in respect to the Paris Agreement, as well as to its objectives and associated challenges.

Cooperation and coordination are key to combatting climate change: climate action can only be meaningful and effective in a globally coordinated, cooperative, Talanoa-spirit manner. This is also reflected in the global stocktake, which is expected to take stock of the global efforts towards achieving the Paris Agreement goals, not only in terms of the type and extent of mitigation and adaptation actions but also in the context of adequately transferring knowledge, technology, funds and policy lessons.

This perceived notion of enhanced cooperation in climate policy is reflected in three core elements of PARIS REINFORCE.

First, and in addition to the analyses in the EU (at the national and Community level), the project will carry out tailored modelling and respective analyses of current and future action pledges of major emitting countries outside the EU, including Brazil, Canada, China, India, Indonesia, Japan, Mexico, Russia and the United States of America; as well as of selected less emitting and/or less developed countries, including Kenya, the Gulf Cooperation Council (GCC) countries (Saudi Arabia, Kuwait, the United Arab Emirates, Qatar, Bahrain, and Oman), the Central Asian Caspian (CAC) region (Kazakhstan, Uzbekistan, Turkmenistan, etc.), Australia, and South Africa. In this direction, the consortium comprises institutions across the globe, including thirteen European partners, and five international partners from major emitting countries (Brazil, China, India, Japan and Russia), with regional offices and outreach in numerous other (both major emitting and less developed) countries. The diverse consortium membership transforms the knowledge exchange process.

Second, all project tasks will focus on promoting international cooperation, in terms of finance, policy and technological exchange: for instance, all modelling activities will highlight respective Paris Agreement mechanisms, such as cap-and-trade schemes and foreign policy acknowledgement cases, while regional and global analyses will consider different international cooperation and coordination scenarios and mechanisms.

Last but not least, the project framework is demand-driven and based on a co-design principle, since in its development all different stakeholder groups—policymakers, climate system and integrated assessment modellers and scientists, industry representatives, NGOs, the civil society, etc.—will be engaged. In fact, this ongoing stakeholder dialogue, along with the establishment of the respective Stakeholder Council body in which these stakeholder groups will be engaged (see D3.1), constitute one of the three pillars of the project's concept.

The aforementioned elements of PARIS REINFORCE only reflect the project's conceptual perception of cooperation in the policymaking world. Considering the new challenges brought about by both climate change and the Paris Agreement, the project acknowledges that successfully reshaping our world in sustainable pathways not only requires cooperative action but also dictates that scientific support to climate policymaking be revolutionised and carried out in an equally cooperative manner as well.

This second aspect of enhanced cooperation, i.e. cooperation in science, is reflected in two other elements of PARIS REINFORCE.

The first element lies in the development of an open access, multi-model, data exchange platform, I^{2}AM PARIS,

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the core of which will consist of all models and incorporate all modelling activities of the project. Its scientific interface will enable exchanging and harmonising datasets, assumptions and scenarios to be used in all modelling activities, thereby not only providing a common basis and reference point for all analyses but also making model inter-comparisons more meaningful and targeted at model-inherent features.

The second element traverses the consortium boundaries and constitutes the subject of this report: the project will actively seek to create synergies and establish ties with relevant scientific efforts and research projects in this domain. Synergies can come in many forms and have multiple aims, but given the objectives, scope and framework of the PARIS REINFORCE project, we distinguish two axes of synergies, both aimed at delivering high-quality, relevant and robust policy prescriptions: (a) joining scientific forces to promote science; and (b) broadening outreach to promote inclusiveness and stakeholder participation. There are research projects that are offered for establishing synergies in the first axis, projects offered for coordinating efforts in the second axis, and others that can be reached for both types of cooperation.

This report presents key elements of coordination, and is based on the outcome of a review carried out during the project's initial phase, including the analysis of information gathered through internal and informal stakeholder consultations and brainstorming, as well as suggestions from the European Commission and the Executive Agency for Small- and Medium-sized Enterprises (EASME), regarding the establishment of synergies among the four LC-CLA-01-2018 sister projects: PARIS REINFORCE, ENGAGE, LOCOMOTION and NAVIGATE.

We distinguish two categories of relevant research projects and initiatives, with which PARIS REINFORCE will seek to establish ties for coordination and synergies: (a) projects of the Horizon 2020 LC-CLA-01-2018 programme, on "supporting the development of climate policies to deliver on the Paris Agreement, through Integrated Assessment Models", i.e. sister projects (Section 3); and (b) other projects and initiatives (Section 4).

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2 Purpose, assumptions and principles: laying the groundwork

2.1 Purpose

The main purpose of this report is to outline the basis for an effective strategy for the coordination and communication elements addressing the following questions:

- How to raise awareness of projects and generate shared interest in looking beyond programme territory, thematic and partnerships?
- How to ensure that requests for complementarities are a natural feature of projects?
- How to establish coordination and cooperation between projects, the management models and methodologies of which differ to a significant extent?
- How to turn identified overlaps of project territories and/or themes into an opportunity, and build synergies across projects?
- How to make project participants/consortium members aware of coordination and cooperation possibilities and benefits?
- What tools and means are or would need to be made available to enable coordination and cooperation?
- How to promote and better communicate complementarities between PARIS REINFORCE and other project and initiatives (the most notable being the Horizon 2020 "LC-CLA-01-2018" sister projects)?

In essence, the plan for coordination and synergies is a report on defining mutually agreeable ways, in which the PARIS REINFORCE consortium can reach out, agree upon and then coordinate and synergise project activities with other Horizon 2020 LC-CLA-01-2018 projects and other relevant interventions financed by the EU, EU Member States or project partner countries. The progress and extent of implementation of this plan will be reflected in project deliverable D8.15 ("Report on coordination and synergies"), due in Month 18.

2.2 Overarching assumptions

The Plan for coordination and synergies document has a set of assumptions under which it is elaborated, as a basis to formulate its next iterations, which are intricately linked with the formal start of all Horizon 2020 "LC-CLA-01-2018" projects:

- Other relevant projects, including the three sister projects, have a positive attitude and show willingness to cooperate, and above all to share their knowledge, experience, and methodologies to be applied in their own projects, and to make themselves available;
- If other projects should elaborate similar coordination and synergy plans, these plans are not substantially different from the present deliverable;
- The contracting authority, EASME, and in particular the PARIS REINFORCE Project Adviser promotes synergies among the projects funded under the same Unit, by sharing information and creating the spaces for collaboration.

2.3 Core principles

The overall objective of the partner coordination mechanism is to effectively collaborate, harmonise and align efforts with that of the EC to help achieve the vision of "supporting the development of climate policies to deliver on the Paris Agreement, through Integrated Assessment Models", as laid out by the Horizon 2020 LC-CLA-01-

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2018 programme. The principles outlined below should guide the PARIS REINFORCE approach.

1. **Project harmonisation**. Effective project harmonisation is required to support the H2020 priorities, and in this context, encourage harmonisation of project instruments and processes among the projects, in addition to alignment of specific activities, including but not limited to meetings, reviews, and documentation.
2. **Alignment**. Projects should contribute scientific progress as well as/with the aim to deliver assistance to various stakeholders—including primarily climate policymakers—in accordance with the Paris Agreement's provisions. This may imply/require developing joint actions and activities that support the goals, objectives and outcomes of the projects.
3. **Improved information sharing and learning**. The approach should encourage projects to improve information sharing and cross-learning amongst themselves through regular meetings, thematic seminars and workshops, electronic updates and other informal dissemination channels.

2.4 Lessons learnt as a basis to build synergies

A basic component of synergising lies in the exploitation of the knowledge and experience produced in the array of previous and/or ongoing relevant research efforts in the climate-economy and climate policy support domains. These have largely formed the foundations of the PARIS REINFORCE novelties, as reflected in its ambitious I^2AM PARIS, dynamic stakeholder engagement, and robustification modules; and can help drive our efforts to identify both the research projects, with which productive ties could potentially be established, and the types of potential synergies that should be sought. Table 2 summarises previous EU-funded projects in this area as well as how PARIS REINFORCE has chosen to exploit their knowledge and experience.

Table 1: Reference to previous EU-funded research projects that have been implemented in this field

Project	PARIS REINFORCE envisaged contributions to advancing knowledge
H2020 Projects	
CARISMA	PARIS REINFORCE aims to bridge IAM modelling results with stakeholders through the I^2AM PARIS platform and can benefit from stakeholder engagement techniques conducted with sectoral business partners and stakeholders in the policy field for generating a comprehensive communication language
CDLINKS	PARIS REINFORCE can benefit from previous scenario development and national and global low carbon transformation pathways generated via CDLINKS. Moreover, the CDLINKS project has components of leveraging international networks and knowledge sharing and PARIS REINFORCE can build upon their existing networks, carrying it out further to acclaim members of this network to the Stakeholder Council.
COACCH	An important element of COACCH is the "co-design" of Climate Change costs. Although COACCH generated these assessments from a "downscaled" perspective, PARIS REINFORCE can benefit from co-designing principles and integration techniques from COACCH and extend them out to our stakeholders.
COP21 RIPPLES	Building on COP21 RIPPLES focus on the "facilitative dialogue", with a view to creating the conditions for the revision of NDCs, PARIS REINFORCE can advance innovation implications of NDCs, technology portfolio choices and international competitiveness generated from COP21 RIPPLES; moreover, we will translate modeling results and indicators to stakeholders through the I^2AM PARIS platform.

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Project	PARIS REINFORCE envisaged contributions to advancing knowledge
ENABLE	PARIS REINFORCE can potentially scale up results on behavioural changes (efficiency, consumer behavioural change, etc.) and demand-driven action (including a different array of stakeholders) generated from ENEABLE.EU, for a more collective analysis from a macro point of view.
ENERGISE	PARIS REINFORCE can take advantage of the understanding of cultural values as perceived by different stakeholders groups and integrate it as a form of the demand-driven component of elements fostering or hindering low-carbon transition pathways, as a basis for guiding questions within the Talanoa dialogue.
EUFORIE	Expanding on the demand-driven orientation of PARIS REINFORCE, EUFORIE experience can help combine supply and demand chains in producing energy and investigating how resources are consumed through sectoral and household levels and then up-scaling to regional and national levels.
GREENWIN	Learning from synergies created from win-win strategies as potential entry points for low-carbon transition pathways in GREENWIN, PARIS REINFORCE will extend on business models and important landscape and socio-economic changes (urban transformation, coastal management energy poverty and eradication).
MAGIC	PARIS REINFORCE can extend and expand MAGIC results by working closely with a different and more diverse set of IAMs (as well as a multitude of energy system and sectoral models), to offer complementary perspectives to climate-economy modelling, which will be integrated in an online platform, where stakeholders are at a continuous engagement within the process. We can integrate other essential elements of the nexus (such as water use or land requirement) from MAGIC results.
MEDEAS	Learning from the MEDEAS open-source platform and its results on the generated biophysical and socio-economic indicators, PARIS REINFORCE modelling teams will expand on both the modelling and the science-policy interfaces of the I^2AM PARIS open platform.
REEEM	PARIS REINFORCE will build on the REEEM results on renewables and employment as well as the indicators on how decarbonisation pathways can affect specific regions in the EU.
SET-NAV	We will build on the knowledge produced in SET-NAV on integrating macroeconometric, energy system and sectoral models, as well as on the technological implications for long-term energy and climate policy. PARIS REINFORCE, however, will expand on the sectoral focus, covering the entire economy and respective transformations. We will also extend the modelling core, building on an IAM-based, larger and diverse set of models, while covering both Europe (at all levels) and other major and less emitting countries.
SHAPE ENERGY	Learning from the participatory mechanisms (workshops, storytelling guidelines, questionnaires, calls for evidence and research design challenges) and systematic reviews of Social Sciences and Humanities studies, PARIS REINFORCE will effectively integrate social aspects into research activities.
SIM4NEXUS	PARIS REINFORCE will draw from the experiences acquired in SIM4NEXUS, especially with regard to bridging knowledge and technology gaps, in order to effectively design the I^2AM PARIS platform and work on its capacity to facilitate policy decisions.
TRANSrisk	PARIS REINFORCE will use a fully demand-driven, integrative approach, in line with the Talanoa dialogue, in which stakeholders are a vital and dynamic component of all modelling processes. We will mobilise a significantly broader and more diverse IAM pool, coupled with a large number of energy system and sectoral models. We will also place emphasis on reducing uncertainty through robustification tools.

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Project	PARIS REINFORCE envisaged contributions to advancing knowledge
FP7 Projects	
AMPERE	PARIS REINFORCE can draw from the AMPERE database, and look at its soft and hard linkages when bringing together the ensemble of IAMs. AMPERE can also serve as the basis for further expanding the stocktaking exercises on what models have to offer and on what is out there in terms of policy ambitions.
APRAISE	APRAISE can serve as a first testing ground for making use of a variety of models combined with extensive stakeholder consultation, for evaluating the outcomes of climate and sustainability policies in Europe.
LIMITS	PARIS REINFORCE can enhance the critical balance between mitigation and adaptation options and financial investments based on outputs running from LIMITS.
MILES	MILES can serve as a basis for integrating developing countries transition pathways in terms of ambitions and targets within modelling, as well as policy objectives set out for demand-driven scenarios.
POLIMP	PARIS REINFORCE can use lessons learned from the policy knowledge gaps on implications of international climate policies and how to effectively convey the messages to the key policymakers.

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3 Synergies with LC-CLA-01-2018 sister projects

3.1 Brief presentation of the projects

The activities outlined in this report have been motivated by the PARIS REINFORCE project's commitment to addressing the need for synergies and potential coordination of efforts in the implementation of the four research and innovation projects/components of the Horizon 2020 "LC-CLA-01-2018: Supporting the development of climate policies to deliver on the Paris Agreement, through Integrated Assessment Models" package, and beyond. Therefore, the project is, first and foremost, aiming at boosting fruitful coordination and productive synergies among the following projects:

1. Supporting the design and assessment of climate policies
   - **PARIS REINFORCE** (01/06/2019 – 31/05/2022; 36 months)
   - **ENGAGE** (01/09/2019 – 31/08/2023; 48 months) coordinated by IIASA (25 partners)
2. Improving Integrated Assessment Models (IAMs)
   - **LOCOMOTION** (01/06/2019 – 31/05/2023; 48 months) - coordinated by University of Valladolid (13 partners including PARIS REINFORCE partner BC3)
   - **NAVIGATE** (01/09/2019 – 31/08/2023; 48 months) - coordinated by PIK (17 partners including PARIS REINFORCE partner CMCC)

As two out of the four of the Horizon 2020 "LC-CLA-01-2018" projects have just kicked off in this month, a plan has not officially been elaborated alongside the coordinators of the four projects. However, initial efforts to discuss and establish the mutually acceptable modalities of the coordination and cooperation have begun. Furthermore, all four projects have proposed their ideas and perceptions of coordination and synergies in the Networking and knowledge sharing event for decarbonisation projects and the Coordinators' Day 2019, which were organised by the European Commission and took place on the 5th and the 6th of September 2019 in Brussels, Belgium, respectively.

The coordination and synergising mechanism is expected to help build on the momentum developed within each of the Horizon 2020 "LC-CLA-01-2018" components, to ensure synergies in the modelling analyses and other scientific activities; and promoting communication, dissemination and exploitation activities, by cultivating a broader stakeholder buy-in as well as shifting from four separate stakeholder networks to a collective one.

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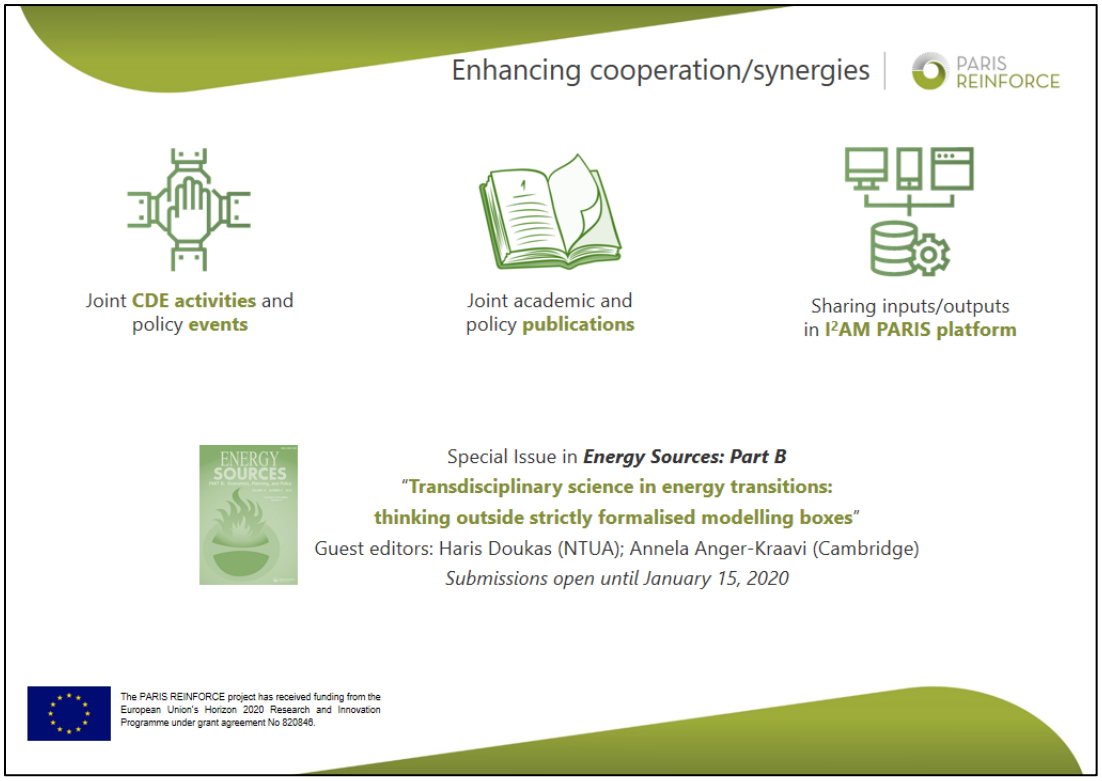

Figure 1: Example of initial ideas on cooperation and synergies presented by Prof. Haris Doukas in the "Networking and knowledge sharing event for decarbonisation projects 2019" workshop.

3.1.1 ENGAGE

With a similar approach to PARIS REINFORCE, **ENGAGE** aims to engage stakeholders in the co-production of a new generation of global and national decarbonisation pathways, supplementing natural science, engineering and economics that are traditionally represented in IAMs, with insights from social science, in order to reflect multidimensional feasibility of decarbonisation. This project aims to design pathways to minimise overshoot of the temperature target and analyse the timing of net-zero emissions to meet the Paris Agreement temperature target, and reduce the reliance on controversial negative emissions technologies. The resulting pathways are expected to link national mitigation strategies of major emitters with the Paris Agreement's objectives, integrate potential game-changing innovations, and advance conceptually novel approaches to architectures of international climate agreements. The project also aims to quantify avoided impacts of climate change, co-benefits and trade-offs of climate policy, and identify the biggest sectoral opportunities for climate change mitigation. The ENGAGE consortium intends to develop new pathways in an iterative global and national stakeholder process, ensuring their credibility and legitimacy.

ENGAGE, coordinated by Keywan Riahi (as well as Volker Krey and Bas van Ruijven) of the International Institute for Applied Systems Analysis, and started in September 2019. It is not only a projected funded under the Horizon 2020 "LC-CLA-01-2018" topic, but also the single project sharing the same overall objective of PARIS REINFORCE, which is to support the design and assessment of climate policies. In particular, it aims to:

- Build a legitimate, transparent, and iterative knowledge co-production process, including different stakeholder groups.
- Conceptualise and operationalise multi-dimensional feasibility of decarbonisation policies and pathways.
- Quantify national avoided impacts of climate change and identify climate policy portfolios that maximise

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co-benefits and minimise trade-offs with other sustainability objectives.

- Develop a new generation of decarbonisation pathways, which represent said multi-dimensional feasibility and reflect all characteristics of the Paris Agreement to inform the 2023 stocktake and national mid-term strategies.
- Inform and contribute to the 6th Assessment Report (AR6) of the Intergovernmental Panel on Climate Change (IPCC).

Through its remarkable consortium of 27 partners and collaborators, the project brings together expertise from several domains, including global integrated assessment modelling, national energy modelling, political economy of energy transitions, international collaboration and governance, policy design, atmospheric chemistry, land use, agriculture and water.

3.1.2 LOCOMOTION

On the other branch of this topic (i.e. improving IAMs), **LOCOMOTION** aims to enhance existing IAMs. Building on the models developed in the MEDEAS European project and including knowledge from other relevant models (World6, TIMES, LEAP, GCAM, C-Roads), a number of improvements are foreseen with respect to the state-of-the-art in energy-economy-environment modelling, such as the expansion of the geographical coverage through the creation of a new worldwide multi-regional model with seven global regions and the integration of the 28 EU member states; the improvement of IAMs by increasing the detail and precision of existing modules and adding new ones; the integration of relevant functionalities from other models and the comparison of modelling results; the integration of demand management policies in scenario assessment; the representation and quantification of uncertainty; the improvement of the usability of the IAMs through the development of two interface levels (professional and educational); and the exploitation and dissemination of modelling results to policymakers and experts on strategic planning and/or IAMs, modellers and programmers, and to the civil society.

The project, coordinated by Prof. Luis Javier Miguel González of the University of Valladolid, started in June 2019 (similarly to PARIS REINFORCE). In the envisaged improvements, it highlights aspects relevant to:

- Economy and finance (upgrading household consumption and representing government consumption; integrating a stock-flow consistent financial module; modelling potential behavioural changes; improving representation of international trade; endogenously quantifying climate change impacts and adaptation, by identifying climate-sensitive sectors and quantifying sectoral impacts and adaptation costs; and improving labour modelling)
- Population and society (featuring further population disaggregation; including relevant Sustainable Development Goals; and improving representation of energy-society feedbacks)
- Environment (improving modelling of competing land use; focusing on tipping points; accurately representing negative emissions technologies, like afforestation, soil carbon contents increase, and bio-energy with carbon capture and storage; and improving the incorporation of the water-energy-land nexus)
- Energy infrastructures and technologies (dealing with the intermittency of renewables; modelling technological learning curves; dynamically and endogenously computing the energy return on investment; consistently integrating energy-economy feedbacks; expanding the non-energetic materials module; etc.)

Key aspects of the LOCOMOTION project that could prove vital for synergies with PARIS REINFORCE include: (a)

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the dissemination of results via multiple interfaces (open-source software with extensive modelling documentation for scientists/modellers, and user-friendly web interface for policymakers and other stakeholders), quite similarly to the I²AM PARIS platform; and (b) the participation of the Basque Centre for Climate Change (BC3) in both LOCOMOTION and PARIS REINFORCE, where in fact they lead the I²AM PARIS platform work package (WP2).

3.1.3 NAVIGATE

Similarly to LOCOMOTION but based on models to be used in ENGAGE, **NAVIGATE** aims to critically improve the capability of IAMs by tackling existing weaknesses and lack of capabilities of the current generation of IAMs. With the aim to increase the usability, transparency, legitimacy and hence uptake of IAM results, NAVIGATE will try to foster a stakeholder dialogue to elicit user needs and engage in co-production of knowledge about IAMs and their uses, and to develop the methodologies to better assess the robustness of IAM results, by extending model documentation and new communication tools as well as by building capacity to lower the entrance barrier to IAM activities for other research teams, including research teams in less-developed countries. The project also aims to actively promote uptake of project results by policymakers and international assessments.

The NAVIGATE project, coordinated by Elmar Kriegler of the Potsdam Institute for Climate Impact Research, started in September 2019 and orients on the following activities:

- Increasing the transparency, legitimacy and usability of IAMs (by developing and applying methods to identify robust modelling results, reduce modelling uncertainties, defining future needs; creating and sustaining continuous exchange with stakeholders and building capacity with IAM users worldwide; setting up frameworks for the uptake and sustained use of new IAM approaches; and applying new model developments)
- Analysing transformative change (by improving modelling of deep structural changes, technological innovations and sociotechnical transitions; improving modelling representation of deep mitigation in industry and land use; quantifying consumer behavioural and lifestyle changes; and analysing implications of radical, consumer-driven transformations in the transport and residential sectors
- Analysing distributional impacts (by improving spatial disaggregation of IAMs; analysing climate change implications on inequality, social preferences, population growth and migration; and understanding impacts and benefits of avoided impacts and reduced inequality, as well as trade-offs and co-benefits between climate action and SDGs.

Key aspects of the NAVIGATE project that could prove vital for synergies with PARIS REINFORCE include: (a) the development of the IAM NAVIGATOR platform (comprising teaching material, a scenario portal, and a methodological toolbox), quite similarly to the I²AM PARIS platform; and (b) the participation of Euro-Mediterranean Center on Climate Change (CMCC) in both NAVIGATE and PARIS REINFORCE.

3.2 Spaces for coordination and synergies

3.2.1 Coordination of research activities

The coordinators of each of the four sister projects (Haris Doukas, Keywan Riahi, Luis Javier Miguel González and Elmar Kriegler) have agreed to participate in the Scientific Advisory Board (SAB) of the other projects. The SAB of each project serves as an advisory body to the project consortium, the collective expertise of which will draw on a broad range of perspectives from the key scientific disciplines underlying climate change research and climate

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policymaking. It will advise the consortium on matters related to the implementation and development of the project activities, including but not limited to the scope, transparency and legitimacy of the activities and methods applied as well as the robustness and dissemination of the results produced. All four project coordinators have found that participating in the steering committees of the other sister projects will be beneficial for the research activities and outcomes of all four projects, as it will encourage projects to directly exploit one another's results as well as to cover emerging knowledge/research gaps and unfold their activities in a complementary manner. In this framework, the coordinators will meet at least twice a year to exchange ideas, progress and data.

3.2.2 Geographical and thematic complementarities

PARIS REINFORCE will investigate complementarities with the three sister projects, in terms of the envisaged modelling analyses, as regards the countries where case studies will be carried out. This includes coordination of national and regional analyses, in order to avoid duplicate research of specific aspects, policies, sectors, dimensions, etc. for countries/regions that will be analysed by both PARIS REINFORCE and at least one of the other projects.

3.2.3 Open access to the modelling platforms

A key outcome of the PARIS REINFORCE project is the I^2AM PARIS open access, data exchange platform that is aimed at (technical and non-technical) documentation of the modelling ensemble and capabilities for all target audiences; streamlining modelling activities by harmonising and publicly providing all scenario inputs and assumptions; and visualising the outcomes in an exhaustive, policy-relevant and useful manner. However, this does not exclude other models and/or modelling consortia, but instead by default encourages exploitation of the platform for the modelling documentation, scenario harmonisation and outcome visualisation of other research activities. The same can be pursued for the project's research activities in the IAM NAVIGATOR platform or LOCOMOTION's open-source modelling interfaces. This not only enhances the outreach of each project, but also traverses the project boundaries, by allowing for sharing common scenario frameworks among all projects as well as carrying out model inter-comparisons for countries/regions/the globe, where modelling analysis will be performed by more than one project. Finally, NAVIGATE and LOCOMOTION both seek to upgrade a set of models that are also part of the PARIS REINFORCE modelling ensemble (such as GCAM, LEAP, and TIMES); therefore, PARIS REINFORCE could take advantage of and make use of the improvements to these models.

3.2.4 A stakeholder internetwork

Key objectives aside, and albeit to a different extent, all four projects highlight stakeholder engagement. Although the idea of stakeholder representation is to make sure that all stakeholder groups are adequately involved in the process, there is only so many people a project can have ties with or reach out to. PARIS REINFORCE will, therefore, investigate the possibility of putting together the stakeholder pools of all projects into one large stakeholder internetwork, acknowledging of course the limitations posed by the ethics requirements of each project and the European Commission.

3.2.5 Joint communication, dissemination and exploitation activities

3.2.5.1 Joint academic publications

One of the PARIS REINFORCE priorities is to foster sharing of knowledge and research results among peers and other potential users. The four projects could join forces and disseminate results in joint papers, or actively organise co-editing and/or submitting to joint special issues.

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PARIS REINFORCE has already explored the potential of such a joint dissemination option. A call for papers in a Special Issue, entitled "Transdisciplinary science in energy transitions: thinking outside strictly formalised modelling boxes" in the peer-review journal "Energy Sources, Part B: Economics, Planning, and Policy", has been launched in September 2019. The guest editors of this special issue are the PARIS REINFORCE Project Coordinator (Haris Doukas, NTUA) and WP7 Leader (Annela Anger-Kraavi, Cambridge). On the occasion of the "Networking and knowledge sharing event for decarbonisation projects" which was organised by the EASME and held in Brussels on September 5, 2019, all projects that were present in the event, including the sister projects from the LC-CLA-01-2018 topic, were invited by the PARIS REINFORCE Project Coordinator to submit their papers to the Call. The deadline for the Call is set for January 15, 2020, allowing adequate time even for the projects that started in September 2019 (ENGAGE and NAVIGATE) to submit perspective/methodological papers. Promotion of the call will continue by using all relevant communication channels, i.e. the PARIS REINFORCE social media accounts and website. Moreover, PARIS REINFORCE aims to communicate directly with the sister projects and other relevant projects to further raise their interest and highlight the joint benefit from submission of manuscripts for publication in this special issue.

Another special issue on national energy and climate plans (NECPs) in the EU is currently being considered, as a joint effort between PARIS REINFORCE and LOCOMOTION.

3.2.5.2 Joint policy publications

PARIS REINFORCE envisages the production of a series of policy publications. Starting from November 2019, with the Policy Brief on "What can our models deliver" (Deliverable D3.2), PARIS REINFORCE will share the documentation of the PARIS REINFORCE models with the other projects, with the aim to also contribute to their research.

Later in the project lifetime, following the first and second rounds of regional and national modelling iterations (most likely in 2021 and 2022), PARIS REINFORCE will explore the possibility for synergies as regards publication of policy briefs on topics such as (i) future action pledges and long-term decarbonisation pathways of the EU and of other major emitting and less developed countries, (ii) sectoral decarbonisation pathways such as on decarbonising the international aviation and shipping sectors, (iii) co-impacts and trade-offs in the broader EU policy framework, (iv) interactions between EU climate policy agenda and the 2030 Agenda for Sustainable Development, and (v) lessons to inform and contribute to the upcoming global stocktake. One possibility to be explored is the production of a bigger joint publication encompassing the results of the modelling runs and results of all sister projects.

3.2.5.3 Joint policy events

PARIS REINFORCE plans to engage beneficiaries of similar projects to the policy events, the aims of which include co-creation of research with stakeholders. In parallel, PARIS REINFORCE partners will seek participation in policy events of other projects. Researchers from other projects will be invited to join the Stakeholder Council and therefore be the first to be invited in the policy events of the project, i.e. the national and regional workshops and the final conference. Partners from sister projects will be invited to attend the first regional EU engagement workshop in Brussels on November 21, 2019.

This first stakeholder dialogue will comprise sessions detailing the capabilities of available models, a concept layout for the I^2AM PARIS platform, as well as stakeholder-led sessions discussing and defining the most pertinent climate policy questions. Sister project consortium members, along with stakeholders, can expect the following:

- A first session conveying the capabilities of the PARIS REINFORCE modelling ensemble, i.e. what the

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models can and cannot do. The models have global, regional, and national capabilities.

- The presentation of a concept version of the I^2AM PARIS platform, which will align all modelling inputs, activities, and outputs, making them available to users over the course of the project. Stakeholders are asked to provide input and feedback relating to the first concept design.
- Group sessions designed for embarking upon the co-design and co-creation of the PARIS REINFORCE modelling approach. Stakeholders are asked to actively contribute to discussions of the most pertinent climate topics and modelling needs, in a participatory process aimed at co-creating the most relevant and seminal research questions for the upcoming modelling runs.

3.2.6 Joint communication activities

PARIS REINFORCE plans to foster collaboration with other projects by:

- Following the other projects' social media accounts
- Inviting other projects (and project consortium members) to follow the PARIS REINFORCE social media accounts
- Examining the possibility for joint press releases and articles
- Examining the possibility for specific joint social media campaigns to improve the visibility of the results of the projects
- Inviting other projects to have a specific session in PARIS REINFORCE national/regional workshops and final conference
- Requesting from other projects a specific session in their conferences/workshops and other public events
- Investigating the possibility for a joint public event, probably on the occasion of the second regional EU workshop (November 2020)
- Publishing articles, publications, and news on the websites of other projects and publishing news about and research outputs of other projects on the PARIS REINFORCE website
- Investigating the possibility for joint participation in other meetings and events, possibly upon suggestion of the Project Advisor, to promote the visibility and outputs of the projects. PARIS REINFORCE and the sister project were all represented in the "Networking and knowledge sharing event for decarbonisation projects" on September 5 and in the "Coordinators' Day 2019" for projects funded under the Societal Challenge 5 "Climate Action, Environment, Resource Efficiency and Raw Materials" of Horizon 2020 on September 6, both organised by EASME. Other suggestions to be considered are the global climate change meetings, such as the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC), starting with COP26 at the end of 2020.

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4 A map of other projects and initiatives for consideration

This section refers to projects and initiatives to be considered for synergies and coordination, outside the spectrum of the LC-CLA-01-2018 programme. This includes research projects and efforts that provide the space for joining scientific forces to promote science and/or broadening outreach to promote inclusiveness and stakeholder participation, whether PARIS REINFORCE consortium members participate in these efforts or not.

For example, **C-Track 50** is a H2020 project with thirteen European partners, aiming to support local and regional authorities in their long-term energy planning in order to achieve the 2030 and 2050 EU energy and climate targets. More specifically, it focuses on improving the technical competencies of regions and local authorities in integrated energy and climate policy planning as well as on supporting the development and financing of sustainable energy and climate policy action plans. C-Track 50 aims also to promote and strengthen multi-level governance between the EU, national, regional and local levels, through a series of roundtables and bilateral exchanges. In this framework, C-Track 50 organises activities such as info days, workshops and seminars engaging national and local authorities, regional stakeholders, citizens, financial institutions and energy planning stakeholders. The overarching objective of these activities is not only to communicate the project outputs but also to provide capacity building on sustainable energy planning, working on multi-level collaboration for the formulation of the 2050 priorities, and presenting available funding mechanisms regarding the implementation of sustainable energy projects. As such, it provides a good opportunity for the PARIS REINFORCE project to broaden its stakeholder network, in the countries represented in both projects.

In fact, PARIS REINFORCE has already made an intervention in the Info Day, organised on September 20, 2019, in Athens, where the Project Coordinator (Prof. Haris Doukas) had the opportunity to present the project to a group of 25 energy policymakers and experts from European ministries from countries, climate action pledges of which are already expected to be analysed in detail in the project (e.g. France, Greece, Germany, Spain, and Belgium) and otherwise (e.g. Portugal, Croatia, Poland, Hungary, Romania, Austria and Latvia). Many of these ministry representatives expressed their interest in supporting the co-creation of the I^2AM PARIS platform, participating in the PARIS REINFORCE Stakeholder Council and receiving the project's newsletter. Similar interventions in policy events will become a norm for PARIS REINFORCE, with the aim to strengthen relationships with other projects and broaden its outreach to stakeholders.

Similarly, the overall objective of the **Clima-Med Acting for Climate in South Mediterranean** is to support the public authorities in the European Neighbourhood and Partnership Instrument (ENPI) South Mediterranean Partner Countries to respond more actively to climate change challenges. This includes the coordination with regional/national/subnational stakeholders for the implementation and update of their NDCs, as well as the development and implementation of adaptation/mitigation plans, including the conduction of monitoring, reporting and verification activities; the significant increase of the number of sustainable energy access and climate action plans (SEACAPs) across the region, strengthened by the establishment of the Covenant of Mayors support structures; and enabling access to finance towards achieving sustainable actions at both national and local level. In this direction, Clima-Med aims to promote sustainable skill transfer of the target stakeholders through participatory learning approaches, train-the-trainers programmes, collaborative peer learning networks and working groups involved in specific actions and measures; to establish effective and embedded institutional mechanisms (i.e. SEACAP support mechanisms), with clearly defined roles and responsibilities; to transfer a range of technical tools to the beneficiaries in each partner country (including: e-learning modules, SEACAP methodology toolkits, PPP screening tools, and procurement toolkits); and to secure the financial and physical sustainability of the Covenant of Mayors Office, linked to an appropriate regional actor. Establishing synergies with the Clima-Med project will boost the PARIS REINFORCE project outreach, help broaden its stakeholder

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network and provide grounds for potentially extending its modelling and non-modelling analyses to the South Mediterranean region.

Along these lines, the **EU - GCC Clean Energy Technology Network** was created in 2010 to support strategic clean energy cooperation between the EU and the Gulf Cooperation Council countries. The Network supports cooperation on policy, research and technology aspects in the fields of renewable energy sources, energy efficiency and demand side management, clean natural gas and related technologies, electricity interconnections and market integration, and carbon capture and storage. Its objective is to enhance and deepen EU-GCC energy relations at both the policy and the private sector level, involving also research institutions, in particular in the context of climate change policy. It also aims to further expand the cooperation opportunities in the energy sector and to ensure sustainable operation. More importantly for the purposes of the PARIS REINFORCE project, the well-established EU-GCC stakeholder network consists of energy-related authorities, administrations, utilities, industry representatives, policymakers, research and academic actors and relevant stakeholders from the energy and climate change sectors, in the EU and the GCC; and its events' agenda is full of workshops, info days, study tours and webinars, realised in Europe and GCC countries. Creating synergies with the EU-GCC network will help promote the project in the GCC region as well as provide the stakeholder boots on the ground necessary for carrying out meaningful modelling analysis and providing policy-relevant outcomes in this region, which is among the less emitting countries targeted by the project.

Finally, **SENTINEL** is a Horizon 2020 project that started in parallel with PARIS REINFORCE. Based on the assumption that existing energy system planning models are insufficient for guiding the transition to a low-carbon energy system and that expansion of such models to capture adequately the technological, geographic, and societal details would make them even less comprehensible and transparent than they are now, SENTINEL proposes a new modelling framework, in which extensive collaboration with stakeholders will inform its development and refinement through an initial evaluation of user needs, and then through a set of participatory case studies. The idea behind this new framework is its modularity which would enable flexibility in using sub-models, connectivity between sub-models, and expandability of the framework. All of the sub-models and data will be accessible via an online platform which will contain a user interface, with the aim to make the source code and data open source, supplemented by supporting documentation and guidance. SENTINEL aims to disseminate the results and promote the platform to policy-analysts, model developers, and research scientists through annual conferences, and eventually to build a community of model users and developers. Similarly to NAVIGATE, ENGAGE and NAVIGATE, potential synergies between PARIS REINFORCE and SENTINEL could revolve around modelling documentation, scenario harmonisation and outcome visualisation in the I^2AM PARIS platform and/or the platform developed in SENTINEL.

Outside the strict climate change and policy domain but not far away, the **Triple-A** project seeks to develop a framework for identifying "Triple-A" energy efficiency investments, aiming to reduce the time and effort required to assess potential actions at the critical phase of an investment's conceptualisation, as well as for increasing transparency and efficiency of respective decision making; while **SocialWatt** will develop and provide utilities and energy suppliers with appropriate tools for effectively engaging with their customers and working together towards mitigating energy poverty. Both climate (and energy) finance and energy poverty are aspects that PARIS REINFORCE seeks to incorporate in its analyses towards supporting the effective implementation of NDCs, the preparation of future action pledges, the development of 2050 decarbonisation strategies, and the reinforcement of the 2023 global stocktake (of which finance is one pillar), in light of the need to increase decarbonisation ambition and to align these efforts with sustainable development goals (of which clean and affordable energy is one goal).

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Tables 2 and 3 provide tentative and non-exhaustive lists of H2020/EACEA projects and other (non-) EU projects, respectively, to be considered for synergies, outside the LC-CLA-01-2018 programme.

Table 2: Tentative (not exhaustive) list of Horizon 2020 and EACEA projects to be considered for synergies

Project (abbr.)	Full name	Website	Duration	Consortium leader	Focus/scope	Potential joint action(s)
C-Track 50	Putting regions on track for carbon neutrality by 2050	www.c-track50.eu/	3/2018 – 2/2021	NTUA	Dialogue and planning for sustainable energy and climate action at local level	Stakeholder engagement (local and regional authorities), policy recommendations
CLARA	Climate forecast enabled knowledge services	http://clara-project.eu	6/2017 – 5/2020	CMCC, Italy	Climate services building upon the newly developed Copernicus Climate Change Services near term forecasts and sectorial information systems (SIS)	Data (Copernicus) & climate services aspects relaxant for modelling; water & flood aspects
CLIMA MED	Clima-Med Acting for Climate in South Mediterranean	www.climamed.eu	6/2018 – 5/2022	Human Dynamics	Climate change governance and mainstreaming climate action; access to energy and climate finance; sustainable local actions	Stakeholder engagement (local and regional authorities from the EU South Neighbourhood), policy recommendations
COACCH	CO-designing the Assessment of Climate Change costs	https://www.coacch.eu	12/2017 – 5/2021	CMCC, Italy	Modelling assessments of climate change costs in Europe	Coordination on costs aspects of IAM modelling; stakeholder engagement; joint events
COP21 RIPPLES	COP21: Results and Implications for Pathways and Policies for Low Emissions European Societies	www.cop21ripples.eu	12/2016 – 11/2019	IDDRI, France	Implications of COP21 for European pathways and policies	UNFCCC aspects; follow-up on actions/ recommendations
DEEDS	Dialogue on European Decarbonisation Strategies	www.deeds.eu	10/2017 – 9/2020	TNO, Netherlands	Dialogue on European decarbonisation strategies	Modelling inputs; stakeholder engagement; joint events
ENEFIRST	Making Energy Efficiency First principle operational	Not available yet	9/2019 - 2/2022	IEECP, Netherlands	Supporting further operationalisation of the """Efficiency First"" principle within the EU	Energy efficiency aspects of modelling; policy aspects; joint events

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Project (abbr.)	Full name	Website	Duration	Consortium leader	Focus/scope	Potential joint action(s)
EUCalc	EU Calculator: Trade-offs and pathways towards sustainable and low-carbon European Societies	http://www.european-calculator.eu	11/2016 – 10/2019	PIK, Germany	Delineation emission and sustainable transformation pathways at a European and member state scale	Engagement with the European Decarbonisation Pathways Initiatives (EDPI); follow-up on actions/ recommendations
EU-GCC	EU GCC Clean Energy Technology Network	www.eugcc-cleanergy.net	12/2015 – 12/2021	KOMIS, Belgium	Cooperation between EU and GCC on sustainable energy and climate issues	Stakeholder engagement (national authorities and business from the GCC), policy recommendations
INNOPATHS	Innovation pathways, strategies and policies for the Low-Carbon Transition in Europe	www.innopaths.eu	12/2016 – 11/2020	University College London, UK	Innovation pathways for the low-carbon transition in Europe	Treatment of innovation in IAM; stakeholder engagement; joint events
MAGIC-NEXUS	Moving Towards Adaptive Governance in Complexity: Informing Nexus Security	www.magic-nexus.eu	6/2016 – 5/2020	Universitat Autònoma de Barcelona, Spain	Policy at the nexus between water, energy and food resources	SDGs; water-energy-food nexus in modelling; stakeholder engagement; joint events
MEDEAS	Guiding European Policy toward a low-carbon economy. Modelling Energy system Development under Environmental And Socioeconomic constraints	https://www.medeas.eu/	1/2016 – 12/2019	ICM-CSIC – Institute of Marine Sciences – Spanish National Research Council, Spain	Energy system modelling under environmental and socioeconomic constraints	Modellers/modelling collaborations esp. Re energy aspects; follow-up on actions/ recommendations
MUSTEC	Market Uptake of Solar Thermal Electricity through Cooperation	http://www.mustec.eu	10/2017 – 9/2020	CIEMAT, Spain	Solar power, electricity on demand, trading, CSP	Solar power's implication on modelling; stakeholder engagement; joint events
openENTRANCE	open Energy Transition ANalyses for a	http://www.openentrance.eu	5/2019 – 4/2023	SINTEF Energi AS, Norway	Integrated modelling platform, energy transition pathways in Europe	Modelling/modellers collaborations; joint events

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Project (abbr.)	Full name	Website	Duration	Consortium leader	Focus/scope	Potential joint action(s)
	low-Carbon Economy					
REINVENT	Realising Innovation in Transitions for Decarbonisation	www.reinvent-project.eu	12/2016 – 11/2020	Lund University, Sweden	Realising innovation in transitions for decarbonisation	Innovation aspects for modelling and policy formulation; stakeholder engagement; joint events
REINVENT	Realising Innovation in Transitions for Decarbonisation	https://www.reinvent-project.eu	12/2016 – 11/2020	Lund University, Sweden	Decarbonisation in four industrial sectors: meat/dairy, paper, plastic and steel.	Sectoral aspects in IAMs
SENSEI	Smart Energy Services Integrating the Multiple Benefits from Improving the Energy Efficiency of the European Building Stock	Not available yet	9/2019 – 8/2022	IEECP, Netherlands	Improving energy efficiency in the built environment sector within the EU	Energy efficiency aspects in modelling
SENTINEL	Sustainable Energy Transitions Laboratory	Not available yet	6/2019 – 5/2022	ETH, Switzerland	Creation of a new modelling framework for energy transition	Engagement of members of the Modelling Forum
SIM4NEXUS	Sustainable Integrated Management for the Nexus of water-land-food-energy-climate for a resource efficient Europe	www.sim4nexus.eu	6/2016 – 5/2020	Wageningen University & Research, Netherlands	Land, food, energy, water and climate nexus	SDGs; land -water-energy-food nexus in modelling; stakeholder engagement; joint events
SocialWatt	Connecting Obligated Parties to Adopt Innovative Schemes towards Energy Poverty Alleviation	Not available yet	9/2019 – 8/2022	NTUA	Obligated parties; energy poverty schemes; innovative financing; corporate social responsibility	Stakeholder engagement; joint events and joint policy recommendations
Triple-A	Enhancing at an Early Stage the Investment Value Chain of Energy Efficiency Projects	Not available yet	9/2019 – 2/2022	NTUA	Assessment of the financing instruments and risks for energy efficiency projects	Stakeholder engagement; joint events and joint policy recommendations

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Table 3: Tentative (not exhaustive) list of other EU and non-EU initiatives to be considered for synergies

Abbr. name	Full name	Website	Potential joint action(s)
Africa LEDS	Low Emissions Development (LEDS) in Africa (EC-UNEP)	https://africaleds.org	NDC update; policy/modelling support
ETS - China & Korea cooperation	Cooperation on carbon markets, alongside China's and Korea's nationwide emissions trading systems (EC)	n.a.	Emission trading and energy/industrial aspects especially in China (policy/modelling)
EU4CLIMATE	EU4Climat (supporting the six Eastern Partnership countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Ukraine) to develop and implement climate-related policies) (EC, implemented by UNDP)	https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/eni_2017_040348_eu4climate.pdf	NDC and potentially policy/modelling support in Eastern Partnership
EU-GCC	EU-GCC Clean Energy Technology Network (EC)	https://www.eugcc-cleanergy.net	joint events
Euroclima+	Climate change regional cooperation programme (Latin America) (EC)	http://euroclimaplus.org/	cooperation in Brazil and Mexico (and Latin America)
GCCA+	The Global Climate Change Alliance Plus (EC)	http://www.gcca.eu	joint events globally; NDC update support
GFDRR	Global Facility for Disaster Reduction and Recovery (World bank)	https://www.gfdrr.org/	Disaster (risk) management aspects of modelling
IEA - Clean Energy Transitions Programme	Clean Energy Transitions Programme to support clean-energy development (IEA)	https://www.iea.org/cetp/	key emerging economies including Brazil, China, India, Mexico - modelling/policy and energy sector aspects
NDC Partnership	Nationally Determined Contributions Partnership (WRI & UNFCCC)	https://ndcpartnership.org	NDC update support; modelling/policy aspects
PACT	Project for Advancing Climate Transparency (WRI; EC/EU MS funded)	https://www.wri.org/our-work/project/project-advancing-climate-transparency-pact/about	NDC updates and transparency in modelling/policy formulation
PCCB	Paris Committee on Capacity Building (UNFCCC constituted body)	https://unfccc.int/pccb	Modelling/policy capacity building aspects; joint events
SPIPA	Strategic Partnerships for the Implementation of the Paris Agreement (EC)	https://eeas.europa.eu/delegations/mexico/62990/strategic-partnerships-implementation-paris-agreement-spipa_en	joint events & policy support activities in major and less emitting countries (Brazil, Canada, China, India, Indonesia, Japan, Mexico, Russia, South Africa, South Korea and the United States of America)

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Abbr. name	Full name	Website	Potential joint action(s)
UNDP NDC	UNDP NDC support programme (UN/UNDP)	https://www.ndcs.undp.org/content/ndc-support-programme/en/home.html	joint events & NDC update support activities
URBAN-LEDS II	Urban Low Emission Development Strategies	https://urban-leds.org/	sub-national actions in the context of modelling (Brazil, India)

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5 Action Plan for synergies

The following actions will be implemented by the PARIS REINFORCE consortium to create the space for cooperation mentioned in Section 4 above, as illustrated in Table 4.

Table 4: PARIS REINFORCE Action Plan for cooperation and synergies

Task	Description	Responsible(s)	Timing
Mapping the relevant projects	Numerous projects have already been identified (Sections 3 and 4). All consortium members will screen other projects that their organisation participates in, in order to assess whether they have common grounds with PARIS REINFORCE to be considered for synergies. The screening will be performed primarily over the internet and personal bilateral discussions. The result of the mapping will be reflected in Tables 2 and 3, which will be enriched.	NTUA and all partners	July 2019 to November 2019
Initiating contact with projects	An initial assessment of the potential for synergies will be performed once the list of projects is ready. This exercise will reveal which of the listed project is relevant to be contacted directly for further investigation of the potential and above all of the willingness to coordinate their efforts with PARIS REINFORCE. This direct contact is necessary for building trust between projects. Once trust and common understanding have been established, the interested projects are expected to share the timeframe of their key tasks, deliverables, and milestones to enable PARIS REINFORCE to identify the space for synergies and coordination.	NTUA	December 2019 – February 2019
Establishing synergies	Actions such as the ones described in Sections 3 and 4 will be implemented with the H2020 LC-CLA-01-2018 sister projects as well as other interested projects.	NTUA and all partners	November 2019 – May 2022
Reporting on the synergies	The progress and extent of implementation of this plan will be reflected in project deliverable D8.15 (“Report on coordination and synergies”)	NTUA	November 2020

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