

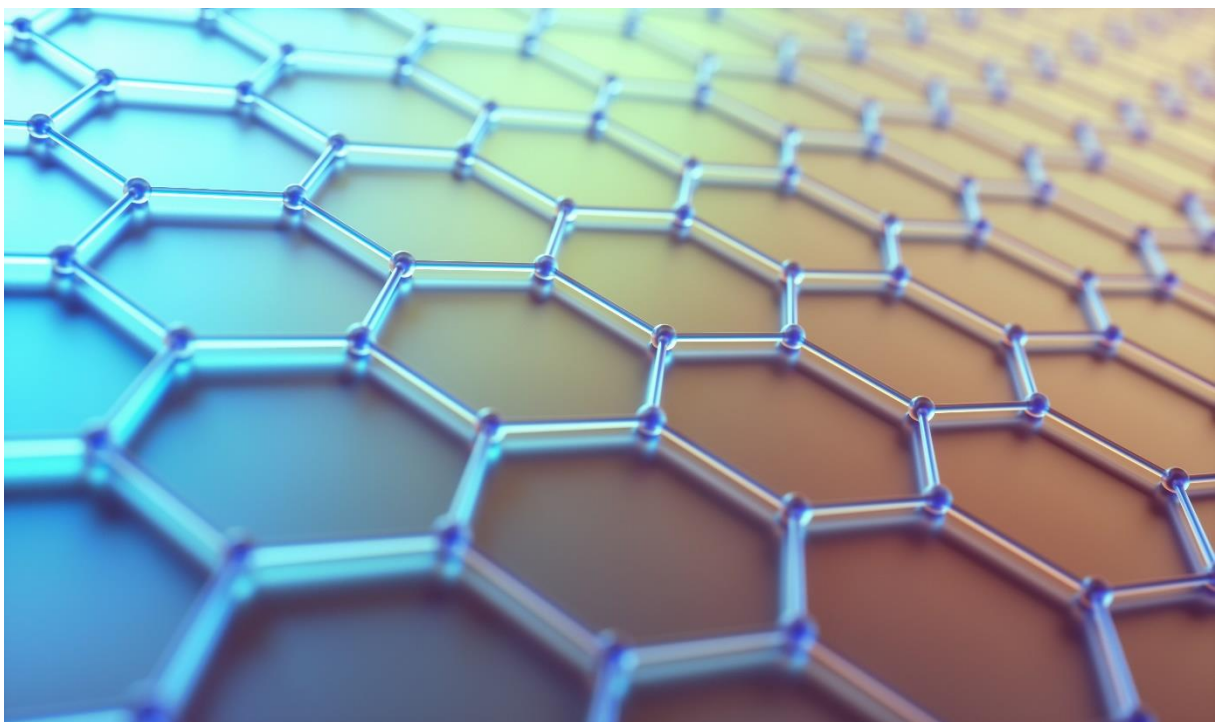
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# Final Assessment of M-ERA.NET 2

2016 – 2022

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## REPORT



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## Content

<b>1</b>	<b>Executive Summary .....</b>	<b>5</b>
<b>2</b>	<b>M-ERA.NET 2.....</b>	<b>10</b>
2.1	About M-ERA.NET 2 .....	10
2.2	Scope of the assessment.....	10
<b>3</b>	<b>Methodology .....</b>	<b>12</b>
3.1	Logical framework of M-ERA.NET 2 .....	12
3.2	Indicator system .....	13
3.3	Realisation .....	15
<b>4</b>	<b>Analysis Call Data .....</b>	<b>17</b>
4.1	Network participation.....	17
4.2	Funded projects, success rates and oversubscription .....	19
4.3	Total project costs and total project funding .....	21
4.4	Oversubscription .....	22
4.5	Call budget execution.....	23
4.6	Call topics.....	25
4.7	Types of funded project partners .....	27
4.8	Network connectivity .....	28
4.9	Leverage effect of network participation .....	29
<b>5</b>	<b>Analysis of Survey Data .....</b>	<b>32</b>
5.1	Input level.....	33
5.1.1	Network management and network health .....	33
5.1.2	Assessment of joint calls: application and funding process .....	34
5.1.3	Experience with national/international research funding.....	35
5.1.4	Free-rider effect -funding alternatives to M-ERA.NET 2 .....	37
5.2	Activities & Output level .....	37
5.2.1	Project implementation.....	37
5.2.2	M-ERA.NET 2 other joint activities.....	38
5.2.3	M-ERA.NET 2 efforts to promote project results.....	39
5.3	Outcome level .....	40
5.3.1	Network sustainability.....	40
5.3.2	Effects on the quality of national/regional research funding programmes ....	40
5.3.3	Innovation chain coverage and year to market .....	41
5.3.4	Added value for funded project partners compared to other funding programmes .....	43
5.3.5	Effects on innovation competency and cooperative behaviour.....	43
5.3.6	Dissemination of project/research results .....	45
5.4	Impact level .....	46
5.4.1	Relevance for national/regional research communities .....	46
5.4.2	Alignment of national/regional and European roadmaps/strategies .....	47
5.4.3	Contributions to low carbon energy technologies .....	48
<b>6</b>	<b>Literature .....</b>	<b>50</b>
<b>7</b>	<b>Appendix .....</b>	<b>51</b>
7.1	Supporting tables and figures .....	51
7.2	Questionnaire (un)successful applicants .....	55
7.3	Questionnaire funding organisations .....	65
7.4	Questions deep dive workshop .....	71

Figure 1: Logical Framework of M-ERA.NET 2.....	13
Figure 2: Characteristics of funding organisations.....	17
Figure 3: Participating funding organisations per call. ....	18
Figure 4: Number of participating funding organisations per call .....	18
Figure 5: Number of pre-proposals, full proposals, funded projects and success rate per call .....	19
Figure 6: Success rate of submitted full proposals per country.....	20
Figure 7: Distribution of research partners in projects funded by M-ERA.NET 2.....	20
Figure 8: EU-13 share of applicants in funded projects and committed funds, respectively. ....	21
Figure 9: Total project costs and total project funding per call.....	22
Figure 10: Oversubscription factor per call .....	22
Figure 11: Funding absorption factor per call .....	23
Figure 12: Indicative call budget vs. requested funding per funding organisation .....	24
Figure 13: Funding volume per call topic .....	25
Figure 14: Number of partners connected to other countries in M-ERA.NET 2 funded projects.....	26
Figure 15: Share of organisation types in funded projects per call .....	27
Figure 16: Success rate per organisation type averaged over all calls.....	28
Figure 17: Total funding amounts and distribution per organisation type over all calls .....	28
Figure 18: Networking through joint projects in M-ERA.NET 2.....	29
Figure 19: Leverage factor for invested person months.....	31
Figure 20: Assessment of network management/network health .....	33
Figure 21: Experiences with the application process.....	34
Figure 22: Comments from unsuccessful applicants on the application process of the M-ERA.NET 2 calls.....	34
Figure 23: Funding procedures and support activities of the M-ERA.NET network .....	35
Figure 24: Experience in participating in national/international research funding programmes/the previous M-ERA.NET.....	36
Figure 25: Reasons for applying to M-ERA.NET calls rather than to EU Framework Programme (comments from the participants).....	36
Figure 26: Funding alternatives for rejected projects .....	37
Figure 27: Experiences with the project implementation.....	38
Figure 28: Drivers for continuing M-ERA.NET 2 cooperation under M-ERA.NET 3. ....	40
Figure 29: Effects of M-ERA.NET 2 on the coordination and cooperation of regional/national funding programmes. ....	41
Figure 30: Technology Readiness Level .....	42
Figure 31: Time frame for commercialisation of project results .....	42
Figure 32: Added value for funded project partners compared to other funding programmes.....	43
Figure 33: Already realised benefits from participating in the project(s).....	44
Figure 34: Effects on cooperative behaviour.....	45
Figure 35: Dissemination process.....	45
Figure 36: Impact of M-ERA.NET 2 on the European Research and Innovation Area .....	47
Figure 37: Role of M-ERA.NET 2 on the alignment of national/regional and European roadmaps/strategies.....	47
Figure 38: Relevance of the project results for contributions to low carbon energy technologies .....	48
Figure 39: Projects addressing low carbon energy technologies .....	49
Figure 40: Leverage effect of investment in transnational projects, measured in person months. ....	54
Table 1: Indicator system M-ERA.NET 2.....	14
Table 2: Response rates online surveys .....	32
Table 3: Comparison of topics and relevance for low carbon energy technologies .....	49
Table 4: Success rates per funding organisations .....	51
Table 5: Network connections (number of joint projects) .....	51

# 1 Executive Summary

M-ERA.NET 2 is an EU-funded network to support and better coordinate European research programmes and related funding in materials science and engineering, including materials for low carbon energy technologies and related production technologies. This report summarises the key findings of the assessment of the network, which was conducted on behalf of the Research Council of Norway by the Institute for Innovation and Technology (iit). The evaluation covers the Co-funded Call 2016 and the additional Joint Calls 2017 – 2020 and related additional activities carried out by the network and was conducted from June to December 2021. The key findings and practical lessons learned are summarised below, while further analysis can be found in chapters 4 and 5. Recommendations or salient issues or aspects that should be followed up are written in *italics*. Where possible, we compared the achievements of M-ERA.NET 2 to achievements of the previous network M-ERA.NET (2012-2015).

## **M-ERA.NET 2 has high geographic coverage in Europe and beyond, and persistent participation of network members in joint calls**

M-ERA.NET 2 is one of the largest European Research Area (ERA-NET) networks. In total, 47 funding organisations (41 network members and 6 additional observer organisations) from 33 countries successfully participated in at least one call. The network was able to maintain a high level of commitment of funding organisations with 30 or more funding organisations participating in joint calls. In particular, funding organisations from EU-13 countries have continuously participated in the calls, which is a strong indication that the network has been successful in terms of sustainable inclusion.

Support for research and innovation at the regional level is fostered by the participation of regional funding organisations, which account for a quarter of all network members. The consortium covers 22 EU member states, 11 of which are EU-13 countries, and 5 Associated States. International participation is important, with funding organisations from six non-European countries.

*The network has succeeded in attracting a large number of funding organisations that are necessary to meet the European and global challenges in materials research. In view of the size of the network, we would like to emphasise at this point the high functionality of the network, which we have analysed in depth in this report.*

## **General positive feedback from applicants in joint calls**

M-ERA.NET 2 was rated very positively by its applicants. Surprisingly, the feedback of the successful applicants did not differ much from those who unsuccessfully applied for funding. Hence, not only the application phase, but also the funding and implementation phases can be rated as very good. Also, when compared with national/regional and European funding programmes, the advantages of M-ERA.NET 2 outweigh the disadvantages.

From the previous experiences of the applicants, it can be deduced that the application to M-ERA.NET 2 is obviously preferred to the application to national funding programmes. If, on the other hand, the project proposal is rejected, it apparently is easier for the unsuccessful applicants to apply for national funding, since about one third of the rejected projects did do so successfully. Nevertheless, some applicants pointed out, that there are some areas for improvements that should be focused on more in the future.

*Coordinating more than 40 funding programmes with different rules is naturally asking for some strictly imposed rules and intelligent coordination. However, potentials for further flexibility at the interface*

*between national programmes and transnational call participation should be kept under constant review and discussion. In addition, there was occasional criticism of the communication of the evaluation results of the applications, especially in the case of unsuccessful applications. It is recommended to make the communication of the project evaluation even more transparent and comprehensible.*

### **Rise in number of proposals speaks for network's high attractiveness for the European research community**

Over time, M-ERA.NET 2 has continued to gain attractiveness for the European research community. In total, the M-ERA.NET 2 consortium received 947 funding applications from 4157 partners.

Between 2016 and 2020, the success rate of full proposals dropped significantly from 52% to 29%, while pre-proposal success rates stayed rather constant. The EU contribution partly explains the relatively high success rate of full proposals in 2016. There is also considerable variation among funding organisations in terms of the success rate of full proposals, although they overall managed to outperform the performance in M-ERA.NET (Calls 2012 – 2015). 29 funding organisations succeeded in achieving a full proposal success rate of 33% or higher, and only one funding organisation wasn't represented in any funded project. A total of 172 projects were funded by M-ERA.NET 2.

*We recommend analysing reasons for the relatively high request for full proposals in M-ERA.NET 2, since applying for funds consumes an important amount of researchers' time. Ways to achieve harmonising availability of funds with full proposal submissions are worth further discussion, although increasing flexibility in available funding was apparent, and smart rules were applied for pre-proposal success rates limits.*

### **Researchers from EU-13 countries play a fundamental role in funded projects**

In M-ERA.NET 2, 40% of funded applicants came from an EU-13 country, or 303 out of 766 partners. This makes the network far more inclusive than other ERA-NET Cofund networks. A comparison of the share of funded applicants with the contribution of EU-13 countries to the total call budget also shows that researchers from EU-13 countries were not disadvantaged in M-ERA.NET 2, and Calls 2017 and 2019 stand out positively in this respect.

*The network may consider sharing its experiences on broad participation of EU-13 partners with other networks that have high potentials in that regard. These addresses in the first place the EU-13 funding organisations in M-ERA.NET 2 themselves, with good access to their respective national/regional programmes.*

### **Large differences in terms of budget execution among funding organisations**

The indicated call budgets for M-ERA.NET 2 ranged from 20.7 million EUR for the Call 2020 up to 40 million EUR for the Call 2016. Overall, the absorption rate for all calls together was 94%. This means that the network was able to spend most of the planned originally committed budget. Over time, the overall absorption rate of each call has steadily increased between 2017 and 2020. The result not only shows that M-ERA.NET 2 has become more attractive over the years, but also speaks to an increasing quality of applications, motivating network partners to provide additional funding for excellent research projects.

At the same time, the absorption rate of the network strongly depends on the performance of the individual funding organisations that participated in M-ERA.NET 2. For Calls 2017 – 2020, for 25 funding organisations, actual contributions equalled planned contributions by 70% or more, while 15 funding

organisations underspent and had a absorption rate of less than 50%. It is striking that the problem of underspending occurs primarily in the regional funding organisations.

*Underspending may have various causes. However, some of them may be overcome by good management approaches. Funding organisations with a good budget-spending fit may co-analyse this issue together with less successful funding organisations.*

### **Data show interesting patterns in research focus and geographic project collaboration**

The thematic priorities of M-ERA.NET 2 joint calls covered innovative surfaces, coatings, and interfaces (34.2 million EUR in funding), (multi) functional materials (32.3 million EUR in funding) and materials for additive manufacturing (28.7 million EUR in funding). There are definitely differences between the countries: for example, measured by the number of funded partners, Poland leads research into high-performance composite materials, while researchers from Germany and Austria funded under M-ERA.NET 2 focus on materials for additive manufacturing.

The degree of RTD collaboration among partners funded by M-ERA.NET 2 varies, with some preferred constellations in terms of partner countries. Comparatively, intensive collaboration can be observed between neighbours such as Poland and Germany, Lithuania and Latvia, or Spain and Portugal – which is likely to develop further. Other patterns are difficult to explain, such as Spain's strong ties with Poland, Germany, and Romania. On average, research groups from 2.7 countries were involved in each research project funded by M-ERA.NET 2.

*Do the identified patterns reflect a move towards a coordinated, transnational and truly European research and innovation space in thematic clusters? We recommend to further explore these ties in terms of their potential for transnational roadmaps and strategies for specific research topics – and for appropriately designed calls under successor programmes. What role could a network like M-ERA.NET 2 play in this respect?*

### **High added values for regional/national programmes from leverage effects of transnational cooperation**

Regarding access to research effort (measured in funded person-months), participating funding organisations derived significant added value from transnational collaboration: the vast majority of funding organisations managed to leverage their own funded person-months by multiple times. The leverage factors of national/regional funding vary depending on the share of foreign partners in the projects and range from 0.47 to 7.

*The leverage factor is an excellent way to show the added value of European cooperation. Even for programmes with a lower factor, the data show that they have benefited greatly from participation in M-ERA.NET 2.*

### **Funding organisations see substantial benefits in cooperation among each other**

Survey results indicate that funding organisations have benefited greatly from participation in M-ERA.NET 2 by improving their ability to design and manage research and innovation programmes. Consequently, almost all funding organisations agreed that the design of national/regional funding programmes has been adapted towards more international research collaboration, e.g., by implementing rules that make it easier for international research to participate in national/regional funding programmes or by aligning national/regional evaluation criteria with those of transnational research programmes. Overall, funding organisations rate the impact of participating in the network much more positively than in the previous network. This is also reflected by the fact that the majority of funding

organisations decided to continue their cooperation under the successor network M-ERA.NET 3. Moreover, other aspects such as the support of their respective innovation strategy by M-ERA.NET 2 or the expected output effectiveness of the network, were drivers rather than obstacles in regards to their further participation.

*Over the years, the network has accumulated a high level of expertise when it comes to the design and implementation of funding programmes that aim for more international research collaboration. We suggest to further promote exchange formats among the funding organisations to share experiences, best practices but also stories of failures. Especially new network members or observer organisations should be taken by the hand in this regard.*

### **Much appreciation for network management**

Network management is certainly a strength of M-ERA.NET 2. All participating funding organisations that took part in the network survey rated the network's management positively, half of which chose the highest possible score. All agreed or strongly agreed that the network's decision-making processes are transparent. All survey respondents felt that the network's activities are appropriately designed and implemented to support the ERA's goals and intended outcomes. There is little room for improvement in this regard. This is a remarkably positive result and is certainly a strong driver for the continued attractiveness of the network.

*M-ERA.NET 2 funding organisations may consider sharing this positive experience. This may include exploration and explicit specification of the drivers of the high level of contempt within the network-internally. It may also include indirect transfer through discussions of national representatives with their national partners present in other partnerships.*

### **M-ERA.NET 2 supports the alignment of national/regional funding programmes and European roadmaps/strategies**

The network has been making significant efforts to better align national/regional funding programmes in materials research and innovation by improving their collaboration and cooperation. This is already evident in the topic identification process, in which all network partners are involved. In addition, a dialogue with European stakeholders (experts) and the international RTD community has been established to ensure an appropriate thematic scope that reflects the state of the art at EU level. This paid off as all members of the network agreed that the calls were part of an approach to align national/regional and European roadmaps/strategies.

*The M-ERA.NET 2 approach for defining call topics is well suited to ensure the alignment with national/regional internationalisation strategies. Funding organisations are encouraged to take advantage of the networks' strong ties with the European RTD community and strategic experts to identify further areas with high European added-value to be addressed by national/regional funding programmes.*

### **Relevance of low carbon energy technologies**

M-ERA.NET 2 aimed to fund transnational RTD projects addressing materials research and innovation including materials for low carbon energy technologies. According to the survey results, 61% of all funded researchers indicated that their project results are at least "somewhat relevant" for the low carbon energy technologies, thereby contributing to the European [Strategic Energy Technology Plan](#).



*According to our findings, it will be important for the future orientation of the network to maintain both a balance between thematic openness on the one hand and taking global goals into account on the other.*

### **Scientific project approach reflected in low Technology Readiness Levels**

In the assessment of the predecessor M-ERA.NET Calls 2012 – 2015 it was unclear whether and why “low” Technology Readiness Levels (TRL) were specifically addressed with the projects. An imbalance between funded and non-funded projects was also identified. These doubts and the imbalance were resolved during the assessment of M-ERA.NET 2. The focus on lower TRLs can be explained by the research approach of the projects, as opposed to the validation or production approaches of the later TRLs. In addition, applicants must submit a plan for the transition to higher TRLs at a later stage and must involve an industrial partner for an entry higher than TRL 4. The focus on lower TRLs was also highlighted by the survey participants.

*The requirements for applicants in future M-ERA.NET joint calls, for example with regard to TRL entry levels, should be as transparent and clearly defined in the future as they are in M-ERA.NET 2.*

### **Data quality significantly improved**

Compared to the predecessor M-ERA.NET (Calls 2012 – 2015), it is worth mentioning that the quality of the (call) data has improved considerably. The data is consistent and comprehensible. Particularly regarding the uniform designation of categories both for the types of applicants and for the funding organisations, significant progress has been made here.

*Especially regarding future assessments of the network, the current data quality is very high and should be maintained.*

## 2 M-ERA.NET 2

### 2.1 About M-ERA.NET 2

M-ERA.NET 2 (2016 – 2022) is an EU-funded network to support and increase the coordination of European research programmes and related funding in materials science and engineering, including materials for low carbon energy technologies and related production technologies. The network comprises more than 40 public funding organisations from 33 countries (network members and observer organisations) and has been continuing the activities started under the predecessor project M-ERA.NET (2012 – 2016). The core activity of the network is the joint strategic programming, and subsequent organisation and implementation of a co-funded and additional annual joint calls, supporting the utilisation of knowledge along the whole innovation chain. Research on materials enabling low carbon energy technologies were particularly highlighted as a main target of all calls under M-ERA.NET 2. Therefore, it contributes to the coordination, integration, efficiency and harmonisation of the European Research Area (ERA). In the long run, M-ERA.NET 2 aims to develop a long-term cooperation between funding organisations from countries and regions across Europe and beyond.

The main tasks of M-ERA.NET 2 are:

- ⇒ Establishment of a joint vision and policy towards joint strategic programming
- ⇒ Implementation of 1 co-funded call and four additional joint calls
- ⇒ Monitoring and assessments of funded projects and valorisation of results
- ⇒ Consolidation of participating funding programmes
- ⇒ Cooperation with the RTD community
- ⇒ Generating impact by funding RTD projects addressing research and innovation on materials for low carbon energy technologies

### 2.2 Scope of the assessment

The main objectives of the final assessment of M-ERA.NET 2 were to check objectives versus achievements in two main categories:

- objectives related to the implementation of joint transnational calls (Co-funded Call 2016 and additional Joint Calls implemented between 2017 and 2020)
- objectives related to other activities (such as communication and networking activities)

To assess the performance and impact of M-ERA.NET 2 as a whole, we considered the following additional aspects in the assessment:

- analysis of call data, including funding availability and over- subscription
- evaluation of M-ERA.NET 2 from the viewpoint of applicants (successful and unsuccessful) and the funding organisations including main benefits
- behavioural additionality due to the participation in M-ERA.NET 2
- indications on the level of sustainability (e.g. with respect to post-funding expectations and achievements)
- promotion of research results at network and project level (limited to Call 2016 /finished projects)
- transnational effects (cooperation patterns, comparison of regional and national funding organisations)
- inclusiveness of M-ERA.NET 2 (participation of widening countries and non-EU countries)
- motivation of funding organisations and funded project partners to participate in M-ERA.NET 2 and reasons for organisations to (not) participate in single certain calls or M-ERA.NET 3
- role of the cluster landscapes in the M-ERA.NET 2 countries and regions (e.g., regarding the preparation/promotion of M-ERA.NET 2 activities and their potential for future cross-cluster-activities)

- comparison between the performance of M-ERA.NET (2012 – 2016) and M-ERA.NET 2 (2016 – 2022) including effects of participation in both networks and assessment on whether learnings have been considered
- comparison with other ERA-NETs (limit to aspects such as number of network partners and funded projects rather than the impact)

The report also included some recommendations for improved practices and the sustainability aspects of the network.

## 3 Methodology

The assessment followed a theory-based approach, using a logical framework to draw conclusions about whether and how the network contributed to expected results and impacts. In the first step, we elaborated a logic model of M-ERA.NET 2 (chapter 3.1). We then derived indicators and identified necessary data sources (chapter 3.2).

### 3.1 Logical framework of M-ERA.NET 2

A logical framework or logic model is “a management tool used to improve the design of interventions, most often at the project level. It involves identifying strategic elements (inputs, outputs, outcomes, impact) and their causal relationships, indicators, and the assumptions or risks that may influence success and failure” (OECD, 2002).

Originally introduced in the 1960's for planning, monitoring and evaluating international development projects, the logical framework approach has recently gained popularity among evaluators in other areas. In 2016, the support platform ERA-LEARN published a report that attempts to create a common framework for impact assessments of public-public partnerships (P2Ps)<sup>1</sup> based on the logical framework approach.

The main strategic elements of a logical framework for P2Ps are:

- ⇒ **Challenges/Problems/Needs:** These are global challenges that are targeted by the members of a P2P network, as the increasing industrial competitiveness in a certain sector, or global needs as pointed out in the Roadmap for a low carbon economy by 2050.
- ⇒ **Objectives:** The objectives a P2P was designed to achieve. In most cases, they prepare the ground for Europe's wider policy aims, such as the development of low carbon technologies that complement the current EU energy policy.
- ⇒ **Inputs:** Inputs are resources used to support the activities of the P2P and to deliver the programmed outputs. They include budgetary costs, such as financial, administrative and human resources on the network and member states' side, but also costs for the funded project partners (e.g. co-financing of research projects and administrative costs associated with reporting requirements). The information is often used to analyse the efficiency of a P2P. Furthermore, the P2P gradual network health and connectivity can be evaluated by assessing the management and governance structure as well as the underlying processes of a P2P.
- ⇒ **Activities:** For most P2Ps, this includes the coordination of national/regional research and innovation activities in view of joint calls, as well as collaboration between the funding organisations taking part in the P2P. Apart from implementing transnational calls, other possible additional joint activities should also be considered.
- ⇒ **Outputs:** The P2Ps produce short-term outputs, that are a direct result of the employed activities. They are mostly quantifiable, such as the number of projects supported under joint calls, produced joint strategy documents or new network partners gained during the time period subject to the assessment. Another mentionable output indicator is the leverage effect of EC contribution to national funding.
- ⇒ **Outcomes:** Outcomes can be described as the intended (midterm) effects on the target group (network partners and funded project partners) that result from the outputs. For example, a project can result in growing collaboration among the project partners, or training activities for

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In the European Union, public-to-public partnerships (P2Ps) are used to coordinate national research policies to create the European Research Area. These P2Ps are used for networking activities and the launch of transnational joint calls for research projects to align national strategies, helping to increase the efficiency and effectiveness of public research efforts. Several kinds of P2Ps like Joint Programming Initiatives, the ERA-NET Scheme and Article 185 Initiatives have been developed.

network members can lead to improved skills and capacity building. In addition, outcome indicators also measure the sustainability of a network (e.g., continued participation in calls, budget commitments).

- ⇒ **Impacts:** Impacts are (un-)intended long-term effects on the target group as well as society and the economy at large scale. They take time to occur, so it is rather difficult to link them directly to the P2P. An example for a global impact which could come from the conduct of research is a strengthened European Innovation Ecosystem.

Based on the grant agreement and supporting documents, we constructed the following logical framework for M-ERA.NET 2:

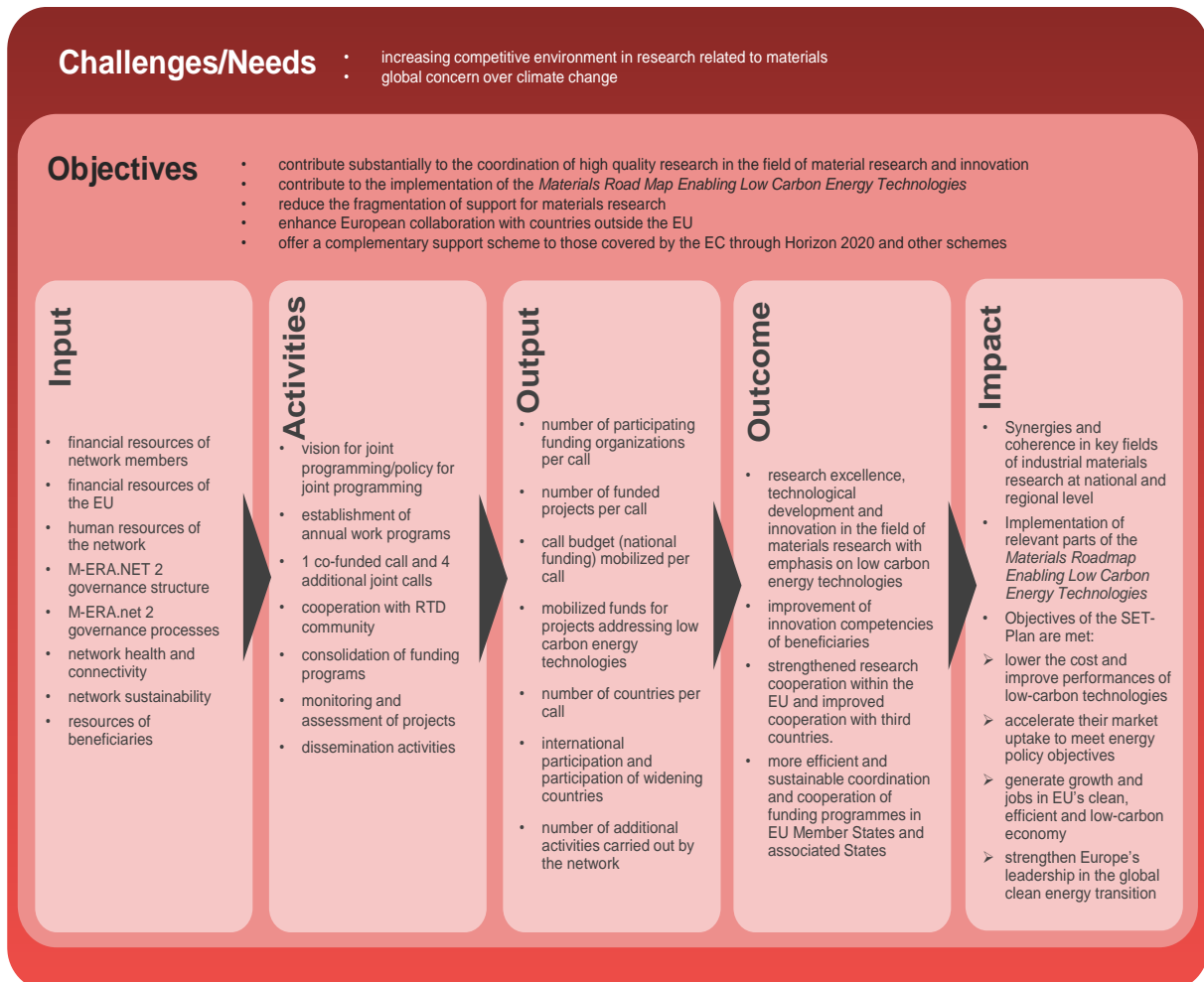


Figure 1: Logical Framework of M-ERA.NET 2

### 3.2 Indicator system

Objectively verifiable indicators help to clarify the logical framework. They measure and verify the input, activities and output of the network and establish whether the network is achieving the expected outcome and impact. For the indicator system, we first assigned indicators for each level of the logical framework. Second, we identified suitable data sources for each indicator:

Table 1: Indicator system M-ERA.NET 2

No.	Indicator	Impact level	Principal data source(s)
1	Assessment of <b>application process</b> of the M-ERA.NET 2 calls	Input	<ul style="list-style-type: none"> <li>• Survey successful applicants</li> <li>• Survey unsuccessful applicants</li> </ul>
2	Assessment of <b>funding procedures</b> (e.g. monitoring activities)	Input	<ul style="list-style-type: none"> <li>• Survey successful applicants</li> </ul>
3	<b>Experience</b> in participating in national/international research funding programmes/the previous M-ERA.NET	Input	<ul style="list-style-type: none"> <li>• Survey successful applicants</li> <li>• Survey unsuccessful applicants</li> <li>• Survey funding organisations</li> </ul>
4	Drivers and barriers for <b>participation</b>	Input	<ul style="list-style-type: none"> <li>• Survey successful applicants</li> <li>• Survey funding organisations</li> </ul>
5	<b>Free-rider effect</b> /funding alternatives to M-ERA.NET 2	Input	<ul style="list-style-type: none"> <li>• Survey successful applicants</li> <li>• Survey unsuccessful applicants</li> </ul>
6	Assessment of <b>network management/network health</b>	Input	<ul style="list-style-type: none"> <li>• Survey funding organisations</li> <li>• Deep dive workshop</li> </ul>
7	<b>Call budget execution</b> per network member	Input	<ul style="list-style-type: none"> <li>• Call data</li> </ul>
8	<b>Implementation</b> of funded projects	Activities	<ul style="list-style-type: none"> <li>• Survey successful applicants</li> </ul>
9	Assessment of M-ERA.NET 2's <b>other joint activities</b> (e.g. cluster cooperation)	Activities	<ul style="list-style-type: none"> <li>• M-ERA.NET 2 documentation</li> <li>• Survey successful applicants</li> <li>• Deep dive workshop</li> </ul>
10	Assessment of M-ERA.NET 2 <b>efforts on valorisation of results</b> of funded projects	Activities	<ul style="list-style-type: none"> <li>• M-ERA.NET 2 website and published material</li> <li>• Deep dive workshop</li> <li>• Survey funding organisations</li> <li>• Survey successful applicants</li> </ul>
11	Number of participating <b>funding organisations</b>	Output	<ul style="list-style-type: none"> <li>• Call data</li> </ul>
12	Number of <b>pre-proposals, full-proposals, and funded projects and success rates</b> (in total, per country, per call)	Output	<ul style="list-style-type: none"> <li>• Call data</li> </ul>
13	Total <b>project costs</b> and total <b>project funding</b>	Output	<ul style="list-style-type: none"> <li>• Call data</li> </ul>
14	Project funding <b>per national/regional programme and oversubscription</b>	Output	<ul style="list-style-type: none"> <li>• Call data</li> </ul>
15	<b>Types of funded applicants</b> and share of funding	Output	<ul style="list-style-type: none"> <li>• Call data</li> </ul>
16	<b>Project topics</b> (funding (per country), number of projects))	Output	<ul style="list-style-type: none"> <li>• Call data</li> </ul>
17	Projects <b>addressing low carbon energy technologies</b>	Output	<ul style="list-style-type: none"> <li>• Survey successful applicants</li> </ul>
18	Participation of <b>widening and non-EU countries</b>	Output	<ul style="list-style-type: none"> <li>• Call data</li> </ul>
19	<b>Project partner connections</b> per country (network connectivity)	Output	<ul style="list-style-type: none"> <li>• Call data</li> </ul>
20	<b>Leverage effect</b> of network participation for funding organisations	Output	<ul style="list-style-type: none"> <li>• Call data</li> </ul>
21	<b>Joint strategic programme</b>	Output	<ul style="list-style-type: none"> <li>• M-ERA.NET 2 documentation</li> <li>• Survey funding organisations</li> </ul>
22	<b>Innovation chain coverage:</b> TRL level project start* TRL level project end	Outcome	<ul style="list-style-type: none"> <li>• Survey successful applicants</li> <li>• *Survey unsuccessful applicants</li> </ul>
23	<b>Added value for project partners</b> compared to <b>national funding</b>	Outcome	<ul style="list-style-type: none"> <li>• Survey successful applicants</li> <li>• Survey unsuccessful applicants</li> </ul>
24	Added value for project partners compared to other <b>transnational funding programmes</b>	Outcome	<ul style="list-style-type: none"> <li>• Survey successful applicants</li> <li>• Survey unsuccessful applicants</li> </ul>
25	Effects on <b>cooperative behaviour (funded project partners)</b>	Outcome	<ul style="list-style-type: none"> <li>• Survey successful applicants</li> </ul>
26	Effect on <b>innovation competency</b>	Outcome	<ul style="list-style-type: none"> <li>• Survey successful applicants</li> </ul>
27	Scientific and innovation oriented <b>results</b>	Outcome	<ul style="list-style-type: none"> <li>• Survey data (projects funded under Co-funded Call 2016)</li> </ul>
28	<b>Patents and licences</b>	Outcome	<ul style="list-style-type: none"> <li>• Survey data (projects funded under Co-funded Call 2016)</li> </ul>
29	<b>Year to market</b>	Outcome	<ul style="list-style-type: none"> <li>• Survey successful applicants</li> </ul>
30	<b>Economic effects</b>	Outcome	<ul style="list-style-type: none"> <li>• Survey data (projects funded under Co-funded Call 2016)</li> </ul>
31	<b>Dissemination strategies (at project level)</b>	Outcome	<ul style="list-style-type: none"> <li>• Survey successful applicants</li> </ul>

32	<b>Network sustainability</b> (sustained participation of network members, budget commitment over time)	Outcome	<ul style="list-style-type: none"> <li>• Survey funding organisations</li> <li>• Call data</li> </ul>
33	Effect on <b>cooperative behaviour (network partners)*</b> <small>*part of network connectivity</small>	Outcome	<ul style="list-style-type: none"> <li>• Survey funding organisations</li> </ul>
34	Effect on <b>cross-border programme cooperation</b>	Outcome	<ul style="list-style-type: none"> <li>• Survey funding organisations</li> </ul>
35	Effect on <b>cross-border project cooperation</b>	Outcome	<ul style="list-style-type: none"> <li>• Survey funding organisations</li> </ul>
36	Effect on <b>capability</b> for innovation programme design&management	Outcome	<ul style="list-style-type: none"> <li>• Survey funding organisations</li> </ul>
37	Effect on <b>quality</b> of national/regional research funding programme	Outcome	<ul style="list-style-type: none"> <li>• Survey funding organisations</li> </ul>
38	<b>Dissemination</b> strategies (at <b>programme level</b> )	Outcome	<ul style="list-style-type: none"> <li>• Survey funding organisations</li> <li>• Deep dive workshop</li> </ul>
39	<b>Relevance of transnational projects</b> for national/regional research communities	Impact	<ul style="list-style-type: none"> <li>• Survey funding organisations</li> </ul>
40	Relevance of <b>project</b> results for <b>contributions to the low carbon energy development</b>	Impact	<ul style="list-style-type: none"> <li>• Survey successful applicants</li> </ul>
41	Relevance of <b>programme</b> results for <b>contributions to the low carbon energy development</b>	Impact	<ul style="list-style-type: none"> <li>• Survey funding organisations</li> </ul>
42	Contribution to topics to the SET plan	Impact	<ul style="list-style-type: none"> <li>• Survey successful applicants</li> <li>• Survey funding organisations</li> </ul>
43	<b>Alignment of national/regional and European roadmaps/strategies</b> and role of M-ERA.NET 2	Impact	<ul style="list-style-type: none"> <li>• Survey funding organisations</li> <li>• Deep dive workshop</li> </ul>

We used the following data sources:

- M-ERA.NET 2 reports published on M-ERA.NET website [www.m-era.net](http://www.m-era.net)
- Additional supporting documents provided by the consortium (e.g., grant agreement, work programmes, communication strategy)
- Reports on annual programme surveys to network members (2016 – 2020)
- Template for final project reports, questionnaire for assessment of funded projects from the Co-funded Call 2016 & collected data from the assessment of funded projects from Call 2016
- Applicant, partner, project, and funding data as available from the submission/evaluation project database. Most tables and graphs in chapter 4 are based on an export of the database on July 20, 2021
- Final assessment report for M-ERA.NET (Calls 2012 – 2015)
- Reports/tools available on the ERA-LEARN platform

In addition, we addressed three different groups with online surveys (see chapter 5):

1. Successful applicants (applicants receiving funds following M-ERA.NET 2 calls)
2. Unsuccessful applicants (researchers who submitted proposals, but were not selected for funding)
3. Funding organisations (M-ERA.NET 2 network members and observer organisations)

### 3.3 Realisation

The assessment approach included statistical analysis of collated facts, online surveys, and a workshop. These were realised as follows.

**Task 1 Assessment Concept:** With a view to assure a continuation of the methodologies used in final assessment of M-ERA.NET, the assessment task force discussed and further specified with the M-ERA.NET 2 consortium major aspects and themes which were to be assessed, target groups and questions of the web surveys. The result was an assessment concept that served as an analytical framework to guide data collection, analyses and report writing.

**Task 2 Call Data Analysis** consisted of the assessment of call data and documentation made available. This included network, partner, and project data that have been collected by the network.

**Task 3 Online Survey** consisted of the design and realisation of online surveys directed to funding organisations and (un)successful applicants. The surveys followed the approach used in the previous M-ERA.NET assessment. The assessment of the results were used to prepare the Deep Dive Workshop (Task 4).

**Task 4 Deep Dive Workshop** covered the design and implementation of an online workshop to discuss relevant findings from Task 2 and 3 as well as recommendations with the members and observer organisations of the M-ERA.NET 2 network. The workshop took place on the 26th of November 2021. In total 20 funding organisations participated in the workshop.

**Task 5 Assessment Report** compiled the documentation of the assessment results and recommendations to a final report, and covered a feedback loop with the M-ERA.NET task force (RCN, FFG, KIT-PTKA, MIZS).

**Task 6 Visual Dashboard:** In addition to the assessment report, key findings are made available to funding organisations via a visual dashboard. The dashboard was built using Tableau and allows users to interactively explore relevant M-ERA.NET 2 call data.



## 4 Analysis Call Data

The network keeps an excellent database with detailed information about the calls, funding organisations and applicants. For example, uniform categories were established for the types of organisation of the project partners or the funding organisations. In addition, the uniqueness of the data sets, calls and participants was ensured by using unique IDs. The network is encouraged to maintain these high-quality standards. For selected indicators, we refer to the predecessor programme M-ERA.NET (Calls 2012 – 2015). We also take a closer look at the EU-13 countries, in order to shed light on the question of network inclusiveness.

### 4.1 Network participation

M-ERA.NET 2 is a large EU funded network. In total, 47 funding organisations (41 network members and 6 observer organisations) from 33 countries participated in at least one of the Calls 2016 – 2020.<sup>2</sup> The following figure shows some key characteristics of the funding organisations.

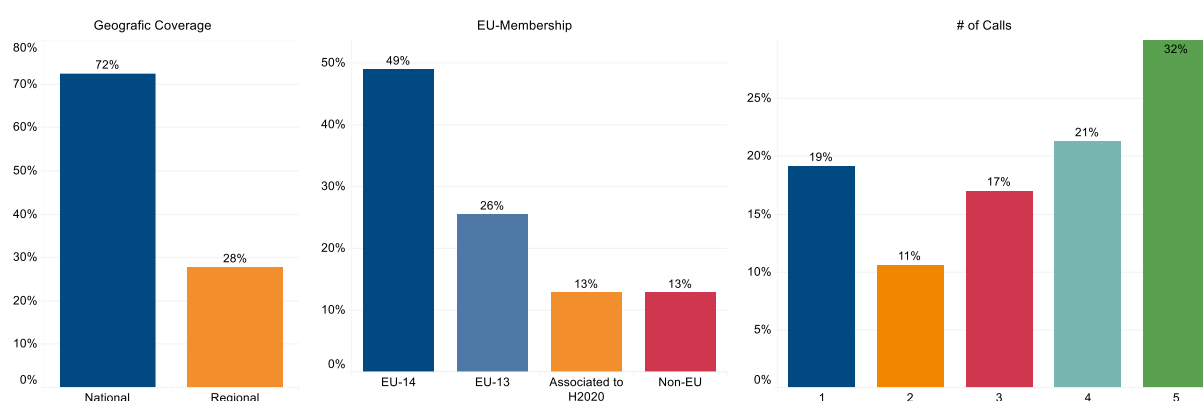


Figure 2: Characteristics of funding organisations

Support for research and innovation at the regional level is fostered with the participation of regional funding organisations. About three quarters of participating funding organisations provided national funding, while one quarter focused on specific regions.

The network covers 22 EU Member States (with only Malta and Croatia missing from the EU-13 countries), and 5 Associated Countries (association to Horizon 2020). International participation is important, with funding organisations from 6 non-European countries (Brazil, Canada, Russia, South Africa, South Korea and Taiwan).

38 out of the 47 funding organisations (81%) participated in at least two calls, while 15 (32%) participated in all five calls of M-ERA.NET 2. Although 19% of funding organisations participated only once, only a few countries have not been represented in more than one call (with exceptions being Finland, Iceland, Ireland, and South Korea). In contrast, funding organisations from EU-13 countries have been interested in continuous participation, as can be seen in the Figure 3. On the one hand, this is a strong indication that the network is striving for sustainable inclusion and, on the other hand, that positive experiences motivate funding organisations from widening countries to join the network in the long term. This is highly important because only the participation of funding organisations representing the entire European research landscape will create the conditions for excellent transnational research projects with high

<sup>2</sup> Two M-ERA.NET 2 network members [Vinnova (Sweden) and fmi+d (Madrid, Spain)] did not participate in any call and are therefore not part of the analysis.

European added value. Only by mobilising different research competencies, methodological approaches and thematic expertise, significant research challenges can be addressed and overcome.

#### Participation by Call

Country	EU-Member	Organisation	Coverage	2016	2017	2018	2019	2020	
Austria	EU-14	AT-FFG	National	x	x	x	x	x	5
Belgium	EU-14	BE-FNRS	Regional	x	.	x	x	x	4
		BE-SPW	Regional	x	x	x	x	x	5
		BE-VLAIO	Regional	x	x	x	x	x	5
Brazil	Non-EU	BR-FAPESP	Regional	x	x	x	x	x	5
Bulgaria	EU-13	BG-BNSF	National	.	x	x	x	x	4
Canada	Non-EU	CA-PRIMA	Regional	.	.	.	x	x	2
Cyprus	EU-13	CY-RPF (now RIF)	National	x	x	.	x	.	3
Czech Republic	EU-13	CZ-TACR	National	.	.	x	x	x	3
Estonia	EU-13	EE-ETAG	National	.	x	x	x	.	3
Finland	EU-14	FI-Tekes (now Business Finland)	National	.	x	.	.	.	1
France	EU-14	FR-ANR	National	.	.	.	x	x	2
		FR-RNAQ (former Region ALPC)	Regional	x	x	.	x	x	4
		DE-JÜLICH	National	x	x	x	x	.	4
Germany	EU-14	DE-KIT	National	x	x	x	.	.	3
		DE-SMWK	Regional	.	.	.	x	x	2
		HU-NKFIH	National	x	x	x	x	x	5
Hungary	EU-13	IS-RANNIS	National	x	.	.	.	.	1
Iceland	Associated to H2020	IE-SFI	National	x	.	.	.	.	1
Israel	Associated to H2020	IL-IIA (former MATIMOP)	National	x	.	.	.	x	2
		IL-MOST IL	National	.	x	.	x	x	3
Italy	EU-14	IT-CALABRIA	Regional	x	x	x	x	.	4
		IT-MIUR	National	x	.	.	.	.	1
Latvia	EU-13	LV-VIAA	National	x	x	x	x	x	5
Lithuania	EU-13	LT-RCL	National	x	x	x	x	x	5
Luxembourg	EU-14	LU-FNR	National	x	x	x	x	x	5
Netherlands	EU-14	NL-M2i	National	.	x	.	.	.	1
		NL-NWO	National	x	.	.	.	.	1
Norway	Associated to H2020	NO-RCN	National	x	.	x	.	x	3
Poland	EU-13	PL-NCBR	National	x	x	x	x	x	5
		PL-NCN	National	x	x	x	x	x	5
Portugal	EU-14	PT-FCT	National	x	.	.	.	.	1
		PT-FRCT	Regional	.	.	x	.	.	1
Romania	EU-13	RO-UEFISCDI	National	x	.	x	x	x	4
Russia	Non-EU	RU-FASIE	National	x	x	x	x	x	5
Slovakia	EU-13	SK-SAS	National	x	x	x	x	.	4
Slovenia	EU-13	SI-MIZS	National	x	.	x	.	.	2
South Africa	Non-EU	ZA-DSI	National	x	x	x	x	x	5
South Korea	Non-EU	KR-KIAT	National	.	x	.	.	.	1
Spain	EU-14	ES-AEI (former MINECO)	National	x	.	x	x	.	3
		ES-EJ-GV/Innobasque	Regional	x	.	x	x	x	4
		ES-ICE	Regional	x	x	x	x	.	4
		ES-IDEA	Regional	.	x	x	x	.	3
Switzerland	Associated to H2020	ES-IDEPA	Regional	x	x	x	x	x	5
		CH-Innosuisse (former SERI)	National	.	x	x	x	x	4
Taiwan	Non-EU	TW-MOST TW	National	x	x	x	x	x	5
Turkey	Associated to H2020	TR-TUBITAK	National	x	x	x	x	x	5

Status  
■ Network Member  
■ Observer Organisation

Figure 3: Participating funding organisations per call.

When analysing the number of funding organisations per call we see that the network could maintain the relatively high level of participation experienced in the predecessor programme M-ERA.NET (Calls 2012 – 2015) with 30 or more funding organisations in the Calls 2016 – 2019.

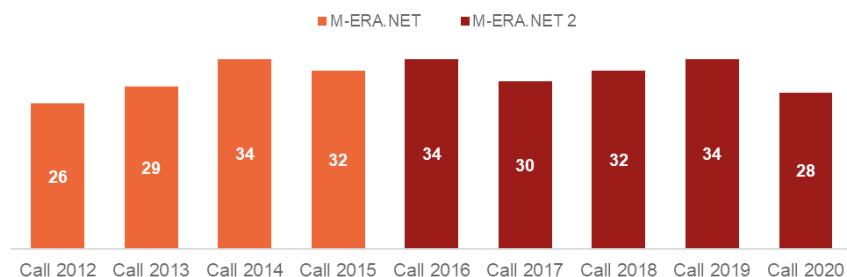


Figure 4: Number of participating funding organisations per call

## 4.2 Funded projects, success rates and oversubscription

For the Calls 2016 – 2020, the M-ERA.NET 2 consortium received **947 proposals with 4157 applicants out of which 172 projects received funding**. Figure 5 shows the distribution of submitted pre-proposals, received full-proposals and funded projects per call. In addition, the graph includes two success rates: 1) the percentage share of pre-proposals which were selected for funding (dark blue line) and 2) the percentage share of successful full-proposals, receiving funding through M-ERA.NET 2 (light blue line). The figure illustrates that there was a sharp decline in number of applications in 2017, which was not fully recovered until 2019 (red bar). In the last two calls, the number of submitted proposals reached a similar level as in 2016. The relatively low number of proposals in 2017 can be partly explained by the abstinence of several funding organisations. For some of them the budget priority was given to the participation in the co-funded Call 2016 vs. participation in the Call 2017.

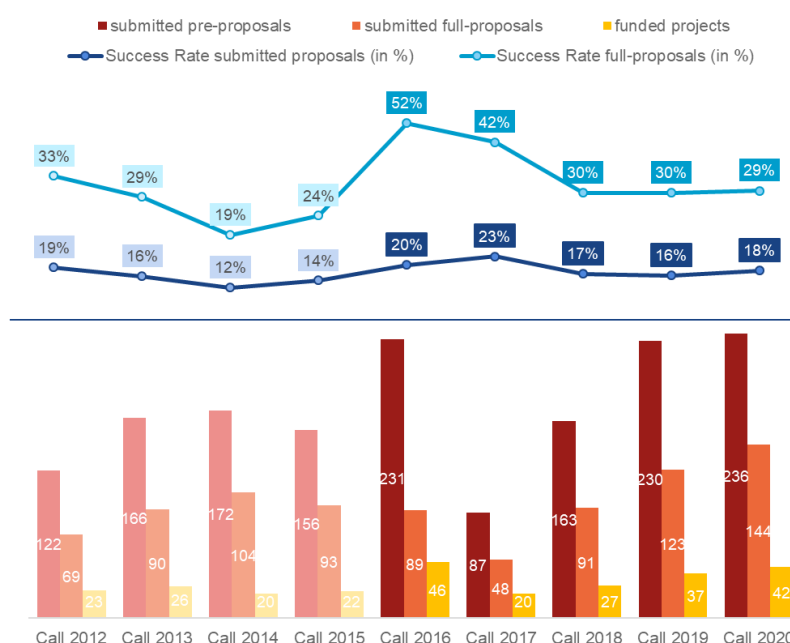


Figure 5: Number of pre-proposals, full proposals, funded projects and success rate per call

When comparing with M-ERA.NET (Calls 2012 – 2015), it becomes evident that there is an overall upwards trend in received applications. With the exception of the Calls in 2017 and 2018, many more project partners have submitted applications in M-ERA.NET 2 than in the predecessor programme. The programme has been able to gain further attractiveness for the European research community over time.

Between the Calls 2016 and 2020, the success rate of full proposals dropped significantly from 52% to 29%, while the general success rate of pre-proposals stayed rather constant over the performed calls. In other words, chances of being invited for a full proposal increased significantly from about 1:3 (39%) in 2016 to almost 2:3 (61%) in 2020, while the probability of ultimately receiving funding remained rather constant. The EU contribution for the Call 2016 partly explains the relatively high success rate of full-proposals in 2016. Firstly, the selection criteria for invitation to full-proposal stage were stricter than in the non-cofunded calls, resulting in a relatively low number of full proposals. Secondly, funding organisations agreed that the quality of proposals in 2016 was indeed very high. The EU top-up was used to fill national/regional funding gaps in the ranking list. That said, it is recommended to further analyse reasons for the relatively large number of proposals invited to the stage 2 over the whole M-ERA.NET 2 life time, since applying for funds consumes an important amount of researchers' time.

The following maps show that there are significant differences between the full-proposal success rates of the individual countries.<sup>3</sup> Looking at the success rate of full- proposals across all calls, despite some exceptions, there is a tendency for smaller countries to have higher success rates than larger countries. There may be several reasons for this. First, smaller countries could be more flexible in their budget management, and second, the research community itself is smaller in these countries, making it easier for funding organisations to promote funding opportunities to the relevant group of researchers and to provide assistance during the application process.<sup>4</sup>

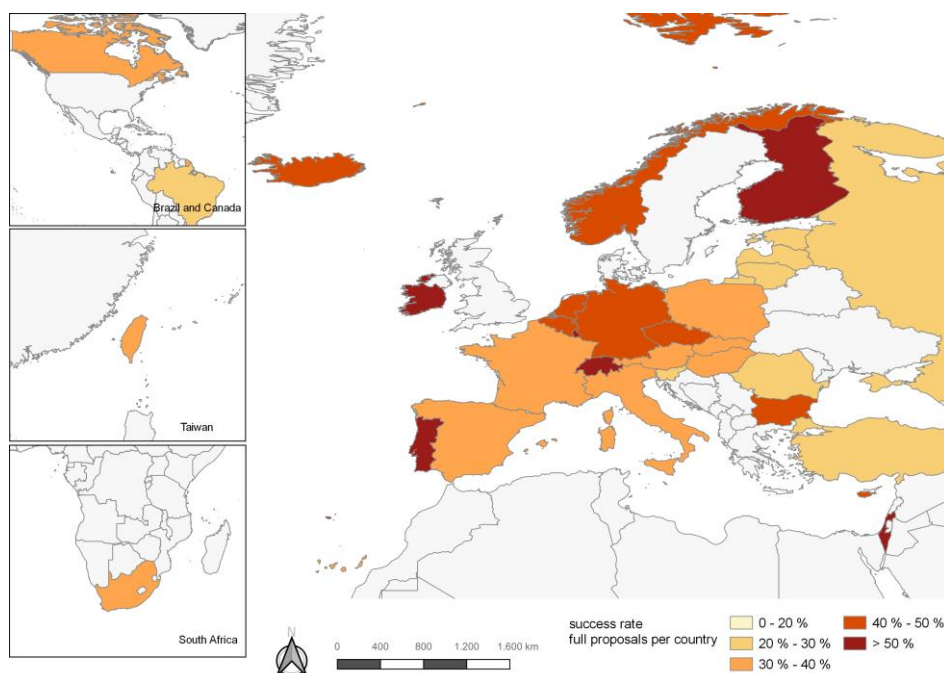


Figure 6: Success rate of submitted full proposals per country

Figure 7 shows how the applicants funded under M-ERA.NET 2 are distributed among EU Member States, Associated States and non-EU countries.

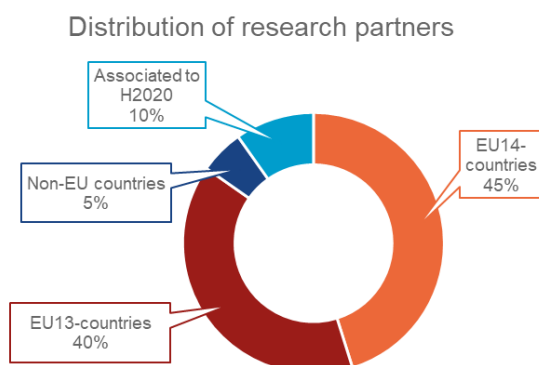


Figure 7: Distribution of research partners in projects funded by M-ERA.NET 2

With 649 out of 766 project partners in total, 85% of all successful applicants came from an EU country, while 75 project partners were from a country associated to Horizon 2020 (10%). 5% of all project

<sup>3</sup> We focus on the success rate of full proposals since it is not influenced by the budget constraints for individual agencies.

<sup>4</sup> Please note that Japan and the USA do not participate in M-ERA.NET 2; nevertheless, a few research groups joined projects without coordinated funding. A more detailed list of success rates for each organisation can be found in the Appendix.

partners were from a country that is neither EU-member nor associated. This also includes a few partners who worked in the funded projects but do not receive any funding, e.g. applicants from Japan and the United States.

Surprisingly, more than one in three partners come from an EU-13 country. Poland leads the field with 81 partners, followed by Romania with 36 and the Czech Republic with 31 funded research partners. At project level, 115 out of the 172 funded projects have a least one partner from an EU-13 country. For better interpretation, the “ERA-LEARN Survey Report on Inclusiveness In European R&I Partnership Programmes” (2020) was taken into consideration. Taking all European Partnership R&I calls together, the number of projects with participation of at least one widening country (here defined as EU-13 countries plus Portugal and Luxembourg) is 4.4 times less than the number of projects with participation of at least one EU-14 country. In M-ERA.NET 2, by contrast, the ratio of projects with participation of at least one EU-14 country to projects with participation of at least one widening country, is almost 1.0 (125 funded projects with EU-14 participation vs. 129 funded projects with EU-13 participation). M-ERA.NET 2 is thus far more inclusive than other ERA NET Cofund networks.

Another indicator pointing to possible discrimination against EU-13 countries is their share in the funded partners compared to their contribution to the total budget. Since the national or regional budget is often the limiting factor, the question arises whether researchers from EU-13 countries may be deliberately kept out of projects. Figure 8 shows both mentioned indicators for the Calls 2017-2020. Since Call 2016 was co-funded, it is not part of the analysis. The result supports the assumption that the EU-13 countries have not been disadvantaged in M-ERA.NET 2. For all calls, their share of participating partners is higher than their share of the total call budget. In other words, a comparatively large number of researchers from EU-13 countries have been funded under M-ERA.NET 2. No trend can be seen over time, but the Calls 2017 and 2019 stand out positively.

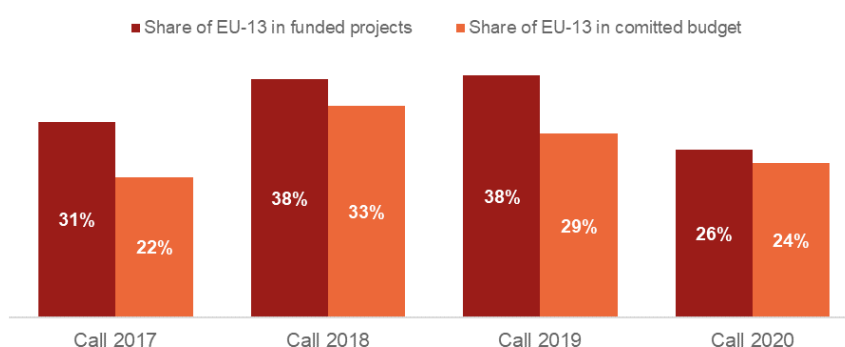


Figure 8: EU-13 share of applicants in funded projects and committed funds, respectively.

### 4.3 Total project costs and total project funding

Figure 9 shows the total planned project costs, the total requested funding and the average funding rates per call. With 32.5 million EUR, the Calls 2020 resulted in the highest funding amount to the selected projects. The co-funded Call 2016 follows closely behind with 32.2 million EUR. After a sharp drop in 2017, the requested funds under M-ERA.NET 2 steadily increased again, reaching, in general, higher levels than under M-ERA.NET (Calls 2012 - 2015). Moreover, average funding rates were generally higher than in the processor programme, ranging from 72% to 78%. The differences in funding rates can be attributed to differences in the participating funding organisations and the involved TRL for each call. A relatively low funding rate indicates a relatively high participation of industry actors and/or higher TRLs.

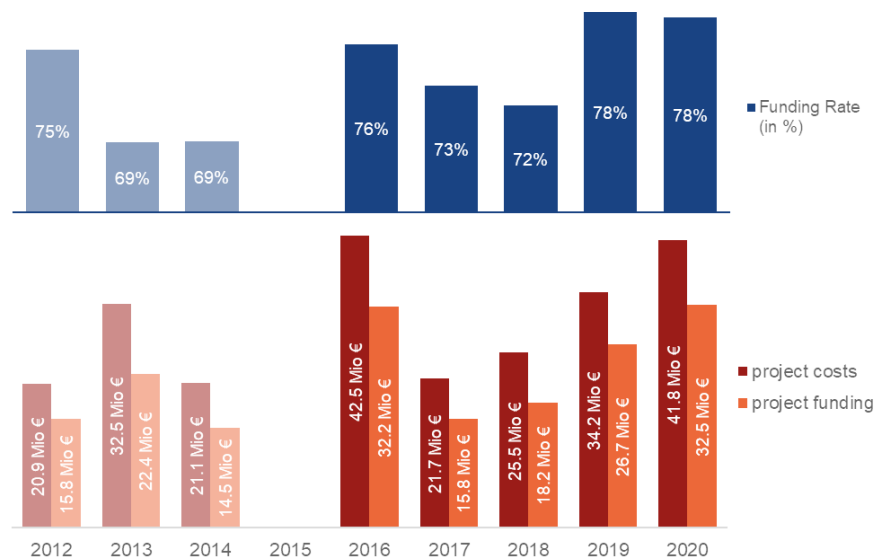


Figure 9: Total project costs and total project funding per call.

#### 4.4 Oversubscription

A general concern in ERA-NET Cofund programmes is the imbalance of available national/regional budgets and the in some cases/countries very high levels of oversubscription. The number of applications is often far greater than the budget to cover them all. It has already shown that this is also true for M-ERA.NET 2, based on the success rates. However, it becomes even clearer when we look at the discrepancy between the total budget requested (by pre-proposals) and the total preliminary budget, including the EU contribution for 2016, per call, as stated on the M-ERA.NET 2 website. The numbers show that M-ERA.NET 2 is a very attractive programme and systematically oversubscribed. Due to the additional EU funding, the oversubscription factor in the Call 2016 was 5.1. In the Call 2017, the relatively low number of applications played a decisive role. Apart from that, the oversubscription factors in the other calls were well above 5 and the overall oversubscription factor was 5.4 times the stated call budget. The heterogeneity of the ERA-NET Cofund programmes makes direct comparison difficult, but the continued increase in the oversubscription in M-ERA.NET 2 is definitely concerning.

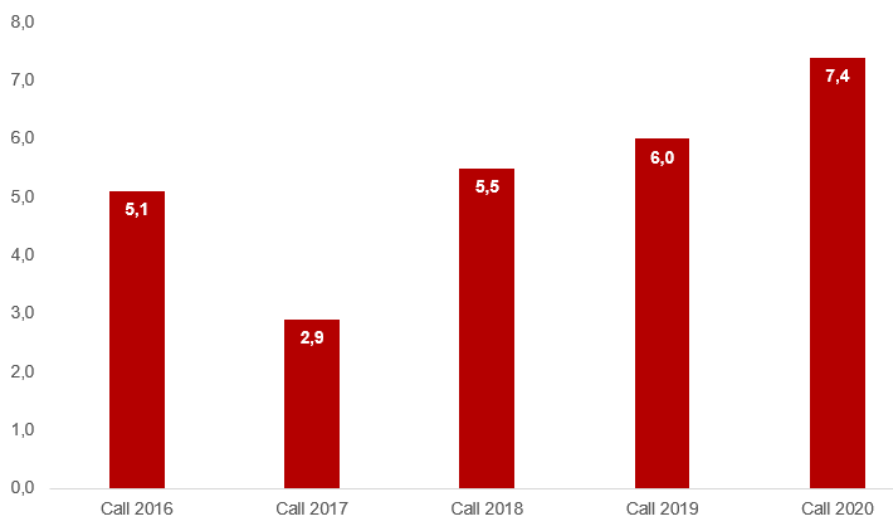


Figure 10: Oversubscription factor per call

At the same time, the oversubscription is unbalanced among countries. ERA-LEARN offers guidance and suggestions from other ERA-NET cofund networks on how to reduce oversubscription rates, for example, by considering rules for applicants to limit the number of participants or to limit the budget per research partner/project. Calls should be planned carefully to ensure adequate national/regional budgets from the very beginning.<sup>5</sup>

## 4.5 Call budget execution

To analyse the call budget execution, we calculate the absorption factor by dividing the requested funding by the planned budget for each call (including the EC top-up for the Call 2016). The following figure shows that the absorption factor has been continuously increased since 2016. In the first calls of the network the indicated budget was not fully exhausted, with the Call 2017 having the lowest absorption rate. In this call, comparatively few applications were received, and as a consequence, the planned budget could not be spent completely. In contrast, in both last calls the level of absorption exceeded a factor of 1 (=100%). In 2020, the originally planned budget was increased by nearly 11.8 million EUR (due to additional funds made available by some funding organisations as shown in Figure 12). The result not only shows that M-ERA.NET 2 has become more attractive over the years, but also speaks for an increasing quality of applications. Thus, the funding organisations have been making strong efforts to provide additional funding for excellent research projects.

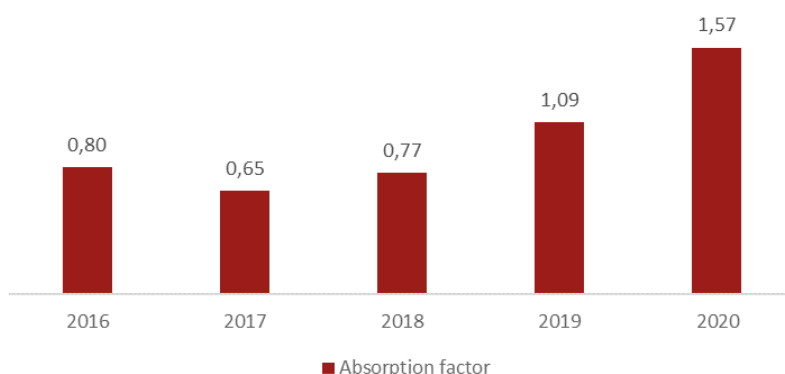


Figure 11: Funding absorption factor per call

Figure 12 shows the indicative call budget (orange bar) vs. the requested funding (red bar) for M-ERA.NET 2 for the joint Calls 2017 – 2020, per funding organisation. The analysis shows that for 25 funding organisations, actual contributions reached 70% or more of the planned budget, with 9 funding organisations exceeding their committed budgets by more than 30%.<sup>6</sup> The front-runner is SMWK (Saxony, Germany), which spent 4.9 times more than actually originally committed. SMWK only participated in the last two calls and is a major reason why the average overall absorption factor increased significantly towards the end of the programme. At the same time, 15 funding organisations underspent and had an absorption rate of less than 50%, and two of them ended up not funding any project at all despite having an initial call budget for at least one call. It is striking that the problem of underspending is particularly prevalent among regional funding organisations. 8 of the total 13 regional funding organisations spent only 50% or less of their preliminary call budget. In general, funding organisations with higher committed budgets tend to fund more than actually budgeted, while those with smaller committed budgets often do not manage to spend their indicated budgets. Overall, they balance out well, the total absorption rate of the planned call budget for the Calls 2017 – 2020 was 97%.

<sup>5</sup> Further information can be found here: <https://op.europa.eu/de/publication-detail/-/publication/74c34f43-b147-11e6-871e-01aa75ed71a1> and here <https://www.era-learn.eu/documents/f02ectopupdistribution.pdf>

<sup>6</sup> Please note that the German funding organisations KIT and JÜLICH joined forces for Calls 2017 and 2018.

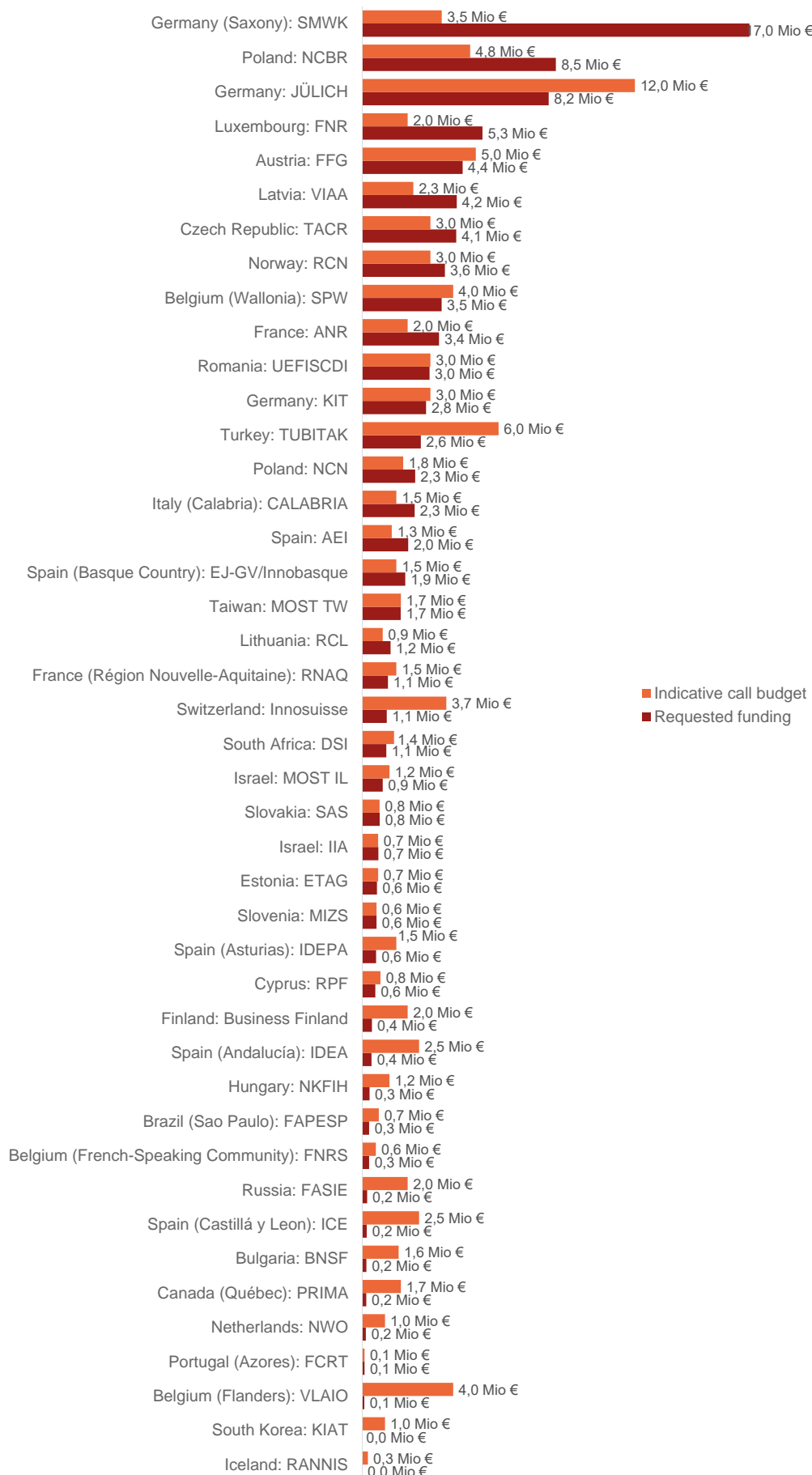


Figure 12: Indicative call budget vs. requested funding per funding organisation



## 4.6 Call topics

Every M-ERA.NET 2 call covered a range of topics, pre-selected by programme owners and elaborated based on the input of external experts (Strategic Expert Group). The Strategic Energy Technology Plan (SET-Plan), which defines the current European Research & Innovation energy-related agenda, served as a guide for all joint calls. Although minor changes have been made throughout the implementation of M-ERA.NET 2, there are six main topics that were covered by the network. The following figure shows how much funding was finally spent on projects funded under each topic.

Funding volume per call topic

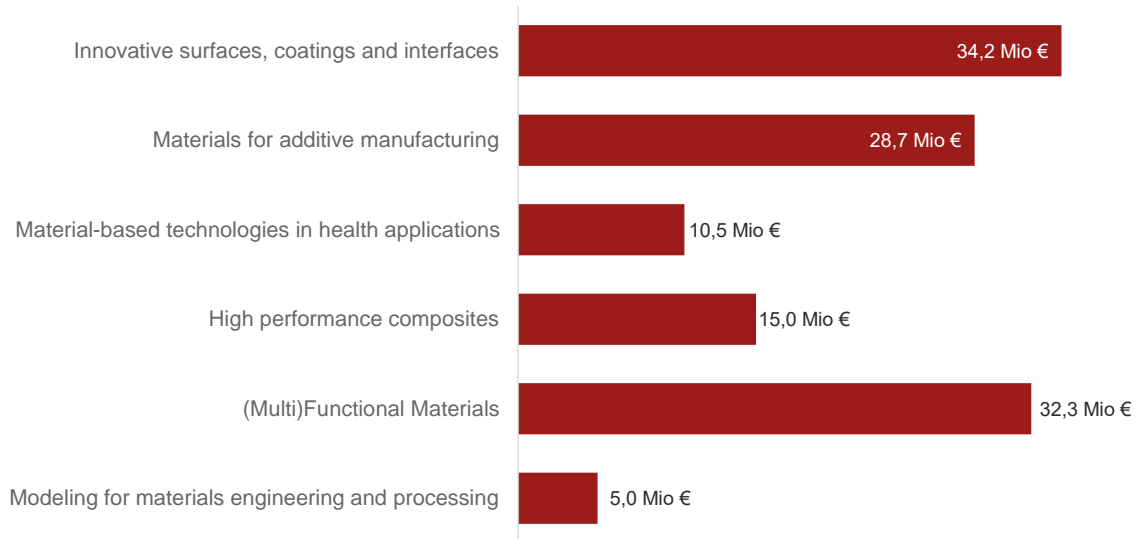


Figure 13: Funding volume per call topic

The majority of projects were funded in the areas of innovative surfaces, coatings and interfaces (34.2 million EUR), (Multi)functional Materials (32.3 million EUR) and Materials for additive manufacturing (28.7 million EUR), while research efforts related to modeling for materials engineering and processing received a comparably low amount of funding by the funding organisations.

A look at the individual countries reveals which thematic priorities the funding organisations are pursuing with their participation in M-ERA.NET 2. Figure 14 displays the number of partners involved in funded projects related to the respective call topic by country.<sup>7</sup> Almost all countries are represented in several projects for research and development of (multi)functional materials and innovative surfaces, while other topics are dealt with more intensively by individual countries. Poland, for example, leads research in the field of high performance composites with 18 funded applicants, while research groups from Germany and Austria are strong in research on materials for additive manufacturing and research groups from Italy in projects on health applications.

<sup>7</sup> Please note that (several) regions are summarised under the respective country.

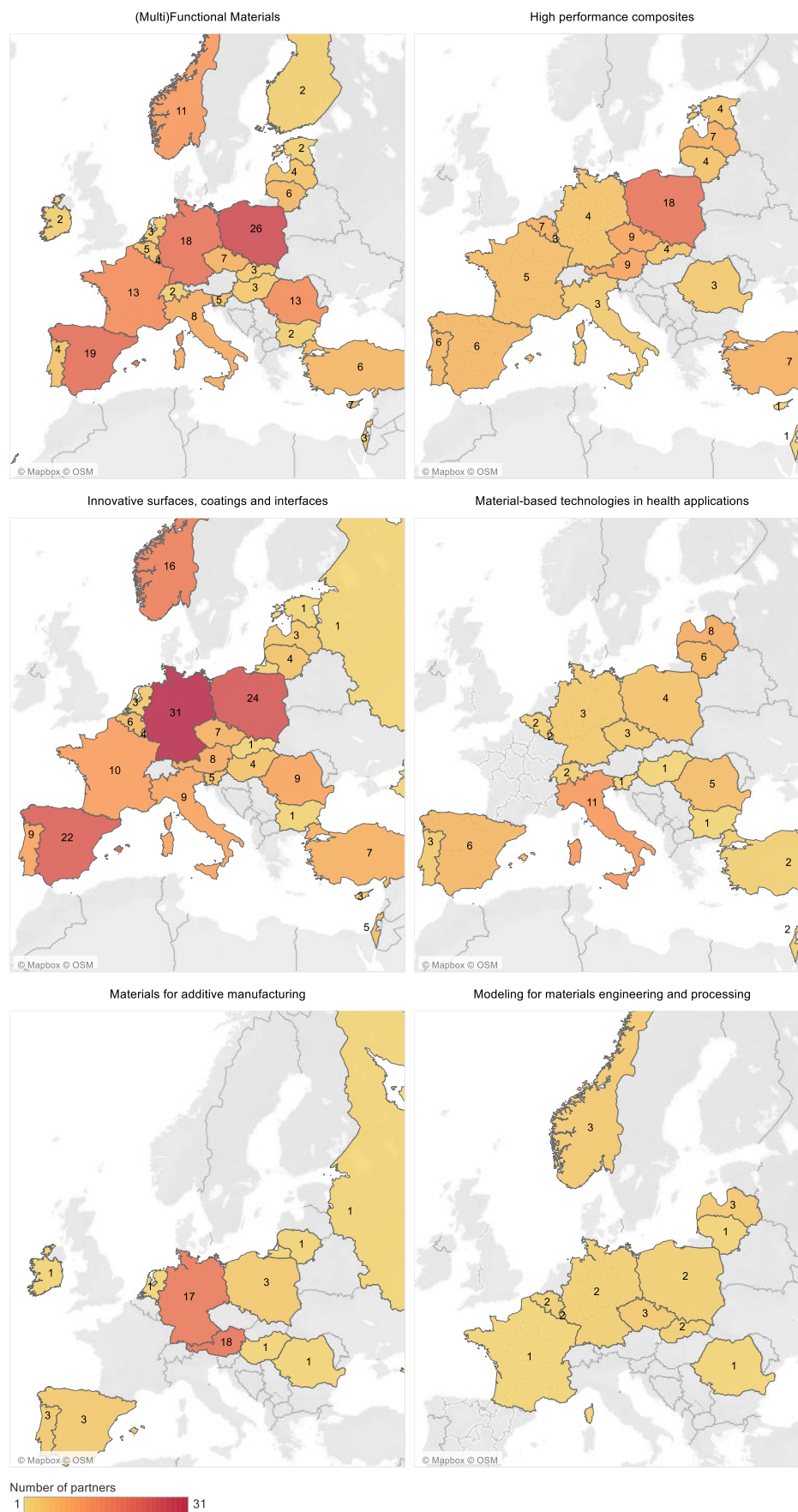


Figure 14: Number of partners connected to other countries in M-ERA.NET 2 funded projects

The differences between countries can be attributed to several reasons. On one hand, funding organisations can set thematic priorities for M-ERA.NET 2 via their call budgets; on the other hand, the national/regional expertise of the research community also plays an important role. Also, depending on the country, some call topics might be already covered by other national/regional funding programmes and/or other ERA-NETs, so there is no great need for further funding in this area.

Taken as a whole, we see that all call topics were covered, albeit in varying strengths, through the participation of a significant number of European countries. Our findings raise interesting research questions: Is this evidence of successful European collaboration, where different national research priorities and specialisations are meaningfully complemented by research excellence from other European countries? Do these transnational collaborative actions ensure efficiency?

## 4.7 Types of funded project partners

By addressing different types of applicants, M-ERA.NET 2 aims to enable collaboration between academic and industrial research partners. The following graph displays the share of participants in funded projects over time. As expected, universities and research organisations constitute the largest group in every call, accounting for about two-thirds of all funded applicants. In general, shares remained rather constant over time, with 2017 being the exception with a high SME share of 36%.

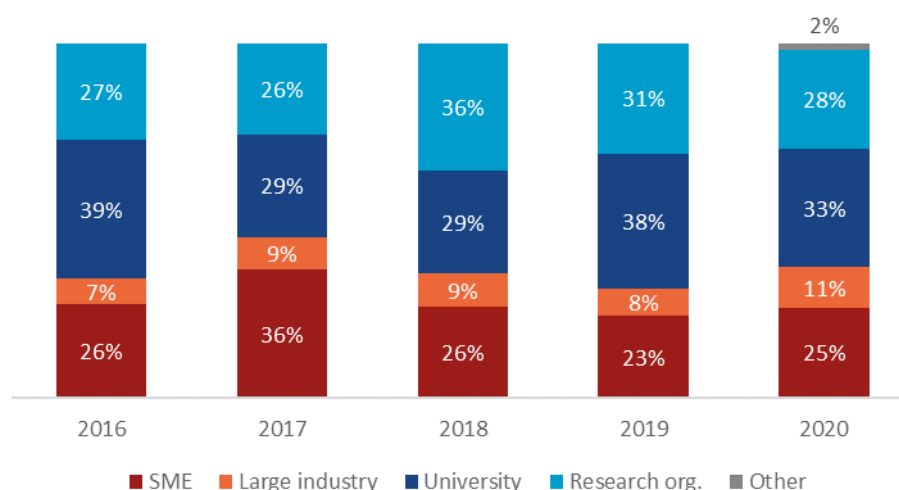


Figure 15: Share of organisation types in funded projects per call

For each organisation type, we also analysed the likelihood of participating in a project that was selected for funding, by comparing the total number of participants involved in submitted pre-proposals with the total number of participants in successful projects. Figure 16 reveals that, among all organisation types, larger companies are those with the highest chances of receiving funding from M-ERA.NET 2, with a success rate of 25%. A possible explanation is that industry partners often take strategic decisions and might consider the submission of applications more carefully than partners from academia. They are important project partners, especially in application-oriented research, since they are crucial for putting research findings to practical use. Their participation will therefore also depend on the TRL-level of the research subject, the higher the level, the more significant the link to practical innovation.

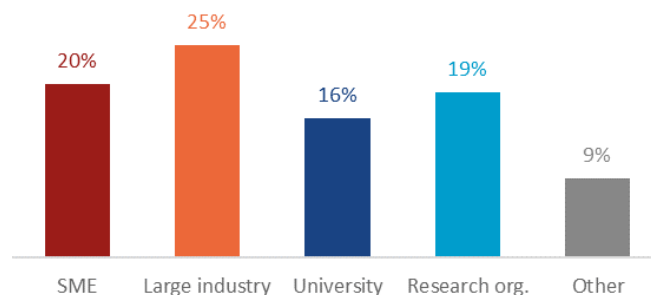


Figure 16: Success rate per organisation type averaged over all calls

Regarding the funding distribution, research organisations and universities raised the majority of the funding made available in M-ERA.NET 2, with a total of 76% (94.9 million EUR, Figure 17). On average, 96% of their projects costs were covered by M-ERA.NET 2. However, SMEs also received as much as 22.1 million EUR (18%) over the course of time. In total, 203 SMEs were recommended for funding, out of which 55 are located in the EU-13 countries. By comparison, only 80 SMEs were funded under the Calls 2012-2014 of the predecessor programme M-ERA.NET. The strong increase of SME participation is an important indicator that the network is an important instrument for SMEs to overcome barriers to entering transnational cooperation.

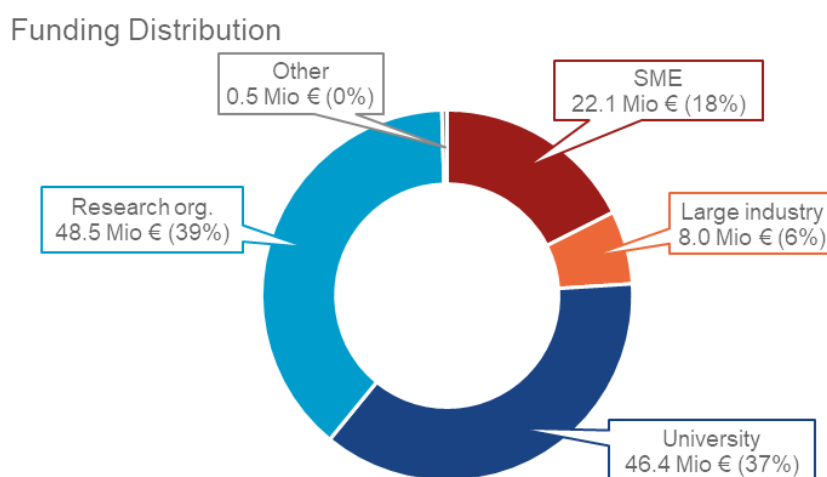


Figure 17: Total funding amounts and distribution per organisation type over all calls

#### 4.8 Network connectivity

One of the main goals of M-ERA.NET 2 is to promote transnational RTD cooperation among European researchers and others. Figure 18 shows the level of interaction between countries for all calls under M-ERA.NET 2. A line (edge) between two countries signifies that cooperation within funded projects took place, while the thickness of the edge indicates how often a constellation between project partners from those countries have been set up (number of joint projects).

On average, roughly 2.7 countries were involved in every research project funded by M-ERA.NET 2. While most projects were implemented by partners from two or three countries, four of the 172 funded projects involved partners from five countries.

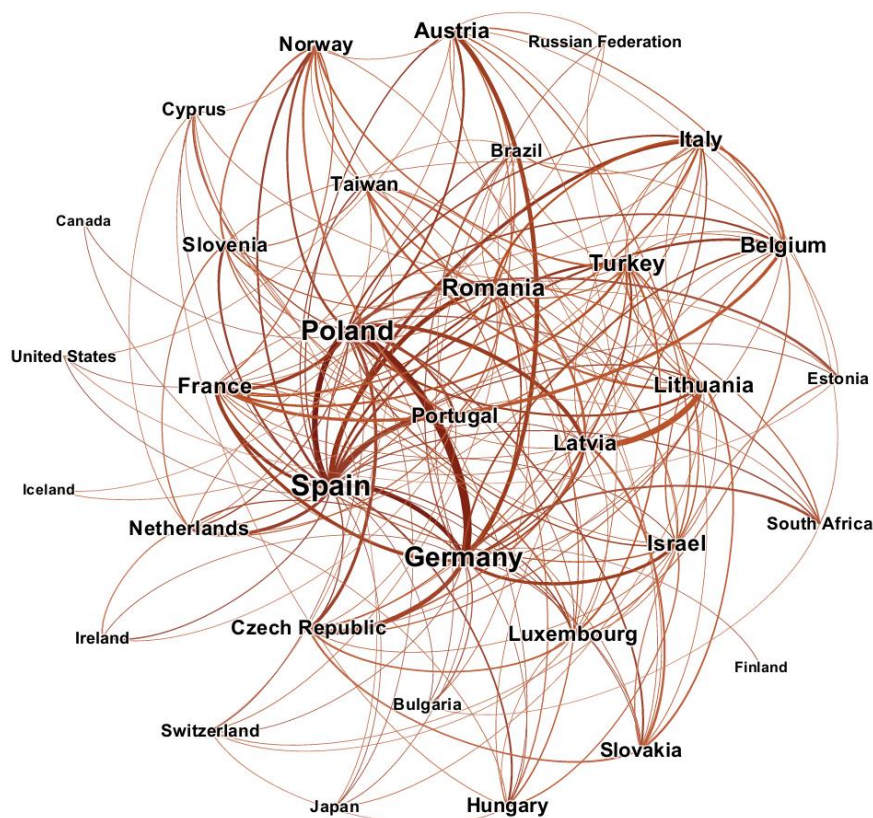


Figure 18: Networking through joint projects in M-ERA.NET 2

As expected, we see a relatively intense cooperation between neighboring countries such as Poland and Germany, with 13 connections (joint projects), Lithuania and Latvia with nine connections, Spain and Portugal with eight connections or Austria and Germany with seven connections. Other patterns are not that easily explained, such as the strong ties of Spain with Poland (nine connections), Germany (seven connections) and Romania (seven connections). At the same time, Spain is very well connected with 28 partner countries in total. In comparison, Austria is represented by a similarly high number of funded research institutions/companies (46 from Austria vs. 53 from Spain) but they collaborated with partners from only 15 different countries. Differences in collaboration-intensity might be explained by the national/regional funding structures (e.g., pre-existing bilateral research agreements) or the national/regional research excellence. An important reason for intensive international collaboration is the mobility of researchers. Many take advantage of the opportunities offered by international exchange programmes and built significant networks, ultimately leading to international collaboration.

Do the identified patterns reflect a move towards a coordinated, transnational and truly European research and innovation space in thematic clusters? We recommend to further explore these ties in terms of their potential for transnational roadmaps and strategies for specific research topics - and for appropriately designed calls under successor programmes. What role could a network like M-ERA.NET play in this respect?

## 4.9 Leverage effect of network participation

The leverage effect tells how much research effort, expressed by the amount of person months funded by other organisations, has been leveraged by the funding organisations "own" funded research effort. This is an important indicator for assessing the added value of European cooperation and shows to what extent national and regional funding programmes have succeeded in increasing their impact through transnational cooperation. Our assumption is that by participating in transnational projects, national and

regional research communities have free access to the rights and knowledge of the whole project, regardless of how much their national or regional funding organisation contributed financially. Thus, the leverage factor indicates how much research effort the funding organisations receive for free when they invest in the transnational projects under M-ERA.NET 2 or how much they save by avoiding duplication of efforts.

Figure 19 illustrates that the vast majority of funding organisations leveraged research effort amounting to multiples of their own funded person months. Only in 2 cases (NCBR, Poland; JÜLICH, Germany) the research effort (in person months) contributed by other programmes was lower than the own contribution (factor <1). Nevertheless, this does not mean that participation in the network was not worthwhile for these two organisations since they could benefit from an additional research effort of 845 (for JÜLICH) and 2235 (for NCBR) person-months, respectively, by participating in transnational projects.<sup>8</sup> In general, there is a tendency for funding organisations with few funded person-months to have a greater leverage factor (e.g. VLAIO, Belgium) as well as those with small shares in large research projects (e.g. FAPESP, Brazil). The average leverage factor across all organisations is 2.13.

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<sup>8</sup> Fig. 40 in the appendix contains a list of invested person-months and leveraged person months for each funding organisation.

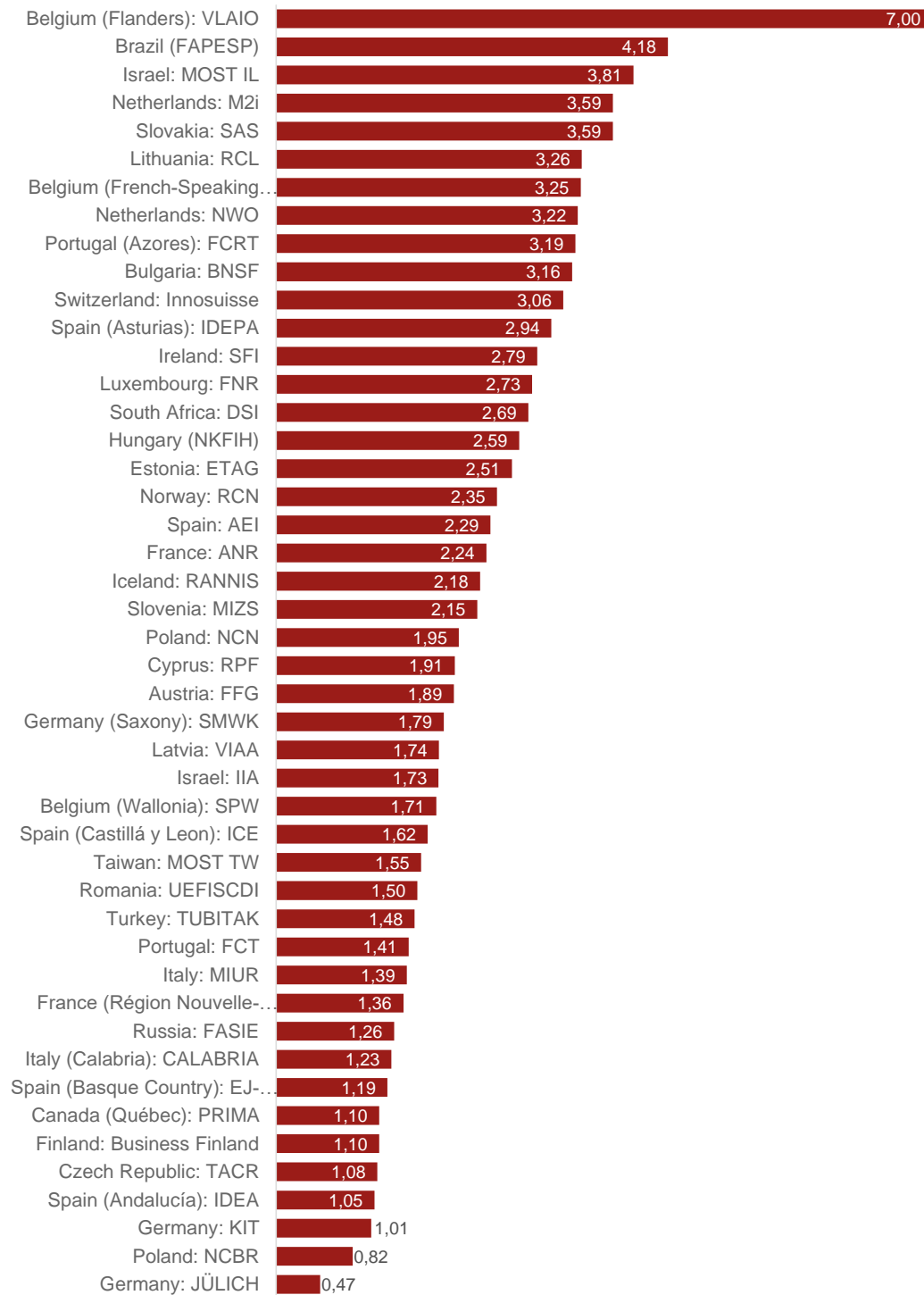


Figure 19: Leverage factor for invested person months.



## 5 Analysis of Survey Data

Surveys were one key element of the evaluation of M-ERA.NET 2. We addressed three groups with online surveys:

1. Successful applicants: research and innovation performing parties receiving funds following M-ERA.NET 2 Calls also referred to as funded project partners
2. Unsuccessful applicants: those research and innovation performing parties who submitted proposals (pre-proposals and full proposals), but were not selected for funding in one or more of the five M-ERA.NET 2 Calls
3. Funding organisations: network members and observer organisations of M-ERA.NET 2

The questionnaires covered a wide range of relevant indicators that were derived from the M-ERA.NET 2 logical chart (see chapters 3.1 and 3.2). When selecting the indicators and related questions, we considered the following:

- ✓ Performance and impact of M-ERA.NET 2 should be comparable with the results from the previous network M-ERA.NET. Survey questions must therefore be similar to the questions used for previous assessments.
- ✓ In order to keep the workload for participants low, we only addressed aspects that cannot be answered with call data or other network information that was made available for the assessment. Project partners participating in more than one M-ERA.NET 2 projects received just one link and had to answer questions regarding the general experience with M-ERA.NET 2 only once, while project related questions were asked for each individual project.
- ✓ By applying filter logic in our code, we ensured that we display only relevant questions for the participants (e.g., questions about economic benefits will only be asked to participants that have already completed their project). Unsuccessful applicants received only a subset of questions.

Since the vast majority of projects funded under M-ERA.NET 2 Calls 2016-2020 have not ended their project lifetime, there were some limitations when it comes to indicators measuring outcome and impact. We therefore focused on the transnational benefits of M-ERA.NET 2 by addressing both funded project partners and network partners. Furthermore, we asked about the contribution of the network and funded projects to the SET-Plan and the Materials Roadmap Enabling Low Carbon Energy Technologies.

Surveying took place from 18 October 2021 to 8 November 2021 for (un)successful applicants and from 19 October 2021 to 3 April 2022 for funding organisations. For both groups, reminders were sent in order to achieve a high response rate.

In the following paragraphs, the survey results of both groups will be analysed. We have used the Logic Chart as a guide and will first discuss the inputs and activities/outputs, followed by the outcomes. The chapter concludes with the overarching impacts of the programme. For better orientation, the survey results of the (un)successful applicants are shown in red and those of the funding organisations in blue.

	Contacted	Completed Survey	Response Rate
Successful applicants	733	298	41%
Unsuccessful applicants	2600	502	19%
Funding organisations	47	39	83%

Table 2: Response rates online surveys

A total of 800 people, 298 (37%) successful applicants and 502 (63%) unsuccessful applicants, answered the questionnaire. With the exception of a few percentage points, this corresponds exactly to



the distribution of call participants for all calls, which leads us to conclude we received an accurate representation.

The response rates of 41% for successful and 19% for unsuccessful applicants are satisfyingly high and also higher than in the last evaluation, where the response rates were 26% and 7%. Especially in the case of unsuccessful proposals, it is a surprise that so many people take part in an evaluation survey.

Regarding the survey among network members, 39 out of 47 funding organisations participated. This is an excellent result. Of the 39 responding funding organisations, 11 operate at regional level and 28 at national level.

5.1 Input level

At the input level, we look at the resources used to support the networks' activities to deliver the programmed results. Aspects concerning the financial resources and network connectivity have been already addressed in the call data analysis. In the following chapter we therefore focus on the network management and as well as the call management including application and funding procedures.

5.1.1 Network management and network health

Network management plays a key role for the success of any network. The management structure has to be adequate to carry out activities efficiently, but must also be flexible enough to adapt as needed in order to sustain the engagement of the network members. The survey results clearly show that the network has succeeded in meeting these requirements. All funding organisations which participated in the online survey rated the network's management positively, out of which 49% chose the highest possible score. Everyone agreed or strongly agreed that the decision-making processes are transparent. All survey respondents felt that the network's activities are appropriately designed and implemented to support the ERA goals and intended outcomes.

Overall impression of the management of the network

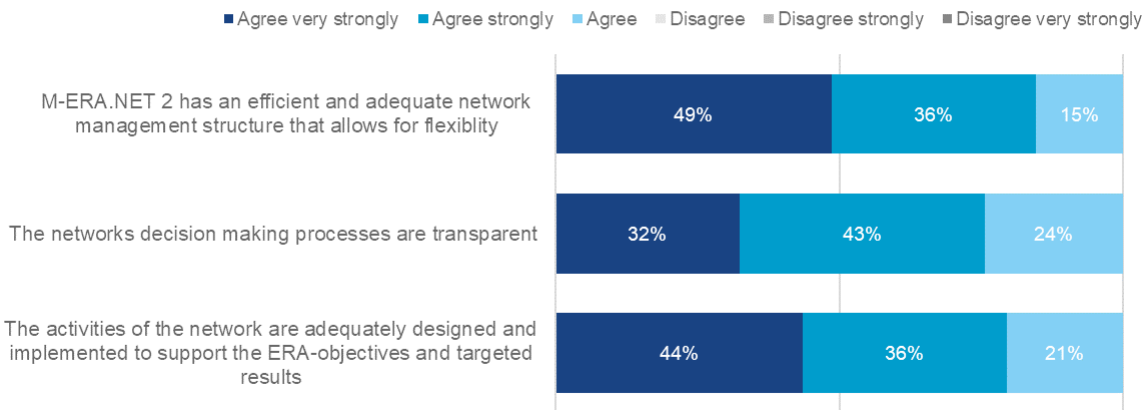


Figure 20: Assessment of network management/network health

As part of the survey, we also asked funding agencies about management issues that could be improved. We received very few comments. To reduce the workload, one suggestion was to consider whether some of the information requested from network members was really necessary or just nice to have. Two organisations saw some improvements of the call management in context of the evaluation procedures. Two others wanted more involvement from some funding organisations to achieve more long-term planning. It was suggested that the network should also encourage less active funding agencies to participate in all network processes.

### 5.1.2 Assessment of joint calls: application and funding process

Applicants must go through the administrative process of application, funding and the implementation phase. While the last two processes were only evaluated by the successful applicants in the survey, the questions on the application process were also asked to the unsuccessful ones. The following chapter deals in particular with the evaluations of the application and the funding process.

#### Experiences with application process

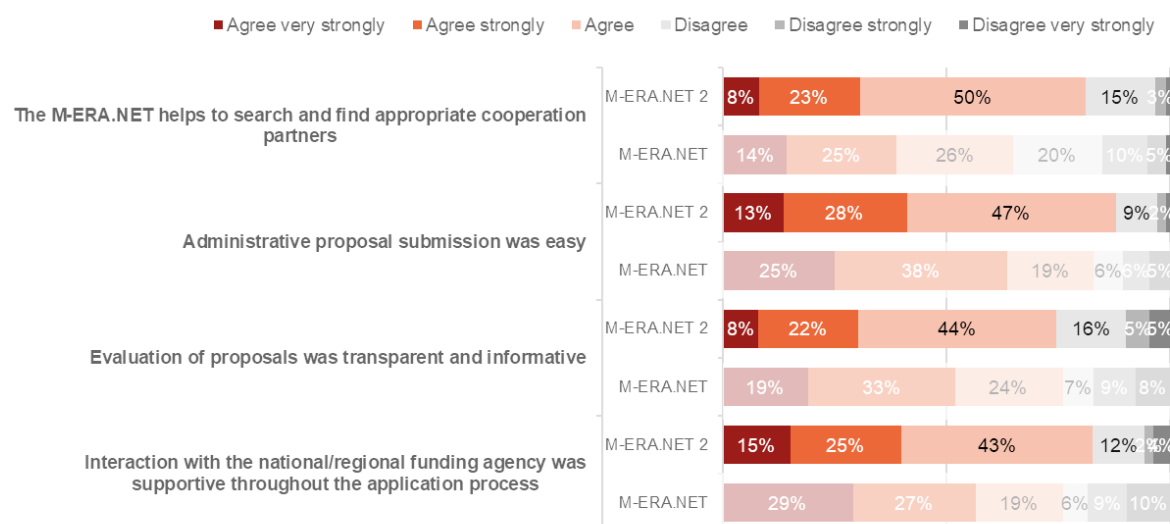


Figure 21: Experiences with the application process

Both groups rated the administrative proposal submission procedure as very simple.

It was also stated that the network helped a lot in finding appropriate partners for the proposals. Most of the applicants (more than 80%) rated this as positive. Comparing the answers with the previous evaluation (M-ERA.NET Calls 2012 – 2015), it is noticeable that the ratings on this point are better.

Also, the interaction with funding organisations was assessed a little bit better than the last time (83% agreement compared to 76%).

The feedback concerning the evaluation of the proposals remains at about the same level. Looking specifically at the unsuccessful proposals, it is noticeable that one third of the unsuccessful applicants rate the evaluation process rather negatively.



Figure 22: Comments from unsuccessful applicants on the application process of the M-ERA.NET 2 calls

An analysis of the comments on the application process revealed that the evaluation process in particular was rated as inadequate. On the one hand, some unsuccessful applicants do not agree with

the evaluation, on the other hand, the feedback is perceived as insufficient and unfair. It has to be considered, that there is no central evaluation of pre-proposal in the first stage. Therefore, not all comments regarding the feedback on proposals can be assigned to M-ERA.NET 2, but rather to the respective national/regional funding organisation. Although most of the comments regarding the application process are from the unsuccessful applicants, the figure above does not quite match the positive evaluation in Figure 21. Nevertheless, these responses give an indication that there may be a need for improvement in this area in the future.

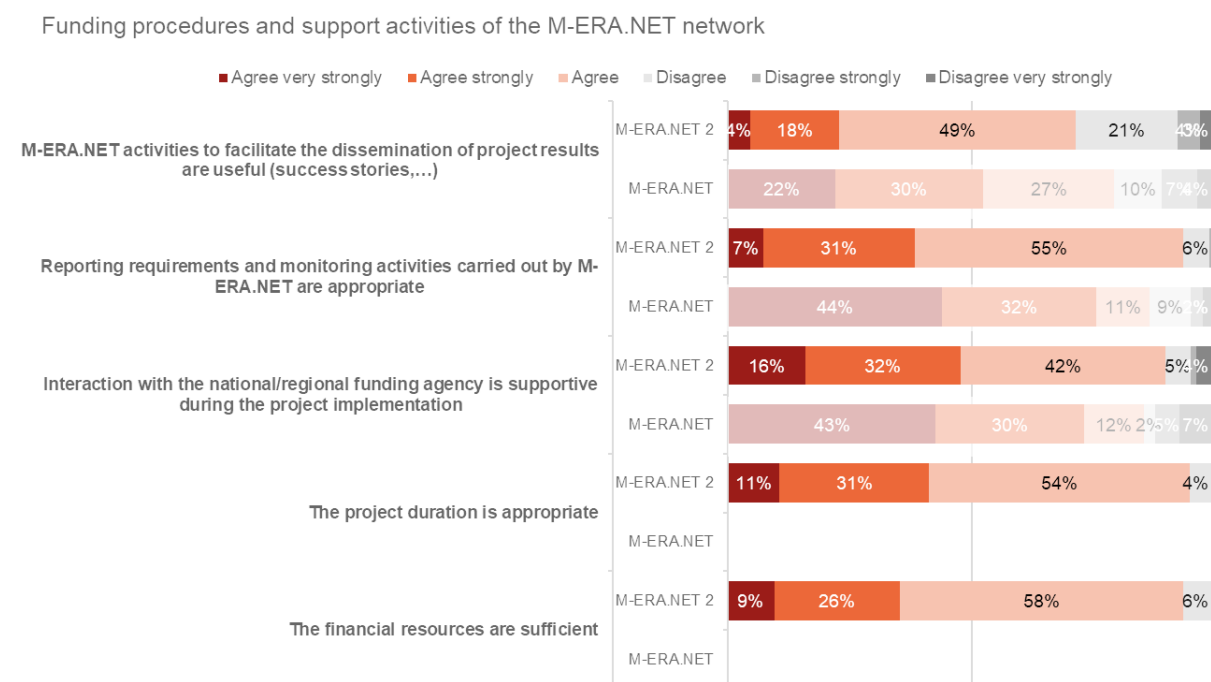


Figure 23: Funding procedures and support activities of the M-ERA.NET network

Regarding the funding process there is in general a positive opinion from the successful applicants. Nevertheless, one quarter does not find the activities to facilitate the dissemination of project results so useful. One reason for this could be that project results tend to be promoted at national level. During the discussion in the deep dive workshop with funding organisations (26 November 2021) it became clear that the target group of the results should be those who also use the knowledge (funded researchers, end-users, national networks/clusters). The activities that M-ERA.NET 2 can undertake at this point are therefore rather limited.

The reporting and monitoring activities are found to be very helpful by almost all respondents. Furthermore, the picture continues that especially the interaction with the funding organisation during project implementation is perceived as very supportive. The duration and financial resources are also rated as appropriate. Overall, the funding process is rated better than in the predecessor network M-ERA.NET (Calls 2012 – 2015).

### 5.1.3 Experience with national/international research funding

The project partners go into a transnational research project with different expectations, but also with different starting points. One of these is their experience with such projects and processes. The experience of the call participants and the reasons for their participation in M-ERA.NET 2 are described below.

## Experience level in participating in national/international research funding programmes

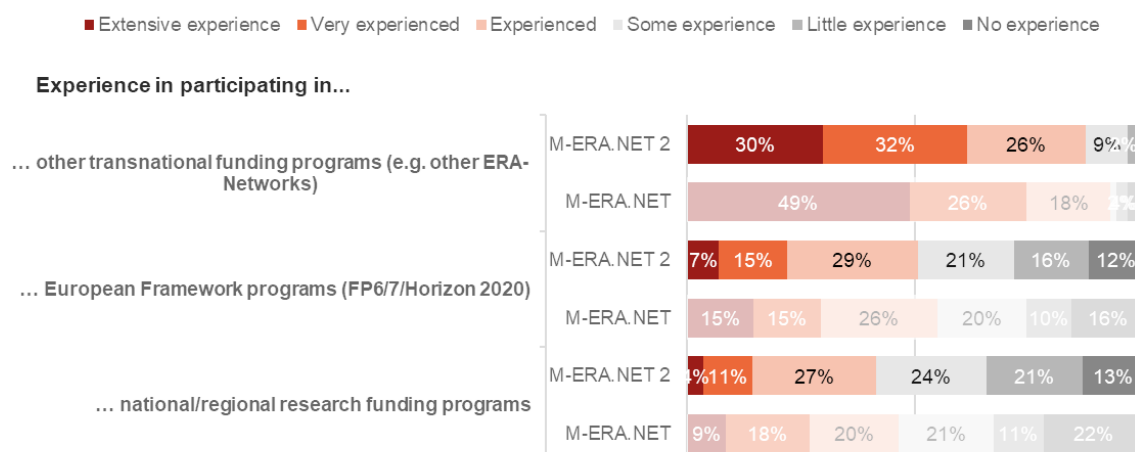


Figure 24: Experience in participating in national/international research funding programmes/the previous M-ERA.NET

A total of 88% of the respondents have extensive to very high experience in other transnational funding programmes. The number of people who have already gained experience in EU Framework Programmes is much lower. A more detailed analysis of the survey results, which is not part of the figure above, shows that both SMEs and research institutions are a little more experienced in this respect than universities. Figure 24 shows that only 15% of respondents have extensive or high experience with national/regional research funding programmes. The much higher experience of applicants with transnational funding programmes indicates that the (administrative) entry barriers for national funding programmes are much higher. This would also be consistent with the reasons given by applicants for participating in M-ERA.NET (see Figure 24).

Comparing these responses with the previous evaluation, two things stand out. Firstly, the number of highly experienced applicants is consistently lower than in M-ERA.NET (Calls 2012 – 2015). This leads to the assumption, that M-ERA.NET 2 is more open to newcomers. After all, only 20% indicated that they had previously participated in calls under M-ERA.NET (Calls 2012 – 2015, not visualized). Secondly, the number of those who said they had no experience at all has decreased in comparison to the previous evaluation of M-ERA.NET. The general level of experience of the applicants has thus apparently increased, even if it has not remained at the same high level as in the 2012-2015 calls.



Figure 25: Reasons for applying to M-ERA.NET calls rather than to EU Framework Programme (comments from the participants)

Respondents were also asked what reasons they had for participating in M-ERA.NET 2 rather than other in the EU Framework programme. In addition to the good success rate for submitting projects, the transnational collaborations and the thematic focus, the small consortia and the simpler application process were also mentioned. This is well inline with the results shown in Figure 21.

#### 5.1.4 Free-rider effect -funding alternatives to M-ERA.NET 2

In total, 959 proposals were submitted. Obviously, however, although the success rate is considered very high, not all of them can be funded. Therefore, the question was asked what alternative path the rejected projects had taken.

Did you already succeed in realising your project ideas, which were not selected for funding under an M-ERA.NET call (2016 - 2020) for proposals, elsewhere?

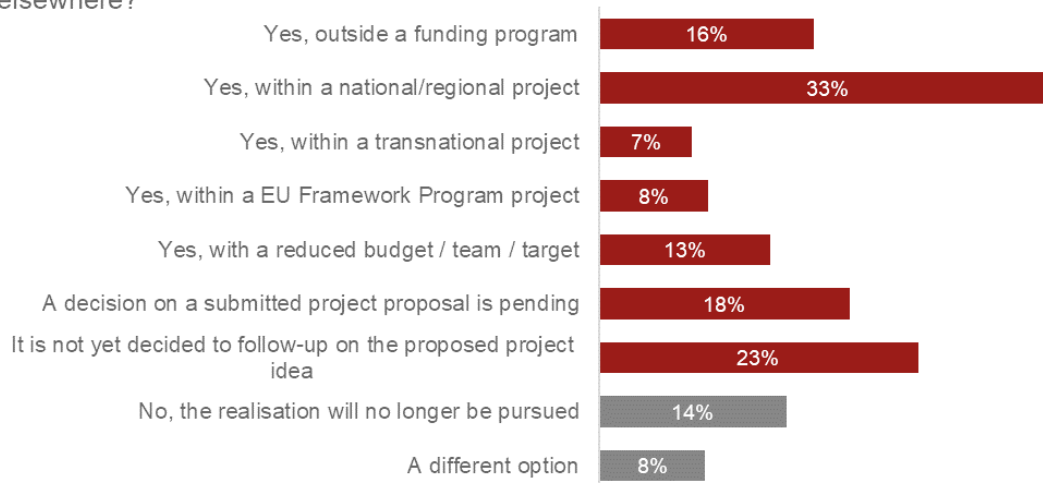


Figure 26: Funding alternatives for rejected projects

One third of the unsuccessful applicants responding to the survey stated that they had submitted and would carry out their part of the planned international project at national/regional level. 16% implemented the project outside a funding programme, and only 7% and 8% respectively submitted their projects to other international and European funding programmes. Based on the results, it can be assumed that due to the construction of the application process and the application forms, there is a high degree of transferability of the individual funding applications to the national/regional level.

However, in 18% of the cases it has not yet been decided what will happen with the project idea, in 23% it is still unclear whether the project idea will be pursued further, and in 14% the project idea will not be implemented at all.

## 5.2 Activities & Output level

This level includes all activities carried out by the network as well as the short-term outcomes that are the direct result of these activities. A number of activities and outcomes directly related to the implementation of the co-founded call and additional joint calls have been analyzed in chapter 4. On the researcher side, we were especially interested in how the implementation of the projects went. In addition, we briefly address some additional activities of the network in this section.

### 5.2.1 Project implementation

All in all, the successful applicants also rate the implementation process of their projects very positively.

The aspects that are more related to project management - the objectives, the effective management and the fair distribution of the outcomes - do not even contain any negative statements. However, the points relating more to the consortium and cooperation, both the stability of the consortium and the commitment and importance of the project partners, were also rated very positively. Differences to the evaluation of M-ERA.NET are difficult to assess, as a different scale designation was used.

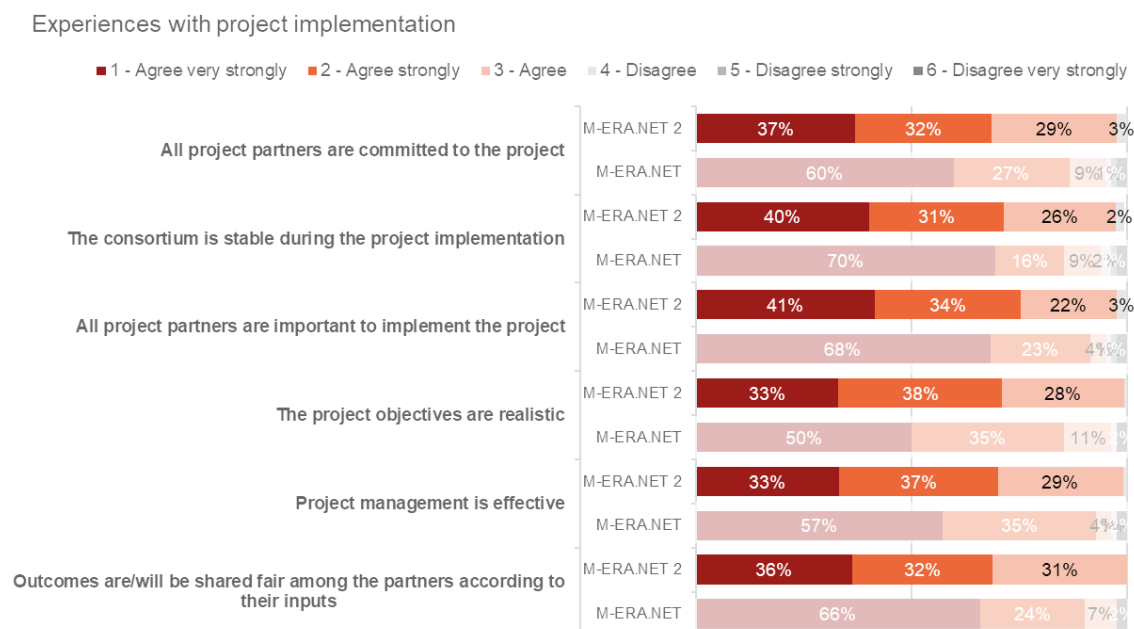


Figure 27: Experiences with the project implementation

If we look at possible differences between the various organization types of funded partners, no major differences are apparent as well. The universities only seem to use the outside extreme values of the scale more frequently than the SMEs, for example. While SMEs strongly agreed on average between 23% and 31%, the percentages for strongly degree were between 42% and 51% for the universities. The SMEs were therefore somewhat more reserved in their agreement.

### 5.2.2 M-ERA.NET 2 other joint activities

The basis for the selection of thematic priorities for the cofounded call and additional joint calls under M-ERA.NET 2 was the elaboration of a common vision and a multiannual policy for joint programming. In addition to the implementation of calls, the network has also implemented other supporting activities that contribute to the network's goals:

M-ERA.NET 2 systematically collaborates with the materials RTD community, for example in the selection of call topics. One focus of the network has been the collaboration with actors from the field of materials for low carbon energy technologies. Thus, the network has worked closely with the following European Technology Platforms (ETPs):

- BATTERY 2030+, Batteries Europe, European Battery Alliance.
- EMIRI - Industrial Research Initiative for Energy Materials
- EuMaT - ETP for advanced engineering materials and technologies
- European Materials Modelling Council (EMMC)

In addition, a database of national and regional RTD clusters and competence centers has been made available on the M-ERA.NET 2 website and has been constantly updated.

Furthermore, the network has established an external and internal communication strategy to effectively present the network via different media to various target groups. A more detailed look at the network's efforts to promote funded projects is provided in the following chapter. Surveys are conducted regularly at both the programme and project levels for evaluation and monitoring purposes. For example, there are annual programme surveys for network partners, the results of which are processed and made available to members. All funded project partners have to submit a final report at the end of their project. Projects funded under Co-funded Call 2016 were obligated to submit final report to M-ERA.NET 2 and the projects were assessed by online questionnaire sent to all parties in funded projects after the project completion. M-ERA.NET 2 also performed assessment of projects funded in joint calls in the previous M-ERA.NET (Calls 2012 – 2015).

Overall, the network is characterized by a well-designed and comprehensible structure and activities that are directly related to the expected impacts of the programme.

### **5.2.3 M-ERA.NET 2 efforts to promote project results**

Effective measures to communicate research results to the research community and the public are becoming increasingly important in European Framework Programmes and transnational P2Ps. Sometimes underestimated, communication and dissemination of results are necessary to show how a true European Research and Innovation Area works and to justify public spending by demonstrating the added value of collaborative research. Moreover, the dissemination of results is an essential way to ensure that project results are used for further research and development and, ultimately, are taken up by the (European) market.

In all M-ERA.NET 2 calls, applicants had to develop a dissemination and exploitation strategy to maximize their impact. At the network level, M-ERA.NET 2 had committed to providing a comprehensive project flyer and regular compilations of success stories of funded projects to raise awareness of results and achievements in the field of research and innovation. Two Success Stories Booklets are currently available on the network website, published in 2018 and 2020, respectively. The booklets present selected projects and their results in a illustrative and understandable way. The most recent booklet also includes several projects that were funded in the 2016 Call.

In the workshop for funding organizations held on 26.11.2021, we devoted a breakout session to the question of how to effectively promote research results funded under M-ERA.NET 2. As to the formats, participants agreed that one should take advantage of the all available options and not focus on just one format. These include, for example, posting results on the organizations's website or social media, sending newsletters, holding workshops or information days, and creating podcasts. It also became clear that the right actors should be involved at an early stage. This includes technology transfer offices (TTO), representatives of clusters and networks, such as the Enterprises Europe Network for innovation results, funded project partners and of course the funding organisations themselves. It was also suggested that end-users could be directly involved in the funded projects and that open access should become mandatory.

Regarding the establishment of transfer structures, there are substantial differences between the funding institutions. While some countries do not have a central coordination office for transfer activities, the Research and Innovation Foundation Cyprus, for example, is in the process of setting up a Knowledge Transfer Office (KTO) that will support the university and research institutions located in the country in knowledge transfer. Moreover, some network members are taking advantage of the H2020 CSA (coordination and support action) grants for information and communication activities.

Regarding the activities that could be carried out centrally by the network, the workshop participants proposed the set up of exploitation workshops, a cooperation with the EU Results Booster and further results-oriented monitoring of projects.



## 5.3 Outcome level

The (medium-term) impact of M-ERA.NET 2 was the focus of the survey of funding organizations and funded project partners. We were interested in finding out what benefits both groups experienced by participating in the programme. In the deep-dive workshop with the funding organisations, particularly interesting aspects were addressed during break-out sessions.

### 5.3.1 Network sustainability

The positive experience with the network is also reflected in the number of M-ERA.NET 2 funding organisations who decided to participate in the successor network, M-ERA.NET 3 (89%). In addition to the positive experience with the network itself (84% of the survey respondents), the majority also saw other aspects such as M-ERA.NET 2 support of their respective innovation strategy or the expected output effectiveness of the network as drivers rather than barriers for their continued participation (Figure 28). For 64%, the openness of the programme to partners from widening countries was a (strong) reason for their continued participation. In addition, funding organisations cited a number of other reasons for continued participation (e.g., increasing the international visibility of national/regional research, strengthening transnational collaboration among research communities but also funding organisations, the high quality of projects funded under M-ERA.NET 2, and the overall success of M-ERA.NET 2).

As expected, the national/regional budget situation was cited as an obstacle by 17%. The few funding organisations that do not participate in M-ERA.NET 3 gave very different reasons for this decision (e.g., other research priorities, low participation of regional companies in M-ERA.NET 2, the relatively low attractiveness of the programme for their universities).

Which of the following aspects did rather drive or hinder your motivation for continued participation in M-ERA.NET 3?

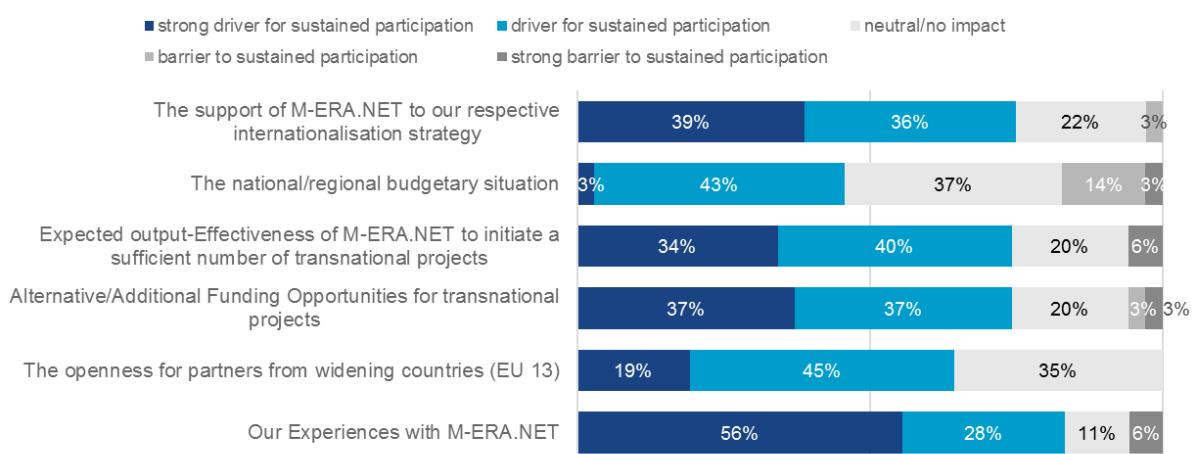


Figure 28: Drivers for continuing M-ERA.NET 2 cooperation under M-ERA.NET 3.

Overall, call and survey data suggest that M-ERA.NET 2 has achieved its goals of creating a sustainable network.

### 5.3.2 Effects on the quality of national/regional research funding programmes

Survey results show that funding organisations have benefited greatly from participation by improving their ability to design and manage innovation programmes (92% positive responses). Four out of five organisations indicated that they learned from other participating funding organisations and that this had a positive impact on the quality of their respective funding programmes, e.g. in terms of how to support applicants during the application and funding process. Interestingly, four out of the five funding organisations, that disagreed with this statement (17%), were regional funding organisations. Other than



that, we do not see any substantial differences in response patterns between regional and national funding organisations on this question.

Almost all funding organisations agreed that the design of national/regional funding programmes has been adapted towards more international research collaboration as a result of M-ERA.NET 2. During the deep dive workshop, this aspect was further elaborated. When it comes to effective measures to facilitate cross-border cooperation between regional/national funding organisations, workshop participants found that partner search tools, such as the one for Horizon 2020 calls, have been very helpful for their regional/national research communities. At the funding organisation level, regular international monitoring was recommended to identify new opportunities for collaboration. Entering into collaboration agreements with other organisations is also seen as very useful. For example, bilateral cooperation in one particular funding programme can also have a positive impact on the joint participation of both research communities in other funding programmes. Some funding organisations have rules that allow international applicants to apply for their national funding under the condition that they work together with a national/regional partner.

We also asked workshop participants about best practices for aligning national and international application and monitoring procedures. One option is to establish national funding programmes that focus exclusively on international research collaboration. One participant stated that this has streamlined the application process by eliminating the need for applicants to upload their documents in different places. Romania provides another example. Here, the national evaluation criteria have been aligned with those of transnational research programmes. Regarding the timing, participants agreed that alignment is rather difficult.

Effects of M-ERA.NET 2 on the coordination and cooperation of regional/national funding program

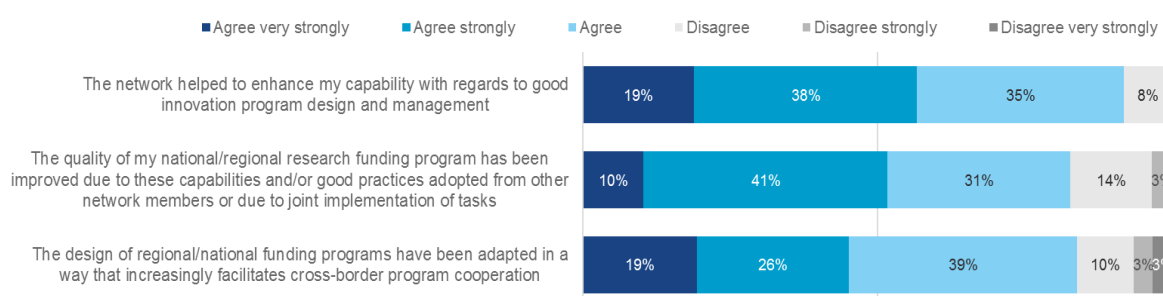


Figure 29: Effects of M-ERA.NET 2 on the coordination and cooperation of regional/national funding programmes.

### 5.3.3 Innovation chain coverage and year to market

M-ERA.NET 2 targets the entire innovation chain. However, in doing so, each project applicant must specify the relevant Technology Readiness Levels (TRLs) to be achieved at the start and at the end of the transnational RTD projects. The following chapter deals with evaluation of these indicated TRLs and the tentative time frame for the commercialisation of the project results.

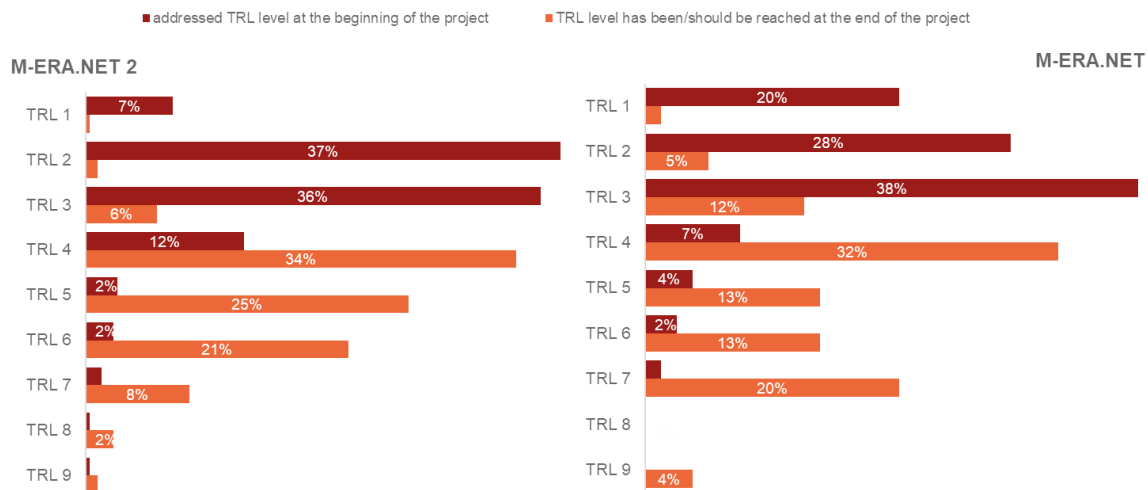


Figure 30: Technology Readiness Level

Regarding the TRL there is not so much difference between M-ERA.NET (right chart) and M-ERA.NET 2 (left chart). The red bars show the distribution of the addressed TRL at the beginning of the project. The orange ones show the level that should be reached at the end of the project. The majority of 37% of the respondents indicated that the project started at TRL 2 (technology concept formulated) or TRL 3 (the experimental proof of concept) (36%). The median TRL at the beginning of the project is TRL 3 and the median target TRL at the end of the project is level 5, where the technology should be validated in relevant environment. While it was unclear in the evaluation of M-ERA.NET whether the classification of projects into low TRLs was intentional or coincidental, the focus on rather low TRLs is clear here and results from the terms of submitting projects. The thematic focus of each call primarily determines the TRLs in which projects are most likely to classify. As an example, see the Guide for Proposers for the Call 2017: Topic 5 addresses “New Strategies for Advanced Materials-Based Technologies in Health Applications” and the indicative TRL target is set at: 2-5.

This indicates that the focus of the projects is more on the scientific level than on the economic level. The comments of the respondents also showed that the low TRL-entry levels in M-ERA.NET 2 can definitely be seen as an advantage (Figure 25).

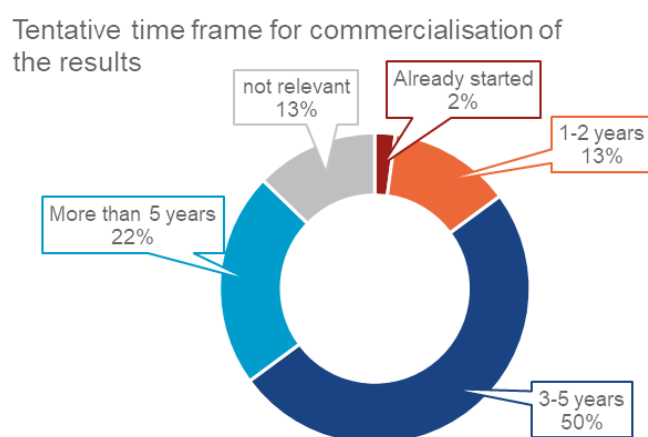


Figure 31: Time frame for commercialisation of project results

At the time of the survey, about 30% of the respondents indicated that they (mainly Call 2016) had already completed the research project. All others are thus still in the project phase. In some cases, however, the end of the project may be delayed even further due to the COVID-19 pandemic. This thesis is supported by the questionnaire for the assessment of the funded projects from the co-funded Call

2016 (sent by M-ERA.NET 2 in June 2021), in which 65% of the respondents stated that the project period needed to be extended due to the COVID-19 pandemic. Nevertheless, 50% of the participants of the survey nevertheless indicated that the commercialisation of the results would take about 3-5 years. For 22% of the respondents, however, the commercialisation of the results is even further in the future, namely more than 5 years, corresponding to lower TRLs.

### 5.3.4 Added value for funded project partners compared to other funding programmes

Comparisons of geographical levels of funding programs

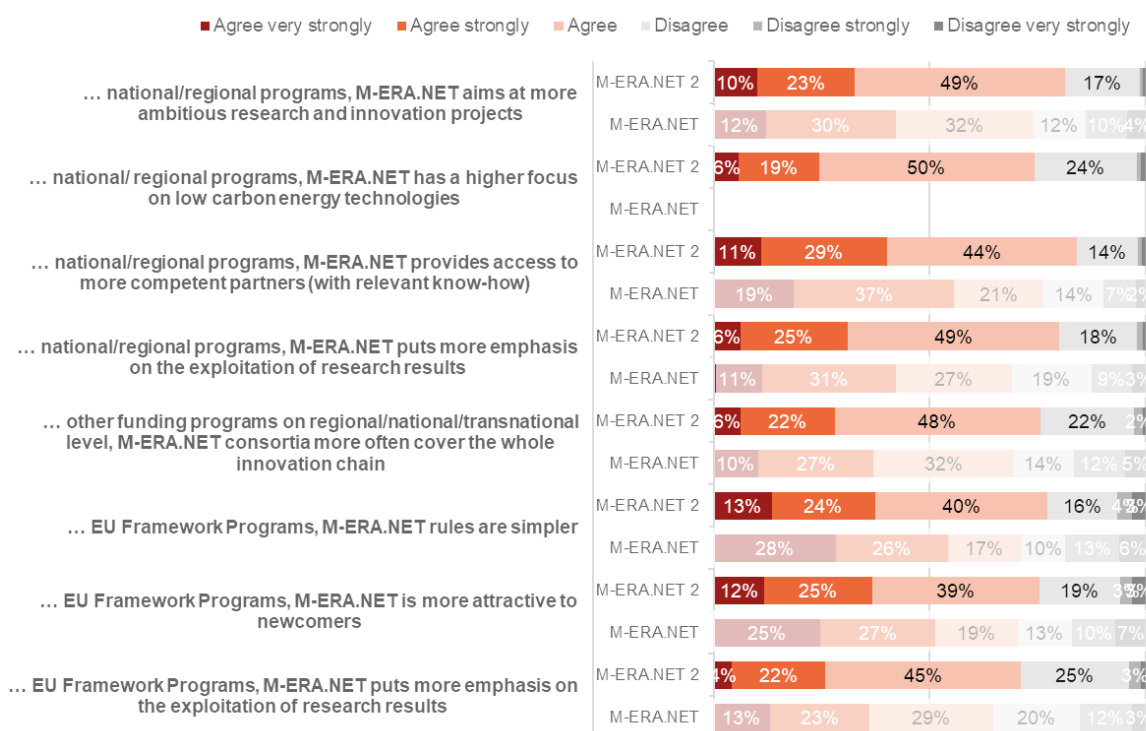


Figure 32: Added value for funded project partners compared to other funding programmes

Compared to other funding programmes, whether national, regional or European, M-ERA.NET 2 was rated better by the majority of respondents. More than 80% of the participants agreed with the statement that M-ERA.NET 2 is aimed at more ambitious research and innovation projects. Compared to the previous round of the survey, this is also a slightly better result. The stronger focus on low carbon energy technologies in M-ERA.NET 2 is also noticeable, as more than three quarters agree that M-ERA.NET has a stronger focus on this topic than the national funding programmes. Access to leading know-how is also rated by the majority of respondents as better than in the national/regional programmes. Compared to national and regional funding programmes, the entire innovation chain can be covered, according to the respondents.

M-ERA.NET 2 also performs significantly better in comparison with the EU programmes. With simpler rules, greater attractiveness for newcomers and better exploitation of research results, the majority of respondents rate the programme as better.

### 5.3.5 Effects on innovation competency and cooperative behaviour

Participation in M-ERA.NET 2 leaves its mark on the participants in various ways. On the one hand, there are some effects on the innovation competence of the participants. On the other hand, it was asked to what extent the cooperative behaviour of the funded project partners has changed. The following chapter deals with the answer to these two questions.

#### Already realised benefits

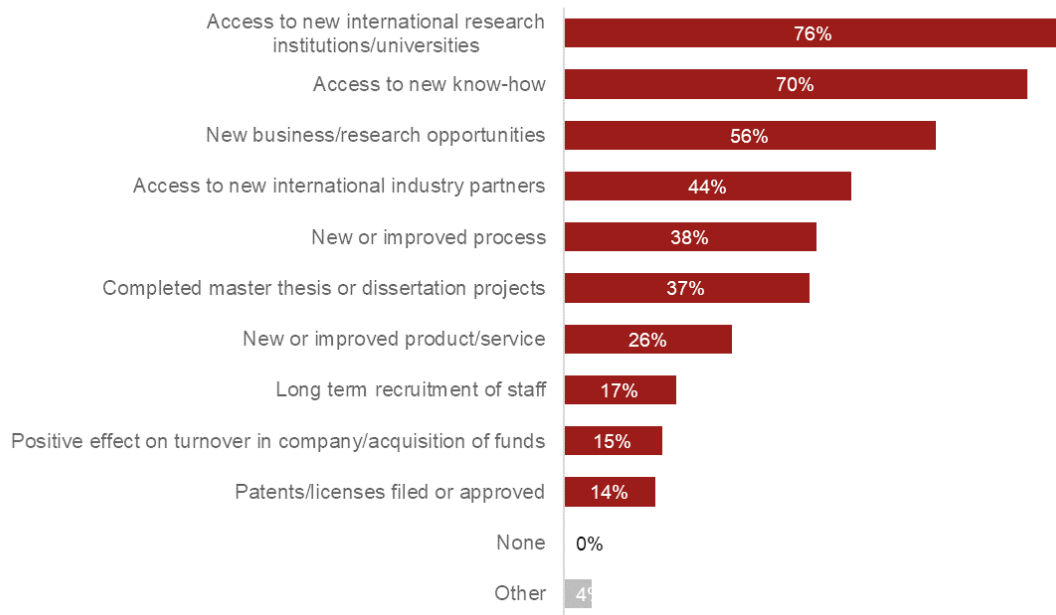


Figure 33: Already realised benefits from participating in the project(s)

By participating in M-ERA.NET 2, all survey respondents were already able to realise a benefit. On average, each respondent indicated four different aspects. The most frequently mentioned benefit (mentioned by 76% of the respondents) was the access to new international research institutions and universities. Three quarters of the respondents were able to name this benefit. New knowledge was also gained by 70% of the survey participants through participation in M-ERA.NET 2. On the other hand, more than half (56%) were able to find new international industry partners. This mix of new industry partners (56%) and new research partners (76%) shows that the projects apparently also promote exchange between research and industry through their heterogeneous composition. In addition to new or improved processes, master theses and dissertations were also written. About a quarter were able to develop new products or services.

It can thus be concluded that the innovation competence of the participants has apparently increased, as many advantages have been generated through participation in M-ERA.NET 2.

In addition to innovation competence, networking competence plays a significant role, especially in international research networks, where cultural differences influence networking competence in addition to linguistic differences. Some participants have been active in the network for a long time, and apparently there is a high level of commitment and a broad basis of trust among the project partners.

Do/would you continue cooperating with some or all of your project partners from your project

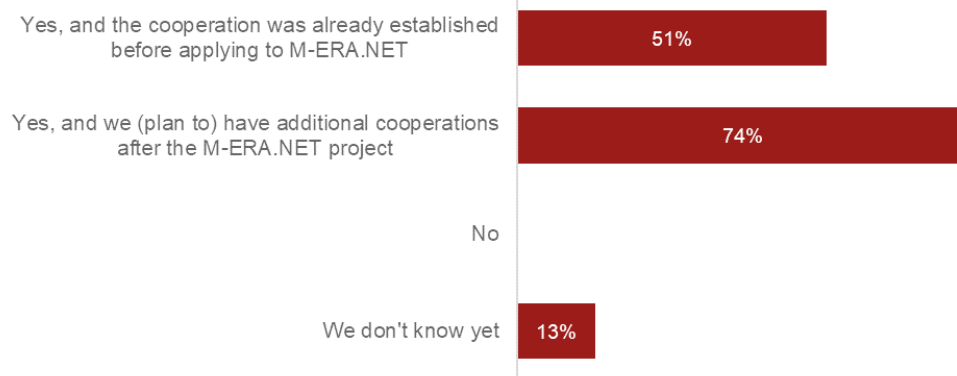


Figure 34: Effects on cooperative behaviour

Otherwise, it is difficult to explain why 51% have already established cooperation before applying to M-ERA.NET 2. The collaboration within M-ERA.NET 2 can therefore be considered strong. Three quarters of the respondents want to continue the cooperation, even if the research project in M-ERA.NET 2 has already ended. In conclusion, this result gives a hint that M-ERA.NET 2 offers project partners an excellent platform for knowledge exchange and cooperation.

### 5.3.6 Dissemination of project/research results

When submitting the full proposal, the project partners must indicate how and with what measures the project results will be disseminated and utilised for each partner and how the impact can be maximised. In addition, M-ERA.NET 2 does not have special requirements when it comes to the dissemination of project results. Only a reference to M-ERA.NET 2 is requested in publications, exhibitions, lectures, success stories and press information concerning results of the projects.

Promotion/Dissemination of project results

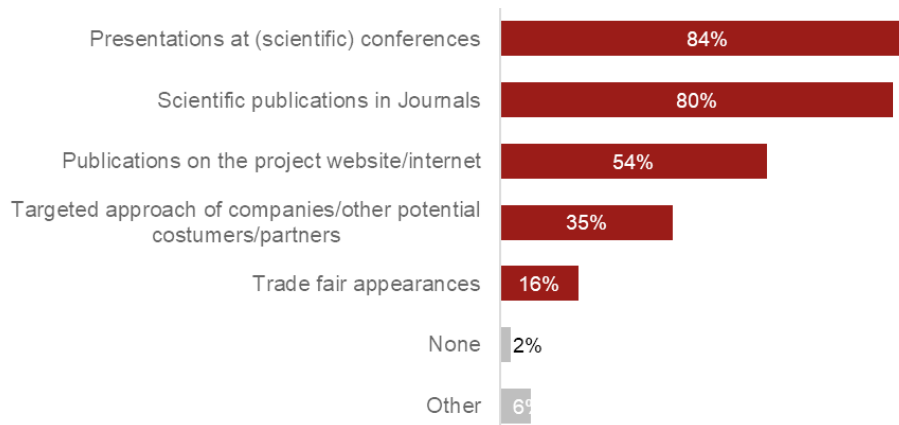


Figure 35: Dissemination process

Funded project partners use different ways to distribute and promote the results of the projects. The majority of respondents use presentations at (scientific) conferences and scientific publications in journals. Publications on websites and other internet sources are still used by slightly more than half to distribute the results. Slightly more than one third address the corresponding target groups of the project results directly. In addition, the project partners have the opportunity to present themselves and their project on the M-ERA.NET 2 website as a success story.

## **5.4 Impact level**

Impacts are long-term effects on the target groups as well as society and the economy in general. As the vast majority of projects funded under M-ERA.NET 2 have not yet completed their project duration (except projects funded under Call 2016), there were some limitations in terms of measuring the impact of the network. Nevertheless, we asked funded project partners and funding organisations for their assessments of selected cross-cutting issues. These include the relevance of M-ERA.NET 2 to the national/regional research community as a whole, the role of M-ERA.NET 2 in aligning national/regional and European roadmaps/strategies and the relevance of programme outcomes for contributions to low carbon energy development.

### **5.4.1 Relevance for national/regional research communities**

The survey results of funding organisations show that M-ERA.NET 2 has indeed made an important contribution to the European Research and Innovation Area. Almost all survey participants agree that knowledge transfer has improved, in both directions (from regional/national research communities to European/global research communities/companies and vice versa). Overall, collaboration at the European and global level has improved as a result of M-ERA.NET 2 (97% agreement).

Regarding the networks' goal to make an impact by funding RTD projects dealing with research and innovation in materials for low carbon energy technologies, the survey results show a similar positive picture among funding organisations as among funded project partners. 94% believe that national research development and innovation in low carbon energy technologies has been strengthened.

According to the funding organisations, many applicants have strengthened their knowledge of proposal writing, which in turn has a positive impact on their success in other European programmes such as Horizon 2020. For instance, M-ERA.NET 2 applicants, even if unsuccessful, take a stronger European perspective in their projects. There has also been an overall improvement in the quality of projects. Funded project partners have elevated their skills on how to plan and implement a project. Thus, 81% of funding organisations agree that the projects under M-ERA.NET 2 were implemented quicker and at lower cost, compared to alternatively under purely national programmes. At the same time, by working with researchers from other countries, regional/national researchers have been able to build an understanding of their strengths and weaknesses.

## Effects of M-ERA.NET 2 on the European Research and Innovation Area

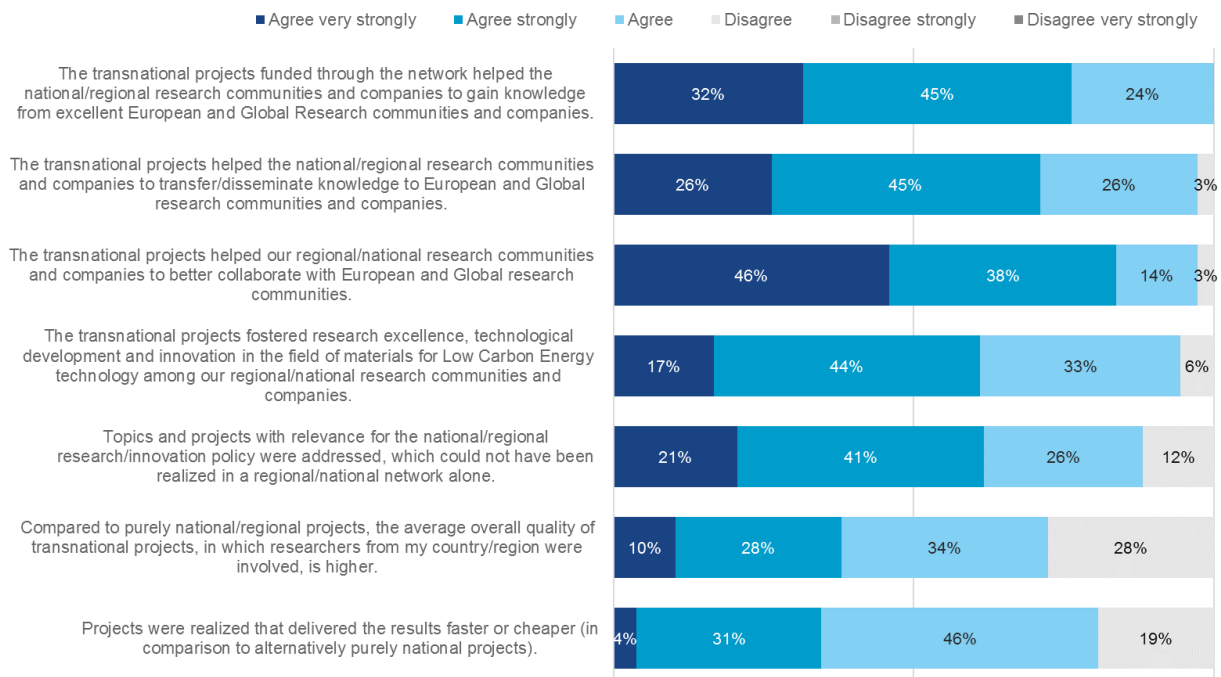


Figure 36: Impact of M-ERA.NET 2 on the European Research and Innovation Area

### 5.4.2 Alignment of national/regional and European roadmaps/strategies

One objective of M-ERA.NET 2 was to make a significant contribution to the alignment of national and regional funding programmes in the field of materials research and innovation by improving their collaboration and cooperation. The M-ERA.NET 2 work programme itself is well aligned with the main EU roadmap and directly responds to the H2020 work programme.

The survey results show that the network succeeded in playing an important role in this alignment: 91% of funding organisations agreed that the calls were part of an approach to align national/regional and European roadmaps/strategies, albeit with differences in the level of agreement. Furthermore, the high percentage of funding organisations participating in the annual calls and in all topics is another indicator that the calls were well aligned with the national/regional internationalisation strategies of the organisations. This is a direct result of the M-ERA.NET 2 joint programming efforts. In addition, there has been an established dialogue with European stakeholders (experts) and the international RTD community to ensure an appropriate thematic scope that is aligned with the state of art at EU level.

#### Role of M-ERA.NET 2 on the alignment of national/regional and European roadmaps/strategies

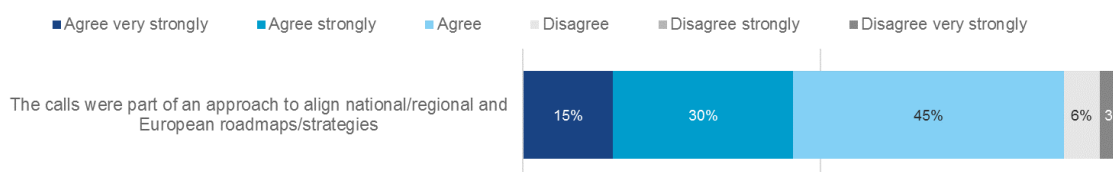


Figure 37: Role of M-ERA.NET 2 on the alignment of national/regional and European roadmaps/strategies

In return, when it comes to the influence of M-ERA.NET 2 on the national/regional agenda setting, we received mixed answers from the participants in the deep dive workshop. Funding organisations

explained, that this strongly depends on how flexible national authorities are in selecting topics. Furthermore, one must be aware that national authorities consider other (perhaps competing) European initiatives and that many national/regional strategies focus on instruments rather than on topics. Nevertheless, results of M-ERA.NET 2 funded projects can indeed inform further developments on the regional/national level.

### 5.4.3 Contributions to low carbon energy technologies

The research on materials enabling low carbon energy technologies is a particularly highlighted as a main target of the co-funded Call 2016 with a view to implementing relevant parts of the Materials Roadmap Enabling Low Carbon Energy Technologies (SEC(2011)1609), and relevant objectives of the SET-Plan (COM (2009)519). Funded project partners were therefore asked to what extent their project results contribute to low carbon energy technologies.

Relevance of the project results for contributions to Low Carbon Energy Technologies

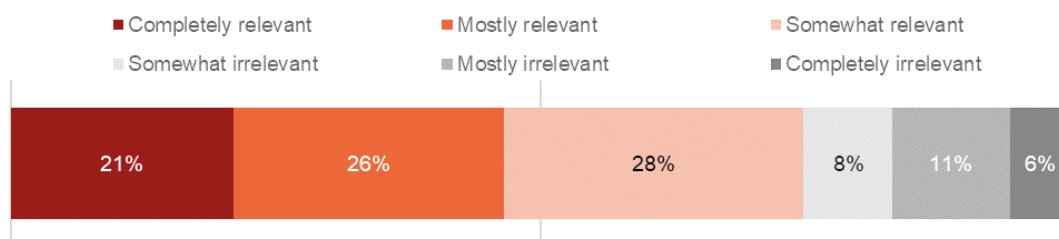


Figure 38: Relevance of the project results for contributions to low carbon energy technologies

In 21% of the cases, the results are were considered even completely relevant. 26% stated that the results were mostly relevant. The largest part with 28% stated that the results would at least make a partially relevant contribution to low carbon energy technology. The majority of the projects thus aim at the required focus.

However, it should be noted at this point that 18% (not part of the graph), and thus a fairly significant proportion, could not or did not want to assess the relevance of the project results to low carbon energy technology. However, the aim of M-ERA.NET 2 is to fund ambitious transnational RTD projects addressing materials research and innovation including materials for low carbon energy technologies. Considering that, the share of completely or mostly relevant results was expected to be a little bit higher.

If the project results are relevant for contributions to Low Carbon Energy Technologies, the funded project partners were asked to which technology the project results are related to.



Please indicate if the results of your project could be related to:

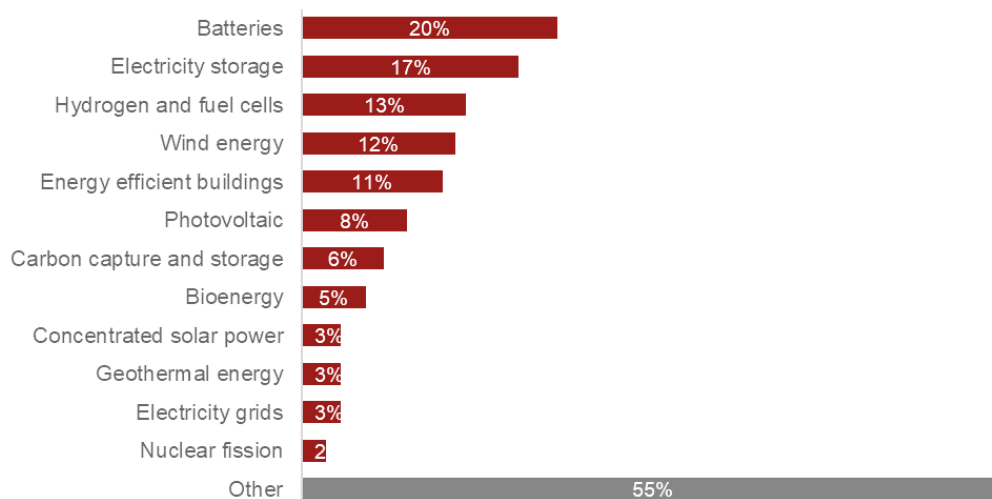


Figure 39: Projects addressing low carbon energy technologies

Half of the answers were in the category “other”. It was not asked, which subject area was meant exactly. From the answers, however, it can be seen that many projects have energy storage as their goal. Batteries (18%), electricity storage (16%) and hydrogen and fuel cells (13%) are the most frequently selected categories after others. Of the total of 320 projects, 61% deal with contributions to low carbon energy technologies.

Table 3: Comparison of topics and relevance for low carbon energy technologies

	Completely relevant	Mostly relevant	Somewhat relevant	Somewhat irrelevant
<b>Other</b>	15	23	54	16
<b>Batteries</b>	18	17	4	1
<b>Electricity storage</b>	15	15	4	0
<b>Hydrogen and fuel cells</b>	13	11	4	0
<b>Wind energy</b>	8	7	5	4
<b>Energy efficient buildings</b>	6	8	8	0
<b>Photovoltaic</b>	6	6	5	1
<b>Carbon capture and storage</b>	6	8	0	0
<b>Bioenergy</b>	3	6	2	0
<b>Concentrated solar power</b>	1	2	1	1
<b>Geothermal energy</b>	3	2	0	0
<b>Electricity grids</b>	2	3	0	0
<b>Nuclear fission</b>	2	1	1	0

A closer look at the comparison of the distribution of topics on relevance for low carbon energy technologies shows that the majority of the “Other” category is only “somewhat relevant”. Looking at the first two categories, it becomes clear once again that the topics relating to energy storage (batteries, electricity storage, hydrogen and fuel cells) play the most important role.

## 6 Literature

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## 7 Appendix

### 7.1 Supporting tables and figures

Table 4: Success rates per funding organisations

Agency	Submitted pre-proposals	Submitted full proposals	Funded projects	Success rate submitted proposals	Success rate full proposals
Portugal (Azores): FRCT	1	1	1	100,0%	100,0%
Netherlands: M2i	1	1	1	100,0%	100,0%
Finland: Business Finland	1	1	1	100,0%	100,0%
Belgium (Wallonia): SPW	34	13	9	26,5%	69,2%
Israel: IIA	14	8	5	35,7%	62,5%
France (Région Nouvelle-Aquitaine): RNAQ	17	8	5	29,4%	62,5%
Switzerland: Innosuisse	16	5	3	18,8%	60,0%
Ireland: SFI	9	5	3	33,3%	60,0%
Germany: KIT	14	7	4	28,6%	57,1%
Luxembourg: FNR	36	24	13	36,1%	54,2%
Portugal: FCT	82	30	15	18,3%	50,0%
Israel: MOST IL	36	18	9	25,0%	50,0%
Iceland: RANNIS	2	2	1	50,0%	50,0%
Germany: JÜLICH	121	27	13	10,7%	48,1%
Netherlands: NWO	29	15	7	24,1%	46,7%
Cyprus: RPF	20	15	7	35,0%	46,7%
Brazil (Sao Paulo): FAPESP	30	13	6	20,0%	46,2%
Italy: MIUR	56	20	9	16,1%	45,0%
Norway: RCN	70	37	16	22,9%	43,2%
Spain (Asturias): IDEPA	21	12	5	23,8%	41,7%
Poland: NCBR	104	73	29	27,9%	39,7%
Spain (Basque Country): EJ-GV/Innobasque	27	18	7	25,9%	38,9%
Austria: FFG	119	50	19	16,0%	38,0%
Czech Republic: TACR	68	49	18	26,5%	36,7%
Germany (Saxony): SMWK	116	94	34	29,3%	36,2%
Taiwan: MOST TW	50	25	9	18,0%	36,0%
Slovakia: SAS	48	28	10	20,8%	35,7%
Spain (Castilla y Leon): ICE	10	6	2	20,0%	33,3%
Canada (Québec): PRIMA	15	6	2	13,3%	33,3%
France: ANR	122	50	16	13,1%	32,0%
South Africa: DSI	37	22	7	18,9%	31,8%
Spain: AEI	194	80	25	12,9%	31,3%
Hungary: NKFIH	51	27	8	15,7%	29,6%
Slovenia: MIZS	60	34	10	16,7%	29,4%
Russia: FASIE	28	7	2	7,1%	28,6%
Italy (Calabria): CALABRIA	55	28	8	14,5%	28,6%
Lithuania: RCL	76	58	16	21,1%	27,6%
Bulgaria: BNSF	24	15	4	16,7%	26,7%
Belgium (French-Speaking Community): FNRS	38	23	6	15,8%	26,1%
Romania: UEFISCDI	221	79	20	9,0%	25,3%
Spain (Andalucía): IDEA	6	4	1	16,7%	25,0%
Latvia: VIAA	116	82	20	17,2%	24,4%
Turkey: TUBITAK	137	69	16	11,7%	23,2%
Poland: NCN	155	88	20	12,9%	22,7%
Estonia: ETAG	33	22	5	15,2%	22,7%
Belgium (Flanders): VLAIO	12	5	1	8,3%	20,0%
South Korea: KIAT	3	2	0	0,0%	0,0%

Table 5: Network connections (number of joint projects)

Country 1	Country 2	Count	Country 1	Country 2	Count	Country 1	Country 2	Count
Poland	Germany	13	Luxembourg	Czech Republic	3	Portugal	Cyprus	2
Lithuania	Latvia	9	Poland	Italy	3	Romania	Slovenia	2
Spain	Poland	9	Poland	Slovakia	3	Romania	Netherlands	2
Spain	Portugal	8	Poland	Belgium	3	Romania	Hungary	2

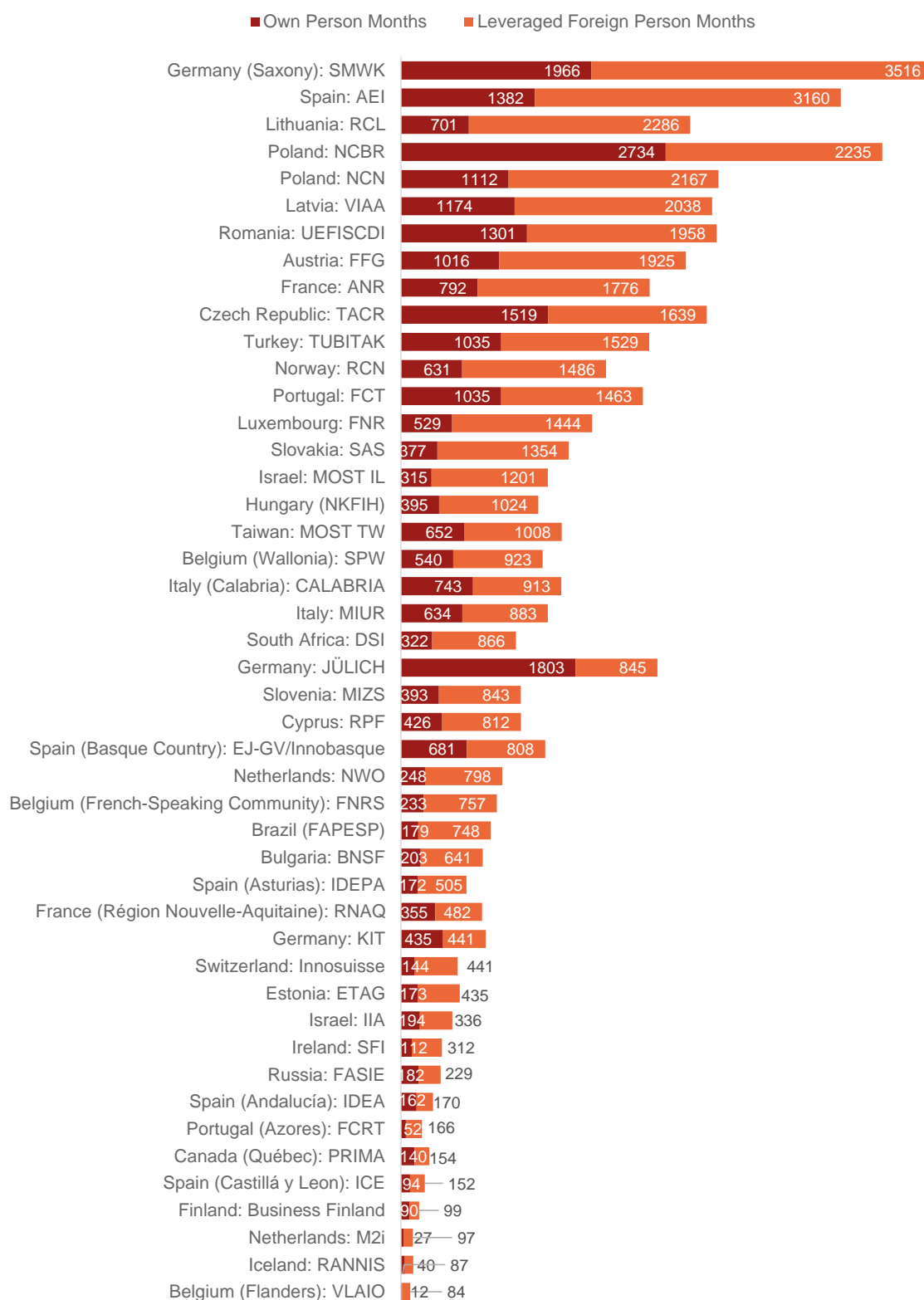
Austria	Germany	7	Romania	Norway	3	Romania	South Africa	2
Germany	Czech Republic	7	Romania	Germany	3	Romania	France	2
Spain	Germany	7	Slovakia	Czech Republic	3	Slovakia	Estonia	2
Spain	Romania	7	Slovenia	Norway	3	Spain	Lithuania	2
Poland	Latvia	6	Spain	Hungary	3	Spain	Taiwan	2
Belgium	France	5	Turkey	Norway	3	Spain	Ireland	2
Germany	France	5	Turkey	Luxembourg	3	Spain	South Africa	2
Israel	Germany	5	Turkey	Germany	3	Spain	Luxembourg	2
Poland	France	5	Austria	Romania	2	Spain	Austria	2
Poland	Czech Republic	5	Austria	Israel	2	Spain	Czech Republic	2
Spain	Netherlands	5	Austria	Portugal	2	Spain	Brazil	2
Spain	Italy	5	Austria	Belgium	2	Taiwan	Slovenia	2
Spain	France	5	Belgium	Luxembourg	2	Taiwan	Hungary	2
Austria	Poland	4	France	Luxembourg	2	Turkey	Romania	2
Germany	South Africa	4	Germany	Bulgaria	2	Turkey	Israel	2
Italy	Belgium	4	Germany	Luxembourg	2	Turkey	Czech Republic	2
Latvia	Slovakia	4	Germany	Brazil	2	Austria	Turkey	1
Lithuania	Taiwan	4	Ireland	Netherlands	2	Austria	Russian Federation	1
Lithuania	Poland	4	Israel	Hungary	2	Austria	Norway	1
Poland	Portugal	4	Israel	Poland	2	Austria	United States	1
Poland	Norway	4	Israel	Belgium	2	Austria	Estonia	1
Poland	Estonia	4	Israel	France	2	Austria	France	1
Portugal	Norway	4	Italy	Portugal	2	Austria	Luxembourg	1
Romania	Italy	4	Italy	Brazil	2	Belgium	Czech Republic	1
Spain	Slovenia	4	Italy	Germany	2	Brazil	Iceland	1
Spain	Belgium	4	Lithuania	Turkey	2	Estonia	United States	1
Spain	Norway	4	Lithuania	Czech Republic	2	France	Slovakia	1
Spain	Turkey	4	Netherlands	Slovenia	2	France	Estonia	1
Taiwan	Latvia	4	Netherlands	Germany	2	Germany	Hungary	1
Turkey	France	4	Norway	France	2	Germany	Finland	1
Germany	Belgium	3	Poland	Netherlands	2	Germany	Switzerland	1
Italy	France	3	Poland	Cyprus	2	Germany	Slovakia	1
Latvia	Czech Republic	3	Poland	South Africa	2	Germany	Canada	1
Latvia	Germany	3	Portugal	Slovenia	2	Germany	Russian Federation	1
Lithuania	Slovakia	3	Portugal	Netherlands	2	Germany	Japan	1
Hungary	Belgium	1	Lithuania	Germany	1	Russian Federation	France	1
Hungary	Cyprus	1	Lithuania	Japan	1	Slovenia	Belgium	1
Hungary	Luxembourg	1	Luxembourg	Switzerland	1	Slovenia	Cyprus	1
Hungary	Switzerland	1	Netherlands	Hungary	1	Slovenia	Japan	1
Ireland	Germany	1	Netherlands	Belgium	1	South Africa	Bulgaria	1
Israel	Cyprus	1	Netherlands	Cyprus	1	Spain	Latvia	1
Israel	Luxembourg	1	Norway	Cyprus	1	Spain	United States	1
Israel	Switzerland	1	Norway	Slovakia	1	Spain	Japan	1
Israel	Latvia	1	Poland	Luxembourg	1	Spain	Bulgaria	1

Israel	Czech Republic	1
Italy	Slovenia	1
Italy	Iceland	1
Italy	South Africa	1
Italy	Czech Republic	1
Latvia	Italy	1
Latvia	Luxembourg	1
Latvia	France	1
Latvia	Belgium	1
Latvia	Slovenia	1
Latvia	Brazil	1
Lithuania	Italy	1
Lithuania	Austria	1
Lithuania	Russian Federation	1
Lithuania	Norway	1
Lithuania	Romania	1
Lithuania	Israel	1
Lithuania	France	1



Poland	United States	1
Poland	Slovenia	1
Poland	Hungary	1
Poland	Canada	1
Poland	Switzerland	1
Poland	Japan	1
Poland	Bulgaria	1
Portugal	Ireland	1
Portugal	Brazil	1
Portugal	South Africa	1
Portugal	Czech Republic	1
Romania	Israel	1
Romania	Portugal	1
Romania	Slovakia	1
Romania	Bulgaria	1
Romania	Brazil	1
Romania	Poland	1
Romania	Switzerland	1

Spain	Cyprus	1
Spain	Estonia	1
Spain	Slovakia	1
Spain	Israel	1
Taiwan	Norway	1
Taiwan	Netherlands	1
Taiwan	Luxembourg	1
Taiwan	Switzerland	1
Taiwan	Israel	1
Taiwan	Brazil	1
Turkey	Cyprus	1
Turkey	Netherlands	1
Turkey	Latvia	1
Turkey	Slovakia	1
Turkey	Italy	1
Turkey	Belgium	1
Turkey	Brazil	1

Figure 40: Leverage effect of investment in transnational projects, measured in person months.



## 7.2 Questionnaire (un)successful applicants



0%

### Welcome to the M-ERA.NET assessment!

On behalf of the Research Council of Norway, the Institute for Innovation and Technology (iit) is assessing the performance and impact of M-ERA.NET for the calls 2016 – 2020.  
You have participated in one or more of the M-ERA.NET calls for transnational projects. Now, we kindly ask you to provide your views and experience.  
Your contribution to this survey is important. It will help to determine the achievements and impact of M-ERA.NET and support the design of future activities.

You can interrupt the survey at any time by closing the browser. As soon as you call up the survey again via your personal access link the questionnaire will be continued on the last saved page.  
The questionnaire will take approximately 10 minutes to complete.

We kindly ask you to complete the survey by Sunday, October 31<sup>st</sup>.

For further inquiries, please do not hesitate to contact Karoline Rodriguez([rodriguez@iit-berlin.de](mailto:rodriguez@iit-berlin.de)).  
For technical questions, please contact Michael Nerger ([nerger@iit-berlin.de](mailto:nerger@iit-berlin.de)).

We thank you in advance for your support of the evaluation.

**Privacy Declaration:**  
The Institute for Innovation and Technology (iit) at the VDI/VDE Innovation + Technik GmbH commits to maintaining the confidentiality in the handling of the data. All analysed data will be elaborated only in an anonymous and aggregated manner for the project's purpose.  
All data will be processed in relation to lawfulness, purpose limitation, data minimisation, accuracy, storage limitation, integrity and confidentiality in accordance with Art. 5 GDPR. For more information about your rights, please see [www.iit-berlin.de/en/privacy-policy/](http://www.iit-berlin.de/en/privacy-policy/).

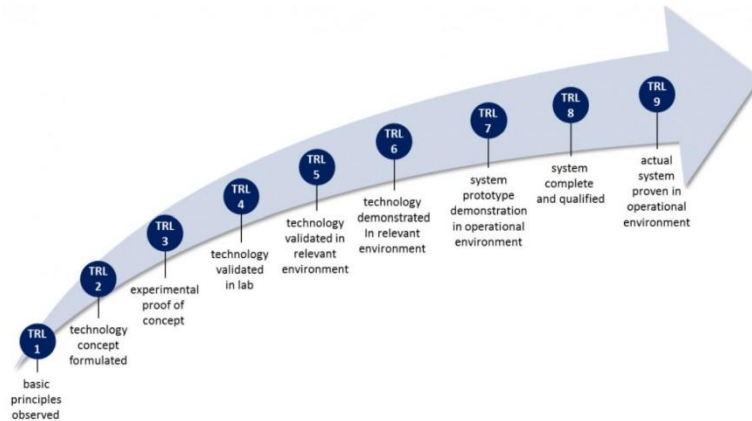
☐ I declare my consent with the Privacy declaration above.

Start the survey

Please only use the buttons provided in the online survey to navigate.  
As soon as you close the browser, the survey will end.  
If you have received a personalised link, the questionnaire will be continued on the last saved page as soon as you call up the survey again via your personal access link.  
If you have accessed the survey via an "open" link, there is no possibility to continue the interrupted survey. In this case, the survey will be restarted.  
In principle, no cookies or IP addresses are stored.

5%

## TECHNOLOGICAL SELF-ASSESSMENT AND TECHNOLOGICAL/ECONOMICAL/INNOVATION BENEFITS



Which TRL level did you address with your individual project activities at the beginning of the project?

	1	2	3	4	5	6	7	8	9	I don't know / not applicable
%PROJECT1%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
%PROJECT2%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
%PROJECT3%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
%PROJECT4%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
%PROJECT5%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Which TRL level has been/should be reached at the end of the project?

	1	2	3	4	5	6	7	8	9	I don't know / not applicable
%PROJECT1%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
%PROJECT2%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
%PROJECT3%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
%PROJECT4%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
%PROJECT5%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Is your project already completed?

	Yes	No
%PROJECT1%	<input checked="" type="radio"/>	<input type="radio"/>
%PROJECT2%	<input checked="" type="radio"/>	<input type="radio"/>
%PROJECT3%	<input checked="" type="radio"/>	<input type="radio"/>
%PROJECT4%	<input checked="" type="radio"/>	<input type="radio"/>
%PROJECT5%	<input checked="" type="radio"/>	<input type="radio"/>



What is the tentative time frame for commercialisation of the results from this project (year to market), where 0 is the end date of the project?

	Already started	1-2 years	3-5 years	More than 5 years	not relevant
%PROJECT1%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
%PROJECT2%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
%PROJECT3%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
%PROJECT4%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
%PROJECT5%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Based on your overall experience, which of the following benefits have you already realised from participating in the project(s)?  
(Multiple answers are possible)

<input type="checkbox"/>	Positive effect on turnover in company/acquisition of funds
<input type="checkbox"/>	New business/research opportunities
<input type="checkbox"/>	Long term recruitment of staff
<input type="checkbox"/>	Access to new know-how
<input type="checkbox"/>	Access to new international industry partners
<input type="checkbox"/>	Access to new international research institutions/universities
<input type="checkbox"/>	New or improved product/service
<input type="checkbox"/>	New or improved process
<input type="checkbox"/>	Patents/licenses filed or approved
<input type="checkbox"/>	Completed master thesis or dissertation projects
<input type="checkbox"/>	None
<input type="checkbox"/>	Other, please specify: <input type="text"/>

How did you disseminate/are you disseminating project results or how did you promote/are you promoting your initiative?  
(Multiple answers are possible)

<input type="checkbox"/>	Presentations at (scientific) conferences
<input type="checkbox"/>	Publications on the project website/internet
<input type="checkbox"/>	Trade fair appearances
<input type="checkbox"/>	Scientific publications in Journals
<input type="checkbox"/>	Targeted approach of companies/other potential costumers/partners
<input type="checkbox"/>	None
<input type="checkbox"/>	Other, please specify: <input type="text"/>

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22%

## TRANSNATIONAL BENEFIT

Please indicate your personal experience level in participating in national/international research funding programs on the following scale.  
Please only refer to the Calls 2016 – 2020.

Experience in participating in...	1 Extensive experience	2 Very experienced	3 Experienced	4 Some experience	5 Little experience	6 No experience	I don't know / not applicable
... national/regional research funding programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... European Framework programs (FP6/7 /Horizon 2020)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... other transnational funding programs (e. g. other ERA-Networks)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Did you successfully participate in a call of the previous M-ERA.NET network (2012 – 2015)?

- ☐ Yes  
☐ No

Please rate the following comparisons of geographical levels of funding programs on the following scale.  
Please only refer to the Calls 2016 – 2020.

Compared to...	1 Agree very strongly	2 Agree strongly	3 Agree	4 Disagree	5 Disagree strongly	6 Disagree very strongly	I don't know / not applicable
... national/regional programs, M-ERA.NET aims at more ambitious research and innovation projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... national/ regional programs, M-ERA.NET has a higher focus on low carbon energy technologies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... national/regional programs, M-ERA.NET provides access to more competent partners (with relevant know-how)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... national/regional programs, M-ERA.NET puts more emphasis on the exploitation of research results	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... other funding programs on regional/national/transnational level, M-ERA.NET consortia more often cover the whole innovation chain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... EU Framework Programs, M-ERA.NET rules are simpler	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... EU Framework Programs, M-ERA.NET is more attractive to newcomers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... EU Framework Programs, M-ERA.NET puts more emphasis on the exploitation of research results	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Are there any other reasons for applying to M-ERA.NET rather than to other EU Framework Programs?

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Please only use the buttons provided in the online survey to navigate.  
As soon as you close the browser, the survey will end.

If you have received a personalised link, the questionnaire will be continued on the last saved page as soon as you call up the survey again via your personal access link.

32%

## TRANSNATIONAL BENEFIT

Reflecting the application process of the M-ERA.NET calls, please rate your general experience on the following scale.  
Please only refer to the Calls 2016 – 2020.

	1 Agree very strongly	2 Agree strongly	3 Agree	4 Disagree	5 Disagree strongly	6 Disagree very strongly	I don't know / not applicable
The M-ERA.NET helps to search and find appropriate cooperation partners (e.g. Partner Search Tool; partnering events at nat/reg level...)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Administrative proposal submission was easy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluation of proposals was transparent and informative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interaction with the national/regional funding agency was supportive throughout the application process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Any comments:

Reflecting the funding procedures and support activities of the M-ERA.NET network, please rate your (general) experience on the following scale.  
Please only refer to the Calls 2016 – 2020.

	1 Agree very strongly	2 Agree strongly	3 Agree	4 Disagree	5 Disagree strongly	6 Disagree very strongly	I don't know / not applicable
The financial resources are sufficient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The project duration is appropriate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interaction with the national/regional funding agency is supportive during the project implementation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reporting requirements and monitoring activities carried out by M-ERA.NET are appropriate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
M-ERA.NET activities to facilitate the dissemination of project results are useful (success stories,...)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Any comments:

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42%

## TRANSNATIONAL BENEFIT

Reflecting the project implementation of your research project %PROJECT1% funded by M-ERA.NET, please rate your experience on the following scale.

Please only refer to the Calls 2016 – 2020.

	1 Agree very strongly	2 Agree strongly	3 Agree	4 Disagree	5 Disagree strongly	6 Disagree very strongly	I don't know / not applicable
All project partners are committed to the project	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The consortium is stable during the project implementation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All project partners are important (i.e. had meaningful roles) to implement the project	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The project objectives are realistic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Project management is effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outcomes are/will be shared fair among the partners according to their inputs (prior and during the project implementation)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Reflecting the project implementation of your research project %PROJECT2% funded by M-ERA.NET, please rate your experience on the following scale.

Please only refer to the Calls 2016 – 2020.

	1 Agree very strongly	2 Agree strongly	3 Agree	4 Disagree	5 Disagree strongly	6 Disagree very strongly	I don't know / not applicable
All project partners are committed to the project	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The consortium is stable during the project implementation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All project partners are important (i.e. had meaningful roles) to implement the project	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The project objectives are realistic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Project management is effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outcomes are/will be shared fair among the partners according to their inputs (prior and during the project implementation)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Reflecting the project implementation of your research project %PROJECT3% funded by M-ERA.NET, please rate your experience on the following scale.

Please only refer to the Calls 2016 – 2020.

	1 Agree very strongly	2 Agree strongly	3 Agree	4 Disagree	5 Disagree strongly	6 Disagree very strongly	I don't know / not applicable
All project partners are committed to the project	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The consortium is stable during the project implementation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All project partners are important (i.e. had meaningful roles) to implement the project	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The project objectives are realistic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Project management is effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outcomes are/will be shared fair among the partners according to their inputs (prior and during the project implementation)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Reflecting the project implementation of your research project %PROJECT4% funded by M-ERA.NET, please rate your experience on the following scale.

Please only refer to the Calls 2016 – 2020.

	1 Agree very strongly	2 Agree strongly	3 Agree	4 Disagree	5 Disagree strongly	6 Disagree very strongly	I don't know / not applicable
All project partners are committed to the project	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The consortium is stable during the project implementation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All project partners are important (i.e. had meaningful roles) to implement the project	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The project objectives are realistic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Project management is effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outcomes are/will be shared fair among the partners according to their inputs (prior and during the project implementation)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Reflecting the project implementation of your research project %PROJECT5% funded by M-ERA.NET, please rate your experience on the following scale.

Please only refer to the Calls 2016 – 2020.

	1 Agree very strongly	2 Agree strongly	3 Agree	4 Disagree	5 Disagree strongly	6 Disagree very strongly	I don't know / not applicable
All project partners are committed to the project	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The consortium is stable during the project implementation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All project partners are important (i.e. had meaningful roles) to implement the project	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The project objectives are realistic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Project management is effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outcomes are/will be shared fair among the partners according to their inputs (prior and during the project implementation)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Any comments:

Do/would you continue cooperating with some or all of your project partners from your project %PROJECT1% (in either R&D or any other context)?

- ☐ Yes, and the cooperation was already established before applying to M-ERA.NET
- ☐ Yes, and we (plan to) have additional cooperations after the M-ERA.NET project
- ☐ No
- ☐ We don't know yet

Do/would you continue cooperating with some or all of your project partners from your project %PROJECT2% (in either R&D or any other context)?

- ☐ Yes, and the cooperation was already established before applying to M-ERA.NET
- ☐ Yes, and we (plan to) have additional cooperations after the M-ERA.NET project
- ☐ No
- ☐ We don't know yet

Do/would you continue cooperating with some or all of your project partners from your project %PROJECT3% (in either R&D or any other context)?

- ☐ Yes, and the cooperation was already established before applying to M-ERA.NET
- ☐ Yes, and we (plan to) have additional cooperations after the M-ERA.NET project
- ☐ No
- ☐ We don't know yet

Do/would you continue cooperating with some or all of your project partners from your project %PROJECT4% (in either R&D or any other context)?

- ☐ Yes, and the cooperation was already established before applying to M-ERA.NET
- ☐ Yes, and we (plan to) have additional cooperations after the M-ERA.NET project
- ☐ No
- ☐ We don't know yet

Do/would you continue cooperating with some or all of your project partners from your project %PROJECT5% (in either R&D or any other context)?

- ☐ Yes, and the cooperation was already established before applying to M-ERA.NET
- ☐ Yes, and we (plan to) have additional cooperations after the M-ERA.NET project
- ☐ No
- ☐ We don't know yet

Did you already succeed in realising your project ideas, which were not selected for funding under an M-ERA.NET call (2016 - 2020) for proposals, elsewhere?  
(Multiple answers are possible)

☐ Yes, outside a funding program

☐ Yes, within a national/regional project

☐ Yes, within a transnational project

☐ Yes, within a EU Framework Program project

☐ Yes, with a reduced budget/team/target

☐ A decision on a submitted project proposal is pending

☐ It is not yet decided to follow-up on the proposed project idea

☐ No, the realisation will no longer be pursued

☐ A different option, please specify:

**How relevant are your project results for contributions to Low Carbon Energy Technologies? Please use the following scale.**  
Please only refer to the Calls 2016 – 2020.

	1 Completely relevant	2 Mostly relevant	3 Somewhat relevant	4 Somewhat irrelevant	5 Mostly irrelevant	6 Completely irrelevant	I don't know / not applicable
%PROJECT1%	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
%PROJECT2%	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
%PROJECT3%	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
%PROJECT4%	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
%PROJECT5%	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Please indicate if the results of your project %PROJECT1% could be related to:**

☐ Wind energy

☐ Photovoltaic

☐ Concentrated solar power

☐ Geothermal energy

☐ Electricity storage

☐ Electricity grids

☐ Bioenergy

☐ Carbon capture and storage

☐ Hydrogen and fuel cells

☐ Nuclear fission

☐ Energy efficient buildings

☐ Batteries

☐ Other

**Please indicate if the results of your project %PROJECT2% could be related to:**

☐ Wind energy

☐ Photovoltaic

☐ Concentrated solar power

☐ Geothermal energy

☐ Electricity storage

☐ Electricity grids

☐ Bioenergy

☐ Carbon capture and storage

☐ Hydrogen and fuel cells

☐ Nuclear fission

☐ Energy efficient buildings

☐ Batteries



☐ Other

Please indicate if the results of your project %PROJECT3% could be related to:

- ☐ Wind energy
- ☐ Photovoltaic
- ☐ Concentrated solar power
- ☐ Geothermal energy
- ☐ Electricity storage
- ☐ Electricity grids
- ☐ Bioenergy
- ☐ Carbon capture and storage
- ☐ Hydrogen and fuel cells
- ☐ Nuclear fission
- ☐ Energy efficient buildings
- ☐ Batteries
- ☐ Other

Please indicate if the results of your project %PROJECT4% could be related to:

- ☐ Wind energy
- ☐ Photovoltaic
- ☐ Concentrated solar power
- ☐ Geothermal energy
- ☐ Electricity storage
- ☐ Electricity grids
- ☐ Bioenergy
- ☐ Carbon capture and storage
- ☐ Hydrogen and fuel cells
- ☐ Nuclear fission
- ☐ Energy efficient buildings
- ☐ Batteries
- ☐ Other

Please indicate if the results of your project %PROJECT5% could be related to:

- ☐ Wind energy
- ☐ Photovoltaic
- ☐ Concentrated solar power
- ☐ Geothermal energy
- ☐ Electricity storage
- ☐ Electricity grids
- ☐ Bioenergy
- ☐ Carbon capture and storage
- ☐ Hydrogen and fuel cells
- ☐ Nuclear fission
- ☐ Energy efficient buildings
- ☐ Batteries
- ☐ Other

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Complete questionnaire



## 7.3 Questionnaire funding organisations



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### Welcome to the M-ERA.NET 2 final assessment!

On behalf of the Research Council of Norway, the Institute for Innovation and Technology (iit) is conducting the final assessment of M-ERA.NET 2 (2016-2022). The survey for M-ERA.NET 2 network partners is an important part of this evaluation. By participating in the survey, you help to determine the achievement of objectives and the impact of M-ERA.NET 2.

When completing the questionnaire, please answer exclusively in relation to M-ERA.NET 2 (activities 2016 – 2021) unless the question is explicitly formulated otherwise.

You may stop answering at any time and continue answering later at the same point. The questionnaire will take approximately 10 minutes to complete.

We kindly ask you to complete the survey by Sunday, October 31<sup>st</sup>.

For further inquiries, please do not hesitate to contact Karoline Rodriguez([rodriguez@iit-berlin.de](mailto:rodriguez@iit-berlin.de)).  
For technical questions, please contact Michael Neger ([nerger@iit-berlin.de](mailto:nerger@iit-berlin.de)).

We thank you in advance for your support of the evaluation.

#### Privacy Declaration:

The Institute for Innovation and Technology (iit) at the VDI/VDE Innovation + Technik GmbH commits to maintaining the confidentiality in the handling of the data. All analysed data will be elaborated only in an anonymous and aggregated manner for the project's purpose.

All data will be processed in relation to lawfulness, purpose limitation, data minimisation, accuracy, storage limitation, integrity and confidentiality in accordance with Art. 5 GDPR. For more information about your rights, please see [www.vdivde-it.de/en/privacy-policy](http://www.vdivde-it.de/en/privacy-policy).

☐ I declare my consent with the Privacy declaration above.

Start the survey

Please only use the buttons provided in the online survey to navigate.  
As soon as you close the browser, the survey will end.

If you have received a personalised link, the questionnaire will be continued on the last saved page as soon as you call up the survey again via your personal access link.  
If you have accessed the survey via an "open" link, there is no possibility to continue the interrupted survey. In this case, the survey will be restarted.  
In principle, no cookies or IP addresses are stored.

13%

## Promotion of research excellence

Please name your organisation:

Please indicate to what extent you agree with the following statements about the impact of M-ERA.NET 2 on the European Research and Innovation Area using the following scale.

	1 Agree very strongly	2 Agree strongly	3 Agree	4 Disagree	5 Disagree strongly	6 Disagree very strongly	I don't know / not applicable
The transnational projects funded through the network helped the national/regional research communities and companies to gain knowledge from excellent European and Global Research communities and companies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The transnational projects helped the national/regional research communities and companies to transfer/disseminate knowledge to European and Global research communities and companies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The transnational projects helped our regional/national research communities and companies to better collaborate with European and Global research communities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The transnational projects fostered research excellence, technological development and innovation in the field of materials for Low Carbon Energy technology among our regional/national research communities and companies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The regional/national programs topics, rules, dates and processes have been adapted in a way that increasingly facilitates cross-border project cooperation (since you started participation in the M-ERA.NET 2 or its predecessors).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Topics and projects with relevance for the national/regional research/innovation policy were addressed, which could not have been realized in a regional/national network alone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compared to purely national/regional projects, the average overall quality of transnational projects, in which researchers from my country/region were involved, is higher.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Projects were realized that delivered the results faster or cheaper (in comparison to alternatively purely national projects).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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26%

## Network Management

Looking back, please indicate the overall impression of the management of the network on the following scale.

	1 Agree very strongly	2 Agree strongly	3 Agree	4 Disagree	5 Disagree strongly	6 Disagree very strongly	I don't know / not applicable
M-ERA.NET 2 has an efficient and adequate network management structure that allows for flexibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The networks decision making processes are transparent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The activities of the network are adequately designed and implemented to support the <a href="#">ERA-objectives</a> and targeted results	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please name aspects of network management that could be further improved.

Please name aspects of network management that should be added in the future.

Please name aspects of network management that should be stopped.




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53%

## Impacts on coordination and cooperation

Please indicate to what extent you agree with the following statements about the impact of M-ERA.NET 2 on the coordination and cooperation of regional/national funding program.

	1 Agree very strongly	2 Agree strongly	3 Agree	4 Disagree	5 Disagree strongly	6 Disagree very strongly	I don't know / not applicable
The network helped to enhance my capability with regards to good innovation program design and management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The quality of my national/regional research funding program has been improved due to these capabilities and/or good practices adopted from other network members or due to joint implementation of tasks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The design of regional/national funding programs (including topics, rules, dates and/or processes) have been adapted in a way that increasingly facilitates cross-border program cooperation (since you started participation in the M-ERA.NET 2 or its predecessors)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The calls were part of an approach to align national/regional and European roadmaps/strategies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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60%

## Participation in M-ERA.NET 3

Does your agency participate in M-ERA.NET 3?

☐ Yes

☐ No

Which of the following aspects did rather drive or hinder your motivation for continued participation in M-ERA.NET 3?

	1 strong driver for sustained participation	2 driver for sustained participation	3 neutral/no impact	4 barrier to sustained participation	5 strong barrier to sustained participation	I don't know / not applicable
The support of M-ERA.NET to our respective internationalisation strategy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The national/regional budgetary situation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expected output-Effectiveness of M-ERA.NET to initiate a sufficient number of transnational projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alternative/Additional Funding Opportunities for transnational projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The openness for partners from widening countries (EU 13)*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our Experiences with M-ERA.NET, please specify: <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other aspects, please specify: <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

\* [https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/widening-participation-and-spreading-excellence\\_en](https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/widening-participation-and-spreading-excellence_en)

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86%

## Next steps

Do you intend to participate in the M-ERA.NET 2 assessment workshop (virtually 26.11.21 - 09:00-12:30)?

- ☐ Yes
- ☐ No

Can we contact you by telephone or e-mail to explore some of the above mentioned aspects further?

- ☐ Yes, please use the following e-mail-address/telephone number:
- ☐ No

*Your contact information will only be used to contact you for survey and will not be stored in any other database. Your answers to the survey will not be linked to your personal and contact data in any way.*

[... zurück](#)[Complete questionnaire](#)

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## 7.4 Questions deep dive workshop

### M-ERA.NET 2 Assessment Workshop

November 26th, 2021

#### Questions for breakout sessions

##### 1) Alignment with national/regional priorities

- a) Are M-ERA-NET cofund actions and joint calls well aligned with national/regional internationalisation strategies? When you look back at call topic planning in M-ERA.NET 2: How well suited did you find M-ERA.NETs approach to assure this?
- b) To what extent are the international topics implemented by M-ERA.NET relevant for your national/regional strategy?
- c) Can you describe good practice examples from your country/region about the coordination of national and international research priorities?
- d) To what extent have M-ERA-NET partnership partner programmes have access or even influence to European and global foresight and roadmaps (actors), and to coordination processes between national and European deciders about research agendas and themes? Do you judge that M-ERA.NET and their national partners are adequately regarded in these processes, given the relevance of its “funding power”?
- e) Which additional or modified action would you like to have initiated by M-ERA.NET or the partnering countries administrations/ministries to improve research call theme coordination between nations, regions, and the Commission? (if at all)

##### 2) Impacts on national/regional funding systems

- a) What are effective measures to influence the number of proposals (in order to control applications towards a realistic number of projects that can be funded later)?
- b) What are effective ways to control/balance national funding budgets in order to finance as many well rated projects as possible?
- c) In what way did the participation in M-ERA.NET 2 improved the quality of national/regional funding programmes?
- d) What have been effective measures to facilitate cross-border cooperation in regional/national funding programmes?
- e) What are best practices with regard to the alignment of national and international application (and monitoring) processes?

### **3) Promotion of research/innovation results**

- a) What are effective ways to promote research/innovation results? Which actors should be involved?
- b) To what extent are existing transfer structures currently being used in your region/country? How could this be improved?
- c) One of the USPs of the network is the collaboration between leading academic and industrial research partners across Europe and beyond. What could be effective measures by the network itself in order to ensure that research results are taken up by the (European) market?

### **4) Results of survey – applicants**

In-Depth Analysis of survey results: Are there any differences between certain groups? And if so, how could they be explained? How can certain aspects, e.g. with the application process, be improved?