



NEWSLETTER

TOWARDS A WORLD FORUM ON RAW MATERIALS

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World Resources Forum 2017

The annual **World Resources Forum** WRF 2017 was held in Geneva, Switzerland on the 24th and 25th October 2017 with over 400 participants. Two years after the establishment of two historic global agreements - the **2030 Agenda for Sustainable Development** with its 17 Sustainable Development Goals (SDGs) and the **Paris Agreement on Climate Change** - leaders and other agents from government, business, research and NGOs came to "UN capital" Geneva, to talk about how to accelerate the Resource Revolution. The two-day conference was opened by Valentin Zellweger, the Permanent Representative of Switzerland to the United Nations in Geneva.

WORKSHOP ON "INTERNATIONAL COOPERATION ON RAW MATERIALS IN THE EUROPEAN UNION HORIZON 2020 PROGRAMME"

Partner workshops were held on various topics related to the main theme of the WRF 2017 conference, including workshop "International Cooperation on Raw Materials in the European Union Horizon 2020 Programme", organized by the FORAM Management Committee in coordination with the European Commission.

This workshop is related to the Horizon 2020 funded project, FORAM, which aims to develop a platform of international experts

and stakeholders that will enhance the international cooperation on raw material policies and investments: Advancing the idea of a World Forum on Raw Materials.

Projects participating in this workshop were four H2020 projects covering the subjects of the International Cooperation Pillar (**FORAM, MinFuture, INTRAW** and **STRADE**), eight projects covering the Non-Technology Pillar (**MICA, MIN-GUIDE, MINATURA 2020, ProSUM, SCREEN, MSP-REFRAM, SMART GROUND, IMPACTPaperRec**) and one project from the Technology Pillar (**VERAM**), all in the framework of the Strategic Implementation Plan (SIP) of the European Innovation Partnership on Raw Materials and in the funding scheme of Coordination and Support Actions (CSA).

They have been chosen to improve framework conditions and international cooperation in the raw materials sector from different perspectives. These projects were expected to share their experiences, increase each other's understanding, explore synergies and together develop and advance ideas for enhanced international cooperation on all aspects of the raw materials value chain.



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Editorial board: Nancy Savall and Jelena Vidovic Design & production: www.tango-grafix.be

FORAM Stakeholders Panel – who are our stakeholders and what are their needs?

SETTING UP THE EU-BASED PLATFORM OF STAKEHOLDERS

Setting up the EU-based platform of stakeholders lasted 12 months and was carried out by EuroGeoSurveys (EGS) with the help of Advisory Board, Consortium Partners and EGS 3rd parties, who have provided the list of potential stakeholders coming from their extensive contact networks. Approximately 1,700 contacts were initially collected. After removing duplications and selecting the most relevant ones, 850 remained. Until now 90 have agreed to be part of the network and around 200 are expected to be involved.

WHO ARE OUR STAKEHOLDERS

FORAM Stakeholders Panel gathers extensive network of contacts representing major raw materials communities extending all over the world: Europe, Asia, Africa, Australia, North and South America, with predominance in Europe (Figure 1). It has relevant coverage related to the entire raw material value chain, with predominance in mining of primary raw materials, extraction and processing (Figure 2). Furthermore, FORAM Stakeholders Panel represents a heterogenous group of stakeholders covering various sectors, with predominance in research and industry (Figure 3).

STAKEHOLDERS OPINIONS AND RECOMMENDATIONS

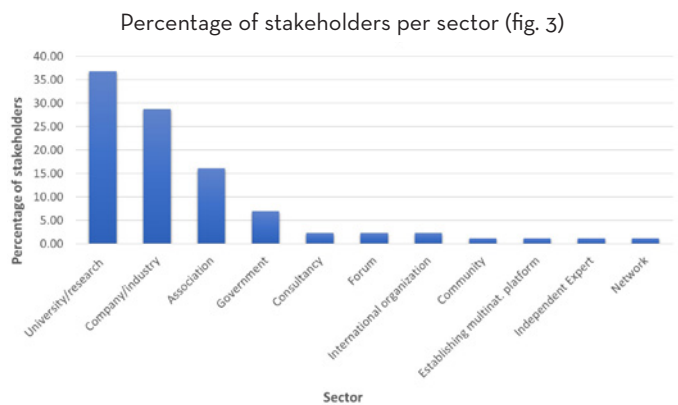
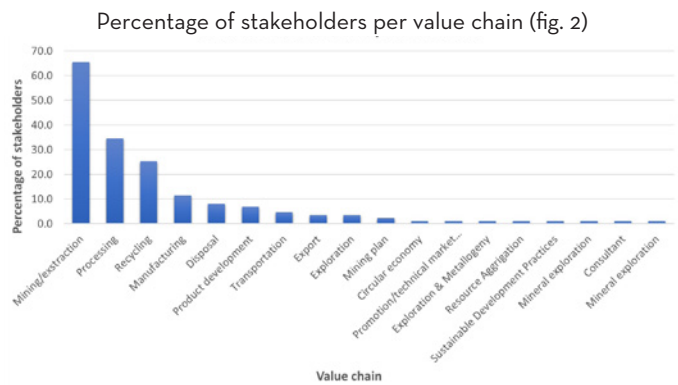
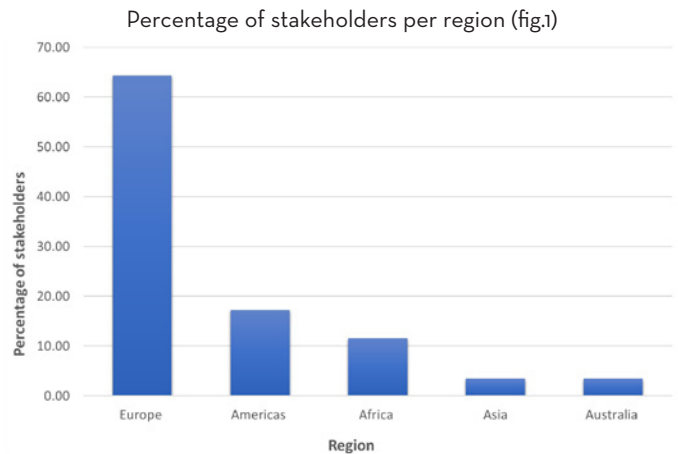
According to our Stakeholders Panel, current most pressing needs in the raw material sector are: boosting resource efficiency and fostering sustainable supply, followed by the importance of information sharing, improving legislative framework and ensuring social and environmental standards (Figure 4).

More than 65% of our stakeholders believe that establishing World Forum on Raw Materials would be important or very important (Figure 5), while its main objectives should cover different topics, starting from higher resource efficiency, supply chain transparency, to advance recycling, waste management and raising awareness for raw materials industry (Figure 6).

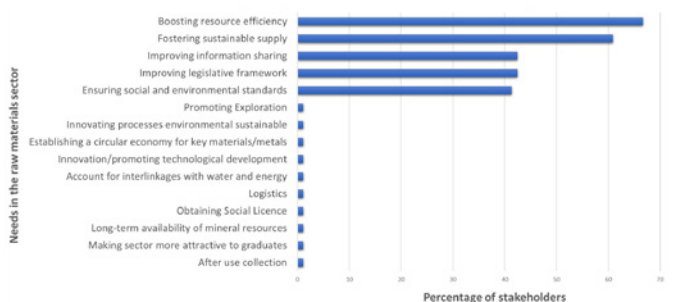
NEXT PHASE: SHAPING CLEAR VISION AND FIRST STAKEHOLDERS' DIALOGUES

Stakeholders Network will be subdivided into interest groups, and a meaningful clustering of the stakeholders will be carried out. It is planned that a relatively simple structure will be initially set up, which will naturally evolve during the duration of the project and beyond. During the last phase the aggregation of stakeholders into target groups will take shape, and clear scope, mission, vision and mandates of each of them will be prepared, as well as dependencies, linkages and synergies.

Finally, stakeholders' dialogues will be initiated. The dialogues will revolve around the need for fair and unrestricted access to raw materials and for joint and coherent approaches towards raw materials supply, policy and investment; the stakeholders will be invited to share experiences about their needs, threats, priorities and preferences with the aim to initiate exchanges and interactions that facilitate raw materials trade and for better coordination of relevant raw material initiatives and actions.



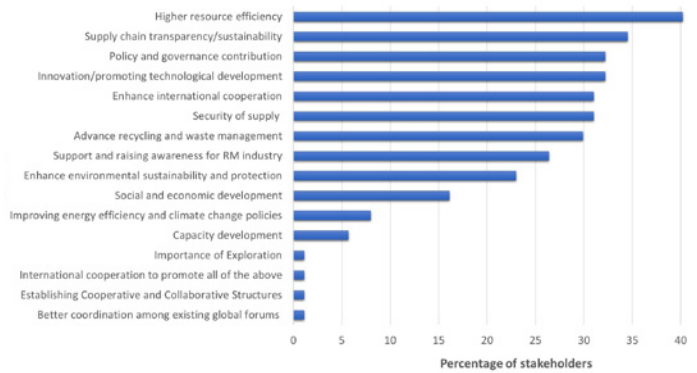
Current most pressing needs in raw materials sector according to FORAM Stakeholders Panel (fig. 4)



The added value of a World Forum on Raw Materials according to FORAM Stakeholders Panel (fig. 5)



Suggestions from FORAM Stakeholders Panel about main objectives of World Forum on Raw Materials (fig. 6)



Global mapping of existing Raw Materials initiatives

The first Work Package of the FORAM project intended to lay a solid foundation for the expert and stakeholder platform developed during the entire duration of the project. It included analysing and evaluating existing international activities and stakeholders, data availability on raw materials, the interrelation between them and the identification of gaps, hurdles and common needs through a scientific sound and realistic set of indicators.

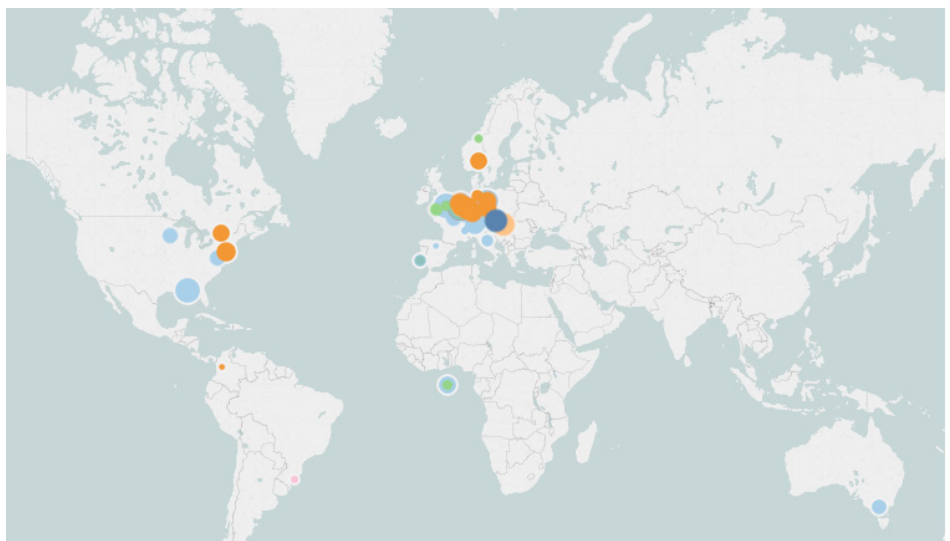
The main outcomes of the work package are a global mapping of existing initiatives along the life cycle of non-energy and abiotic raw materials, as well as a directory of databases on primary and secondary raw materials. These will be available and kept updated on the project website throughout the duration of the project.

MAPPING AND ASSESSMENT OF MULTI-STAKEHOLDER INITIATIVES

The FORAM project mapped multi-stakeholder initiatives working on raw materials globally. Through an online questionnaire, information was collected on the initiatives' organisational structures, 'objectives and strategies', 'type of raw materials', 'number of stakeholders', 'step in the value chain' and more. With this information, the FORAM project has created an overview of currently active multi-stakeholders groups. More than 100 initiatives have been mapped that are related to the primary and secondary raw materials sectors (such as associations, fora, platforms etc.).

To see the results, please visit the online interactive Geo-map (www.foramproject.net), where you can scroll over the individual initiatives to find more information. In our Results section, some

analytical graphs can be found based on these results. These data and information will be checked and updated until the end of the project and initiatives still have the opportunity to register on the website. In addition to the mapping and assessment of initiatives, the FORAM project developed a methodology with metrics, that can be used to rank the multi-stakeholder initiatives based on selected categories.



Foram has mapped over 100 (multi-stakeholder) initiatives related to raw materials. On the FORAM website www.foramproject.net, an interactive map can be found with information on each initiative, as well as more analytical graphs.

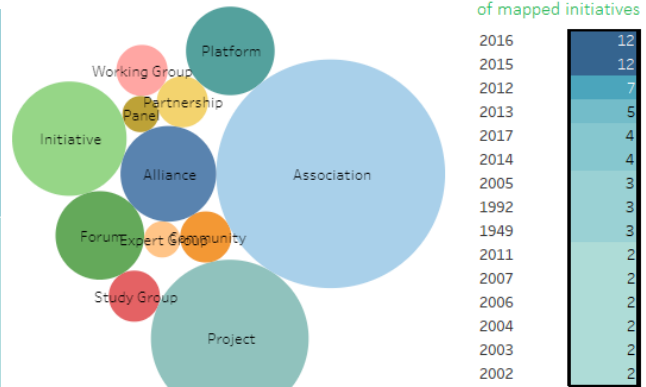
Type of stakeholders in the mapped initiatives

Type of Stakeholder	Count
Company/Industry	71
University/Academia/Research center	48
Government department/organisation	31
Association	20
Non-governmental organisation	17
Intergovernmental Organisation	16
Civil society/the public	12
Initiatives	9
Other	3

Objectives and strategies of the mapped initiatives

Other	Support and raising awareness for raw materials industry	Supply chain	Higher resources efficiency	Advance recycling and waste
Policy and governance contribution	Innovation/promoting technological development	Capacity development	Security of	Social and economic
Enhance environmental sustainability and protection	Enhance International Cooperation	Social and economic development (developing countries)	Improving energy efficiency and climate	

Organisational structures of the mapped initiatives



DIRECTORY OF DATABASES ON PRIMARY AND SECONDARY RAW MATERIALS

The FORAM project created a directory of databases on primary and secondary raw materials. In total 108 databases were collected and evaluated, with for each database information on the: name, description of the content, the type of raw material, type of data and a link to the database. The information collected in the databases include 'the use and needs of raw materials in industrial sectors important for EU economy and society'; 'overall resources, geological

distribution, general availability and accessibility'; 'geopolitical, economic and financial information'; 'current status of use, re-use, recycling, substitution of raw materials'; and 'ecological and social impact'. The Directory of Databases will be available on the FORAM website in the coming month. Additionally, 19 'information sheets' were developed containing information on the industrial use, re-use, recycling and substitution of specific raw materials/group of raw materials taken from the Directory of Databases and the map of initiatives.

INTRAW and FORAM: Break Down the Silos in Raw Material Dialogue Brussels, 8 November 2017

In a joint meeting at the EU Raw Materials Week the European Federation of Geologists (EFG) and the Swiss-based World Resources Forum (WRF) have initiated strong action towards more cooperation amongst stakeholders across the world on raw materials research, dialogue and communication. Being consortium leaders of respectively the Horizon 2020 INTRAW and FORAM projects both organisations joined hands in organising a raw material dialogue roundtable on cooperation possibilities with interested partners from Europe and beyond.

EFG's President **Vitor Correia** started the session by welcoming the official launch of the International Raw Materials Observatory, a non-profit organisation which was launched on 7 November. The Observatory has been created to enhance worldwide cooperation on mineral raw materials' research and innovation, education and outreach, industry and trade and recycling, management and substitution of strategic raw materials. The Observatory is the main outcome of the EU Horizon 2020 funded project INTRAW. The new organisation will offer its members foresight dialogues with key influencers and match-making services for organisations active along the minerals materials value chain.

WRF Program Director **Mathias Schlupe** introduced the FORAM project which is said to be the largest collaborative effort to date for raw materials strategy cooperation on a global level. Built on an EU-based platform of international experts and stakeholders, it enhances international cooperation on raw materials policies,



making the complex maze of raw materials' related initiatives more effective. The initiative is supported by a large number of additional leading organizations, including EuroGeoSurveys, United Nations University, Clausthal University of Technology, and others.

Other participants in the roundtable were Mr. Wang Meng from Young Earth Scientists (YES) Network, China, Mr. Mitsutaka Matsumoto from Advanced Manufacturing Research Institute, Japan, and Ms. Deborah McCombe from RPA, Canada.

"Can we expect to have a Tesla in the mining sector?" (Vitor Correia)

Looking at upcoming trends – can we expect to have a “Tesla” in the mining sector – product life extension could be supported by companies Mitsutaka stated, as long as they are ready to change their business models.

McCombe added that mining companies that are planning to change their traditional methods can count on continued support by investors, who are willing to work with companies that care about Green Economy and resources for future generations. Key point for them is data reliance, disclosure and free flow of information.

Schluep commented that exporting waste for recycling in developing countries can lead to similar tensions in public opinion as the mining of primary materials. Waste can however be a valuable resource and provide business and decent employment opportunities, as long as the practices are improved and formalised, such as according to the recent ISO Guidance Principles for the Sustainable Management of Secondary Metals, which were launched at the Basel Convention Conference of the Parties in Geneva. These guidelines guide operators of secondary metals value chains, including the informal sector, in efficient and credible implementation of recycling practices, in particular in emerging and developing economies.

According to Wang Meng China needs to benefit from technology transfer in order to remain competitive. Almost 99% of the global rare-earth elements (REE) are produced in China. This is accompanied by serious environmental impacts. The same problem applies to the recycling methods that China is applying. It is essential for China to invest in transferring technologies for extraction of both primary and secondary raw materials.

As Correia concluded, the international cooperation has been made a reality by starting the dialogue. Silos need to be broken down and ‘one size fits all’ solutions do not exist.

Schluep announced that international cooperation in primary and secondary raw materials management will further be discussed in Nancy, France, on June 27, 2018. This “FORAM 18” pilot event will be organised back to back with a business oriented two-day World Materials Forum and is open by invitation only. Expressions of interest can be sent to the FORAM team, or by writing to info@wrforum.org

ABOUT THE RAW MATERIAL DIALOGUE ROUNDTABLE

The International Raw Materials Observatory and the FORAM project organised a roundtable on international cooperation on raw materials “catalyzing shared prosperity” in Brussels, on 8 November. This Raw Materials Roundtable was held during the European Commission’s Raw Materials Week.

The continuing rise in global population and living standards is increasing global demand for energy and raw materials, with consequent requirements for a broader and more diversified range of primary and secondary raw materials. This aspect, combined with the transition to renewable sources of energy, offers an opportunity to establish a new paradigm on raw materials supply, ensuring a fair share of benefits to raw materials producing regions and countries, while securing a stable supply to import dependent economies.

Grasping the benefits of this trend requires improving our insights in worldwide cooperation potential. It is essential to design new cooperation strategies, capable of breaking silos and engaging different groups of stakeholders in breakthrough dialogues. Developing a holistic approach on raw materials policies and governance of resources will be guiding such process.

This raw material dialogue roundtable presented the views of representatives of different groups of stakeholders from different world regions on the challenges associated to the exploitation and trade of raw materials obtained from primary and secondary sources (mining and recycling). The conversation also addressed social and political contexts, technological trends, policy gaps and opportunities for international cooperation, thus contributing to advance dialogues and governance solutions. The audience was invited to participate actively in the discussions.

ABOUT THE ORGANISERS

The International Raw Materials Observatory is a new independent, apolitical, international not-for profit organisation, set up to support international cooperation on mineral raw materials’ research & innovation, education & outreach, industry & trade and recycling, management & substitution of strategic raw materials. It has resulted from the EU Horizon 2020 funded INTRAW project, coordinated by the European Federation of Geologists (EFG).

FORAM is the largest collaborative effort for raw materials strategy cooperation on a global level so far. Centered on an EU-based platform of international experts and stakeholders, it aims to enhance international cooperation on raw materials policies, making the complex maze of raw materials related initiatives more effective. FORAM is an EU Horizon 2020 project, coordinated by the World Resources Forum Association.

For information send an email to info@intraw.eu and/or info@wrforum.org





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ON RAW MATERIALS



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COMMUNICATION



EUROGEO SURVEYS SECRETARIAT
The Geological Surveys of Europe

Rue Joseph II, 36-38
1000 Brussels
+32 2 888 75 53

info@eurogeosurveys.org

PROJECT COORDINATION



WORLD RESOURCES FORUM
SECRETARIAT

Lerchenfeldstr. 5
9014 St. Gallen, Switzerland
+41 71 554 0900

info@wrforum.org