

EuroGEOSS Showcases: Applications Powered by Europe

D5.20 Final Market Trends Observatory



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ABSTRACT

The overall aim of WP5 is the long-term sustainability of e-shape Pilots, their penetration in the public and private markets, and the support of their upscaling. This will be achieved by providing a wide range of support measures that will be accessed in a dedicated online environment — the e-shape Sustainability Booster, complemented by on-demand services supplied by qualified experts. The knowledge component of the e-shape Sustainability Booster is the Market Trends Observatory (Insights section of the Sustainability Booster website). This report is a continuation of D5.3 First Market Trends Observatory, presenting the latest updates and the ongoing editorial process that ensures the relevance and sustainability of the e-shape online environment.

The Market Trends Observatory is monitoring market trends, policy priorities, and technological developments in order to produce insights that could help e-shape partners, and the wider EO community as well, to capture associated opportunities. These Insights are accessible through a dedicated online environment. The latest articles are presented in this report along with user statistics. The selection of the topics has been done in full synch with the e-shape pilots. Subsequent batches will expand on these topics while adding new perspectives as markets, policy and technology evolve.

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Version Numbering		
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v1.x	After the first review	
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Vfinal	Deliverable ready to be submitted	

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TABLE OF CONTENTS

Α.	DSTRACT		_
T	ABLE OF C	CONTENTS	5
Lis	ST OF FIG	URES AND TABLES	5
1	6		
2	6		
3	7		
	3.1	7	
	3.2	9	
	3.3	10	
	3.4	11	
4	12		
5	12		
	Lis	T OF FIGURES AND TABLES	

Figures:

Figure 1: Insights landing page	7
Figure 2: Recent articles on the landing page	8
Figure 3: Content Management view (WordPress backend)	8
Figure 4: Master editorial tool	9
Figure 5: Timeline Market Trends Observatory	12
<u>Tables:</u>	
Table 1: Statistics of published articles since 1 May 2020	11
Table 2: Insights articles	12

1 INTRODUCTION

The overall aim of WP5 is to enable the long-term sustainability of the e-shape Pilots, their penetration in public and private markets, and to support their upscaling. In that regard, Task 5.2 focuses on providing e-shape partners with "Market Penetration Support". As part of this process, a "Market Trends Observatory" was designed and is operated throughout the project — and hopefully beyond. This deliverable is a continuation of D5.3 First Market Trends Observatory, explaining the need for upto-date market intelligence (chapter 2) when aiming at the long-term sustainability of the pilots developed in e-shape, and presents the updated technical/procedural and content (chapter 3) aspects of the Market Trends Observatory. The report concludes with a summary of the steps that will be taken (chapter 4) to ensure this resource provides value to e-shape and beyond.

2 NEED FOR MARKET INTELLIGENCE

The Sustainability Booster, as a whole, aims at supporting e-shape's Pilots in maximising their sustainability potential, whether in the real market (i.e. commercial exploitation) or within follow-up research and development activities. It does so by offering active support (e.g. business planning), but also by providing access to knowledge that can guide the meaningful development of the EO-based services developed in e-shape.

The Market Trends Observatory component of the Sustainability Booster focuses on the latter. It is designed and operates as a tool that monitors, analyses, and interprets developments and trends in the market (and technology) that are defining and changing the EO sector and the thematic areas that it supports.

Market intelligence – information about developments and trends in relevant markets, policy priorities, user requirements – enables better-informed decisions both for the design of the products or services as well as business models and sustainability strategies (e.g. regarding market entry, internationalisation, commercialisation). It is also a key resource allowing solution developers to identify relevant markets for their products/services and draw strategies on how to approach these markets. In that regard, it helps not only to ensure up-to-date awareness of the markets' status quo but also to find impulses for innovation, identify gaps in own or competitors' offerings, spot opportunities or threats, source technologies, and assess risks.

The Market Trends Observatory within the e-shape Sustainability Booster makes such knowledge available targeted particularly to the context of e-shape, its Showcases, and Pilots. This is a progressive effort, supported by employing continuous monitoring of developments and trends, desk research, and expert interviews. This way developments and trends are identified, analysed, and described. Insights derived from this activity are presented as actionable information to the e-shape partners and the EO community. This forms the basis for on-demand support provided by the Sustainability Booster – a tool that is conceived with a long-term operation in mind.

The "Final Market Trends Observatory" (described herein) describes the progress of the online environment since its launching and the observations dedicated specifically to the e-shape Showcases.

3 MARKET TRENDS OBSERVATORY (INSIGHTS)

The Market Trends Observatory aims to provide knowledge to e-shape partners and pilots, as well as to the broader Earth Observation (EO) community. Knowledge is provided in the form of online articles about developments and trends in the market, including policy priorities and market activities related to the thematic areas addressed by the e-shape showcases. These articles elaborate on implications for EO and are matched with e-shape showcases as well as EO application fields to ease access to relevant content for the users. It presents its content in an online environment which can be navigated by thematic areas (i.e. e-shape Showcases) and categories (market, technology, policy, investment) in the format of "brief insights" or "expert opinions".

3.1 Technical implementation

The technical implementation has been realised next to the e-shape public website under the subdomain https://sustainability.e-shape.eu/insights as a set of pages and functions for filtering and search. The content management system serving the website (WordPress) allows editing and categorising of market trends content as well as suggesting the user-related content. The development process was accompanied by e-shape's communication team (WP6), ensuring conformity with communication guidelines. WordPress being a content management system allows for the publication of articles in a contemporary fashion, supporting all end-user devices and browsers as well as suitable means of navigation, search, and browsing of contents.

Details of the technical implementation have been previously described in deliverable 'D5.3 First Market Trends Observatory'. Instead, here the focus is placed on some key processes (e.g. editorial process and collaboration with the Pilots) as well as usage statistics and improvements that will (i) ensure increased traction with visitors and (ii) better content for e-shape pilots and the EuroGEO community.

A complete overhaul of the overall website has been realised considering user feedback and other developments within e-shape to accommodate Pilots' needs. The website was re-launched in May 2021.

CLEAR ALL



Figure 1: Insights, new landing page

(10 min. (5 min. stocking at COP26: When it comes to going public, do ommon goal has been agreed on, Cities in a changing climate: the the slow and steady still win the doubts around its feasibility role of Earth Observation race? Or should you consider remain CLIMATE (de-)SPAC? CLIMATE POLICY INVESTMENT & FUNDING POLICY RUUTA SKUJINA STEFKA DOMUZOVA PHILLIP HARWOOD Plenty of fish in the sea but for Entrepreneurs and innovators at the centre of local innovation strategies in Europe: or rather why how long? The role Earth Looking back at a flagship project: observation satellites play in the Internet of Food & Farm 2020 fight against illegal, unreported or you should learn (more) about AGRICULTURE unregulated fishing **Smart Specialisation** TECHNOLOGY TRENDS ECOSYSTEM | RENEWABLE ENERGY | WATER MARINE TECHNOLOGY TRENDS POLICY DAIRE BOYLE STEFKA DOMUZOVA RUUTA SKUJINA

Figure 2: Recent articles on the landing page

FILTERED BY

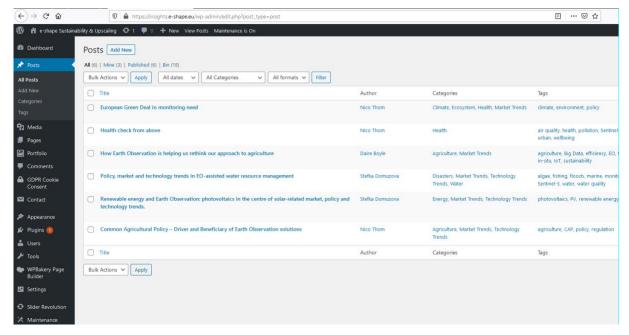


Figure 3: Content Management view (WordPress backend)

A link on the e-shape website (located at https://e-shape.eu/index.php/sustainability) guides users of the website to the Market Trends Observatory insights.

The WordPress implementation allows for categorisation and tagging of content, providing the users with possibilities to search using keywords as well as filtering by application fields, content types, and e-shape showcases.

3.2 Editorial process

To maintain a good understanding of the market and the forces shaping it, a designated team is regularly monitoring and discussing matters such as market trends, policy priorities, and technological developments every month, striving to interpret and share potential implications for EO-based activities. To this end, sectors of interest were allocated to the team members who have identified and followed an array of news outlets, databases, repositories, newsletters, RSS feeds, social media channels, etc. In many cases, this includes monitoring the online presence and published material by key stakeholders within the Copernicus ecosystem and beyond.

These efforts have ultimately resulted in a curated list of topics (regularly revised and updated) (see Figure 4) which, to some extent, focuses the team's news scouting. Topics of interest are subsequently researched and, if necessary, interviews with experts (from among the e-shape partners and beyond) are conducted. The resulting articles then go through a series of revision cycles (internal and/or with the contributing experts) to make sure the information is presented accurately and clearly. Special attention is paid to creating cross-references and synergies between the e-shape pilots and the written articles. For instance, CITIES IN A CHANGING CLIMATE: THE ROLE OF EARTH OBSERVATION makes references to pilot 2.3, 3.1, 3.2 and 7.2. Other examples are PLENTY OF FISH IN THE SEA BUT FOR HOW LONG? THE ROLE EARTH OBSERVATION SATELLITES PLAY IN THE FIGHT AGAINST ILLEGAL, UNREPORTED OR UNREGULATED FISHING (cross-reference to P5.5) and LOOKING BACK AT A FLAGSHIP PROJECT: INTERNET OF FOOD & FARM 2020 (cross-reference to P1.2, P1.4 and P1.5).

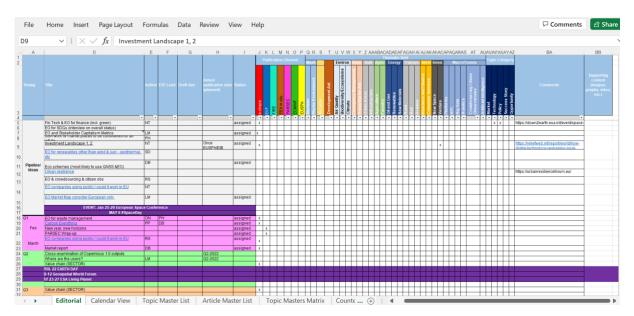


Figure 4: Editorial tool

The established editorial process seeks to ensure balanced coverage of the sectors and a continuous flow of published content.

The Market Trends Observatory is to be regularly updated throughout the project's lifetime to deliver insights of interest to the EO-based business.

3.3 Usage statistics

The Market Trends Observatory online environment was launched in May 2020 and has been regularly updated ever since. Whilst no major outreach campaign has been launched in this timeframe – as the implementors judged that only full capacity would render this advisable – each insight produced has been promoted through Twitter, LinkedIn, and the official e-shape account as well as other related accounts.

In the period of 1 May 2020 to 19 April 2022, there have been:

- 9,240 views
- 2,694 users

Notably, articles promoted through social media or the promotion of the website as such during events regularly saw peaks of users visiting. The promotion through e-shape's communication team as well as direct promotion at suitable occasions will thus be continued.

At this time, two components of the Sustainability Booster had considerable content of interest. Of the 9,240 page views during the indicated period

- 2,337 views were counted for the landing page of the e-shape Sustainability Booster,
- 1,250 views were counted for the landing page of the Insights section.

Interests are constantly measured to derive information needs and guide future content creation. For reference, below are presented the articles since May 2020 alongside the number total views and total users for calibration:

Table 1 Statistics of published articles since 1 May 2020

Articles since 1 May 2020	Number of views/ Number of users
Monitoring the status, function, and disruption of ecosystems	50/7
Swift as the wind: current and upcoming trends in the wind energy sector	59/18
The opportunity and challenge of building a Planetary Digital Twin	67/30
A far-reaching pandemic – COVID-19's impact on sectors where EO services could	53/14
make a difference	00/10
Wildfires going extreme – Earth Observation to the rescue!	82/42
Would your research benefit from taking a good look at our planet? Explore Earth Observation funding opportunities with OCRE	49/32
Show me the money! – Financial opportunities for emerging Earth Observation-based businesses	19/4
Key EO developments expected to define 2021 (part I)	54/30
Key EO developments expected to define 2021 (Part 2)	25/8
THE CLIMATE EMERGENCY: Monitoring greenhouse gases from space	86/54
Earth Observation Opportunities in Africa	92/53
Opportunities for Earth Observation-based service providers in Reef and Rigs-to-Reefs monitoring	39/17
Hitchhiking into the Galaxy – Rocket Ridesharing in support of EO uptake	13/7
Ready, Steady Analyse Data	40/29
Tide Gauges in Orbit: Applications of Satellite Altimetry	38/21
Looking back at a Flagship Project: Internet of Food & Farm 2020	77/34
Entrepreneurs and Innovators at the centre of Local Innovation Strategies in Europe: or rather Why You Should Learn (more) About Smart Specialisation	65/30
Plenty of fish in the sea but for how long? The Role Earth Observation Satellites play in the Fight Against Illegal, Unreported or Unregulated Fishing	108/54
Cities in a Changing Climate: The Role of Earth Observation	47/20
Coal in the stocking at Cop26: Common goal has been agreed on, doubts around its feasibility remain	65/27
When it comes to Going Public, do the Slow and Steady still Win The Race? Or Should You Consider (De-)Spac?	33/14
Total views /Total users	1,161/545

3.4 Improvements

Once the articles are published, Evenflow is in close collaboration with Ms. Mirka Rossi (Communication & Dissemination Specialist from NOA – WP6 Leader) concerning their dissemination across all the e-shape online channels. We aim to further that collaboration to content beyond the Market Trends Observatory (i.e. IPO, Investment Readiness) to benefit from their expertise in reaching different target groups when promoting content. While constantly listening to and further anticipating the information needs of the e-shape community (i.e. Pilots), attention is also being focused on making this information both digestible and accessible. Beyond insight articles, further formats are being developed to convey specific messages to the intended recipients in an appropriate way. These include the use of e-shape social media accounts (i.e. Twitter, LinkedIn) for shorter news in a "rapid-fire" fashion, as well as the introduction of formats such as podcasts. User interaction on the website has

been analysed, and findings have been used in changes to the user interface for improved navigation, annotation, and presentation of contents.

4 NEXT STEPS

The Market Trends Observatory will keep dynamically growing in content. The editorial process comprising of identification of relevant topics and editorial meetings for review, selection, and topics assignment will continue on a monthly basis. New collaborations with industry experts from Evenflow and e-shape's networks will be explored, as well as further synergies with e-shape Pilots. As one means of such collaboration, a monthly "Call for Topics" will be put in place from May 2022, asking e-shape pilots partners for topic ideas of their interest for upcoming Market Trends Observatory articles to (i) identify information needs and (ii) learn about further developments and trends of interest to e-shape. Where appropriate, the editors will reach out to experts from e-shape's partner network to verify descriptions and analyses, aiming to (i) add to the quality and relevance of articles and (ii) their wider dissemination. Besides the ongoing collaboration with the WP6 Leader, Evenflow will investigate with their team additional ways of disseminating the articles in the online environment, such as posting incorporated articles-related short webinars. Further efforts will be put into creating an even more user-friendly Market Trends Observatory.

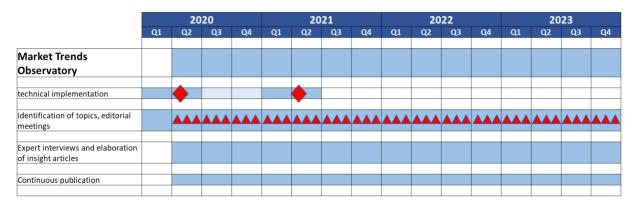


Figure 5: Timeline Market Trends Observatory

5 APPENDIX I: INSIGHTS ARTICLES

To this date, the following articles have been published under https://sustainability.e-shape.eu/insights/.

Table 2 Insights articles

Title	Author	Publishing date
EO achievements for disaster resilience bring new business opportunities	Ruuta Skujina	07/04/2020
Renewable energy and Earth Observation: photovoltaics in the centre of solar-related market, policy and technology trends	Stefka Domuzova	07/04/2020

Title	Author	Publishing date
Policy, market and technology trends in EO-assisted water resource management	Stefka Domuzova	08/04/2020
How Earth Observation is helping us rethink our approach to agriculture	Daire Boyle	15/04/2020
Health check from above	Nico Thom	22/04/2020
European Green Deal in need of monitoring solutions	Nico Thom	29/04/2020
Navigating the landscape of EO platforms	Nico Thom	30/04/2020
Monitoring the status, function, and disruption of ecosystems	Nico Thom	05/05/2020
Swift as the wind: current and upcoming trends in the wind energy sector	Stefka Domuzova	07/08/2020
The opportunity and challenge of building a Planetary Digital Twin	Valentina Balcan	13/08/2020
A far-reaching pandemic – COVID-19's impact on sectors where EO services could make a difference	Valentina Balcan	16/09/2020
Wildfires going extreme – Earth Observation to the rescue!	Nefeli Politi- Stergiou	05/10/2020
Would your research benefit from taking a good look at our planet? <u>Explore Earth Observation funding opportunities with OCRE</u>	Valentina Balcan	09/11/2020
Show me the money! – Financial opportunities for emerging Earth Observation-based businesses	Nico Thom	14/01/2021
Key EO developments expected to define 2021 (part I)	Lefteris Mamais	21/01/2021
Key EO developments expected to define 2021 (Part 2)	Lefteris Mamais	28/01/2021
THE CLIMATE EMERGENCY: Monitoring greenhouse gases from space	Dimitrios Papadakis	15/02/2021
Earth Observation Opportunities in Africa	Daire Boyle	24/03/2021
Opportunities for Earth Observation-based service providers in Reef and Rigs-to-Reefs monitoring	Valentina Balcan	07/04/2021
<u>Hitchhiking into the Galaxy – Rocket Ridesharing in support of EO uptake</u>	Nico Thom	21/04/2021
Ready, Steady Analyse Data	Phillip Harwood	05/05/2021
Tide Gauges in Orbit: Applications of Satellite Altimetry	Phillip Harwood	19/05/2021
Looking back at a Flagship Project: Internet of Food & Farm 2020	Daire Boyle	09/06/2021
Entrepreneurs and Innovators at the centre of Local Innovation Strategies in Europe: or rather Why You Should Learn (more) About Smart Specialisation	Ruuta Skujina	23/06/2021
Plenty of fish in the sea but for how long? The Role Earth Observation Satellites play in the Fight Against Illegal, Unreported or Unregulated Fishing	Stefka Domuzova	14/07/2021
Cities in a Changing Climate: The Role of Earth Observation	Phillip Harwood	27/09/2021
Coal in the stocking at Cop26: Common goal has been agreed on, doubts around its feasibility remain	Stefka Domuzova	26/11/2021

Title	Author	Publishing date
When it comes to Going Public, do the Slow and Steady still Win The	Ruuta Skujina	07/04/2022
Race? Or Should You Consider (De-)Spac?		