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WHITE PAPER

# The Role of Low-Code Earth Observation Tools in Accelerating the Sustainability Transition

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# Contents

# Introduction

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The protection and restoration of our natural world is critical in the transition to a sustainable future. Sustainability is now a business imperative. Every business, including financial institutions, must assess their own exposure and the exposure of supply chains to climate risk.

New regulations are coming into force which require deep knowledge of supply chain sourcing (e.g. EU's Deforestation-Free Products) and of climate risks and opportunities (The European Climate Law, supported by the Taskforce on Climate-related Financial Disclosures (TCFD)). The Taskforce on Nature-related Financial Disclosures (TNFD) framework, currently in development, is set to be published later in the year. Like TCFD, TNFD is expected to be adopted by regulators.

Meeting these requirements present complex challenges, including accessing third-party data on supply chains to ensure that these are deforestation-free or solving the challenge of aligning lending and investment portfolios with net-zero emissions targets. Gathering data and insights needed to report with accuracy and transparency is yet another.

Satellite imagery and Earth observation (EO) allow large-scale monitoring of geographically distributed or difficult-to-access assets. Game-changing serverless cloud-based infrastructures, alongside breakthroughs in artificial intelligence, are transforming how EO data is accessed, distributed and consumed. Many sectors are now discovering and rapidly taking advantage of the combined power of cloud and EO to meet reporting requirements. The finance and insurance sectors are amongst the fastest-growing markets in this space.

The demand for staff with a rare combination of skills (solid coding skills, expert remote sensing expertise and deep domain knowledge) is fast outpacing supply. To meet this fast-growing demand, tools that remove the need for coding and deep remote sensing knowledge are needed to empower sustainability teams to rapidly measure and disclose the impacts, risks and opportunities of climate change. The regulatory landscape and the climate urgency are not forgiving: such tools must allow teams to scale fast without compromising on customisability, transparency, and trustworthiness.

This white paper explores how low-code tools, such as Earth Blox, are empowering enterprises to accelerate their sustainability transition with Earth observation insights.

# 1. The Value of Earth Observation

Earth Observation (EO) is defined as the process of acquiring observations of the Earth's surface and atmosphere via sensors. These sensors are primarily mounted on satellites but can also be on aircraft, drones, or installed on structures located above the surface of the Earth. These sensors collect data in the form of digital imagery[1].

For the last several decades, EO has been an essential tool for monitoring the planet and how it changes over time. EO has propelled our understanding of climate change and allowed us to measure the scale of our human impact: satellites have provided a clear, uniform and continuous picture of changes across the planet.

Figure 1: Sunderbans (Credit: ESA/Copernicus).

In the past decade, the EO industry has been undergoing a revolution of sorts, partly as a result of decreasing costs of space access, miniaturisation of satellite components and the rising need for eyes in the sky across sectors. The last few years have seen a remarkable number of Earth observation satellites launched (Earth observation satellites are defined as those which are used specifically to monitor the state and changes on the Earth, human activities and the relationship between the two).

EO satellites serve a variety of functions – from taking high-resolution images to monitor target areas, such as conflict zones, to acquiring data about the state of the atmosphere for weather forecasting purposes. Traditionally, EO satellites were built, designed and

[1]https://business.esa.int/newcomers-earth-observation-guide

launched primarily for scientific purposes and by governmental agencies. The past decade has seen a boom in privately-funded EO companies launching commercial satellites. This commercialisation of space is often referred to as the NewSpace[2] revolution. Out of the 5,467 satellites in orbit (May 2022), 20% are Earth-observing satellites, of which >50% are now owned by commercial satellite companies.[3]

## Earth Observation Applications

EO serves 17 different market segments[4]. The distribution of revenues across these is presented in Figure 2. The revenues include the sales of EO data as well as the creation of value-added services, such as those described in this document.

This white paper focuses on *Biodiversity, Ecosystems and Natural Capital (hereafter referred to as* "Nature-Based Solutions"), *Environmental Monitoring (*in the context of sustainability reporting and compliance), and the *Insurance and Finance* segment (the segment expected to see rapid growth and become the dominant segment over the next decade).

[2]https://ntrs.nasa.gov/api/citations/20150023562/downloads/20150023562.pdf

[3]https://www.ucsusa.org/resources/satellite-database

[4]https://www.euspa.europa.eu/sites/default/files/uploads/euspa_market_report_2022.pdf

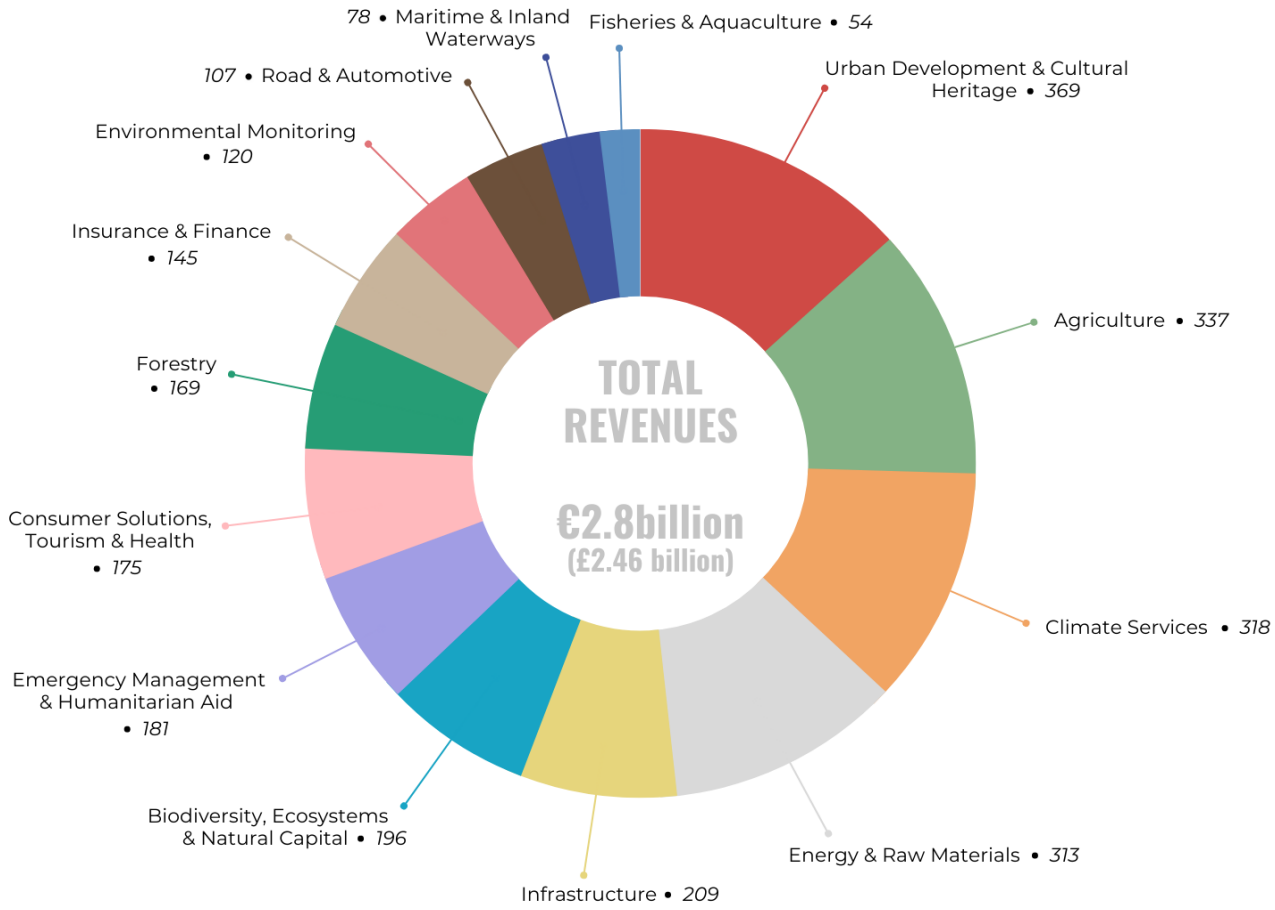


Figure 2: Total revenues in Earth Observation, distribution by market segment (in millions of euros).

## Extracting value from Earth Observation

Organisations interested in leveraging the power of EO for business insights have traditionally had three options:

- **Build in-house solutions:** Building in-house involves identifying business needs, developing an EO data strategy addressing those needs and implementing the strategy (from data acquisition and processing to setting up the computing environment to acquiring and/or building the skills required to create the relevant EO applications or services). This offers organisations ownership of the entire process but at high costs and lengthy development time. The skillsets required for a team-building EO solutions include advanced coding skills, expert remote sensing understanding to generate meaningful metrics from the electromagnetic signals, and, importantly, deep domain expertise to deliver educated interpretations and insights from the EO-derived metrics.

- **Off-the-shelf insights:** Ready-made solutions can be found that meet narrow but highly tailored business needs. Off-the-shelf solutions generally suit organisations with limited and highly tailored needs for EO. With off-the-shelf, plug-and-play products, organisations derive benefits from EO immediately. However, organisations with global operations and diverse EO needs (e.g. requiring regular monitoring of remote and diverse assets) would need many solutions/providers to meet such a suite of needs, presenting cost, procurement and integration challenges.
    - ***Outsourcing:*** The skillsets required to build in-house can be prohibitive for some. As a result, many choose to outsource this expertise to geospatial consultancies. EO consultancies dominate the downstream EO industry. Consultancies offer highly tailored services and may build or deliver one-off answers or custom solutions. Given the niche nature of the geospatial sector, this is a popular strategy for some organisations that do not want to build in-house EO data processing teams, and instead choose to have the solution delivered, while working together with the consultancy.

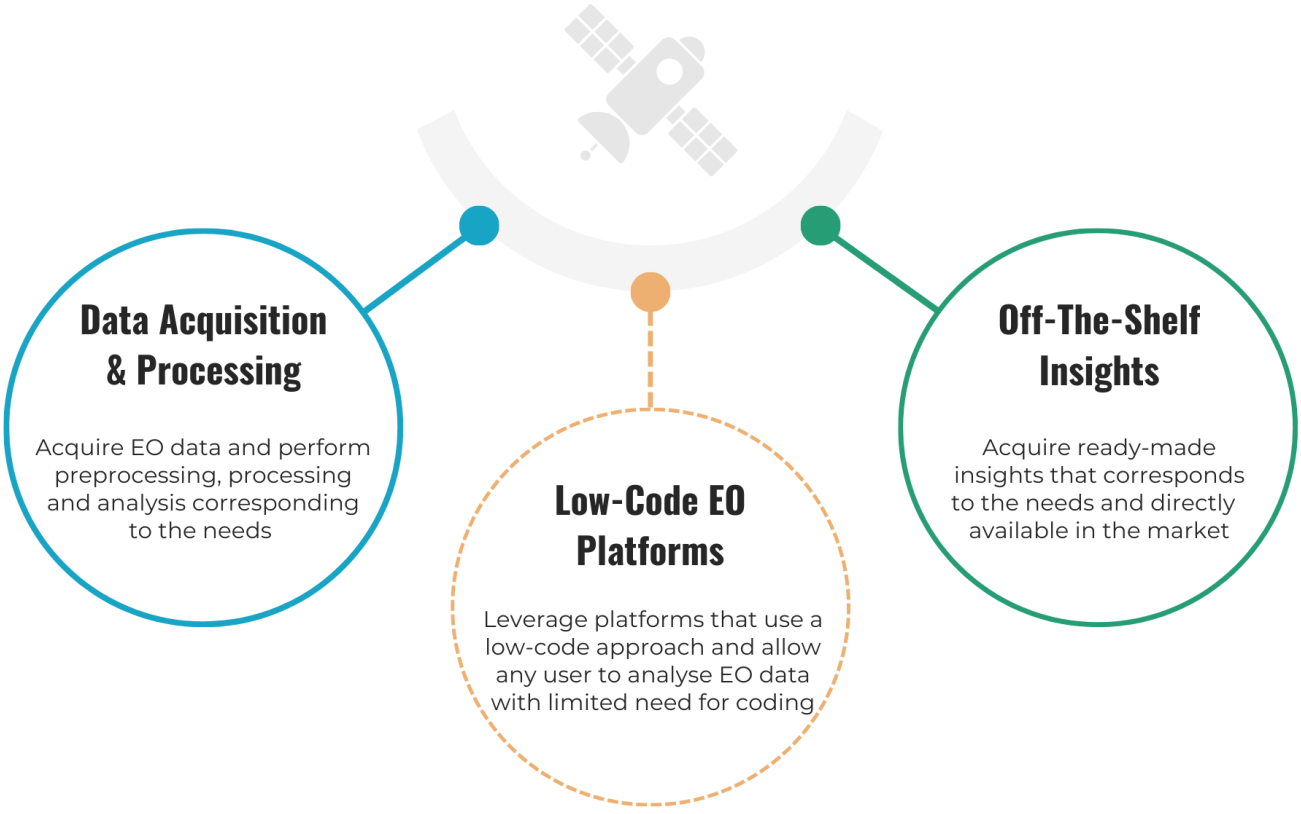


Figure 3: Extracting value from Earth Observation - three models.

## Low-Code EO platforms

Low-code approaches are widely used to build and customise enterprise-scale solutions rapidly. Popular examples include solutions build software (e.g. builder.ai, airtable.com), marketing tools (web design, webflow.io) and sales accelerators (zapier.com). By removing the need to code, these low-code platforms remove prohibitive barriers to entry and democratise access to a wide range of empowering technologies.

Thanks to the game-changing rise of serverless native cloud infrastructures, a fourth approach is emerging in the EO industry. Low-code EO platforms now enable the creation of customised EO insights at scale. These cloud web-based tools allow processing and analysis of EO data in no time to derive actionable insights. Some applications require no coding (for simple applications) others require a limited amount of coding (for the most advanced, less mainstream applications).

In the case of EO, low-code EO platforms present the additional advantage of removing the need for a deep understanding of the peculiarities of remote sensor types and design, e.g. orbits, bands, repeat periods and knowledge of how the electromagnetic signals interact with different objects and surfaces. These now enable both the EO experts and non-experts to focus on the business objectives rather than on the mechanics of remote sensing.

This white paper provides an overview of low-code platforms for EO and their benefits. In particular, we focus on the performance of analyses compared with conventional solutions.

# 2. An Overview of Low-Code Development Platforms

“Low-code” in software refers to a development approach requiring limited programming to build applications. Low-code tools empower those with domain expertise and an understanding of business requirements to build software applications rapidly without investing time in programming.

In reality, the term “low-code” is a misnomer. Low-code tools and the applications they produce are powered by millions of lines of code running in the background. This code is hidden from the user. The art of any low-code tool lies in hiding the repeatable stack from the user (the plumbing) under an intuitive UI, leaving only the functionalities and processes the user should control. This reduces choice overload and facilitates a focus on decision-making directly related to addressing the business needs, dramatically accelerating software development and time to answer (as the underlying complexity is already solved and remains hidden).

The key characteristics of low-code development platforms and their application in EO are the following:

A. **Visual software development:** The software development process generally follows a command-based approach requiring developers to input instructions to build an application. However, low-code tools operate on a ***visual-first approach***, with a simple user interface made up of predefined, intuitive drag-and-drop components that allows any user to easily build an application corresponding to their needs. Low-code EO platforms are rooted in visual development, defined by simple, intuitive interfaces for software applications.

B. **Decoupling of code from logic:** While traditional software development is based on building logic through code, typically based on predefined semantics and syntax (called a programming language), low-code tools decouple code from logic. Essentially, this means that static code, which can be abstracted, is transformed into pre-built components (in Earth Blox, these are called “*blocks*”), allowing the user to build logic into the application. Low-code EO platforms allow users to use drop-down menus as well as drag-and-drop functionalities to create applications that provide insights from EO data.

C. **Integrated development environment:** While low-code platforms enable any user to create software applications quickly without needing to write their own code, low-code platforms still come with an Integrated Development Environment. This environment is a software suite that consolidates the tools required to write and test software. Users develop software and build applications based on procedural logic and interactive workflows. To derive insights from EO, a combination of static

and dynamic data streams might need to be integrated, which calls for an environment that would allow cloud-based data processing.

D. **Generalisation and encapsulation:** In software development, the term 'abstraction' is used to describe generalisation. That is, the process of removing the focus on some processes/algorithms in order to give more attention to processes/algorithms of higher importance *to the user*. In low-code tools, to achieve abstraction, complexities and operations that are repeatable and related to software mechanics are 'encapsulated', meaning hidden from the user. Operations that don't require customisation by the user (also referred to as 'plumbing') are abstracted and encapsulated, delivering a greatly simplified representation of the whole. This allows users to be presented with only meaningful choices to make, easing and accelerating decision-making related to the task at hand (rather than decision-making related to software 'plumbing').

The market for low-code development technologies is expected to grow by 19.6% from 2022 to $26.9 billion in 2023[5]. From Microsoft[6] to SAP[7], no-code and low-code platforms are seeing widespread adoption across enterprise software solutions. Even machine learning platforms such as Amazon SageMaker Canvas[8] are embracing the "low-code" approach, allowing any user to generate predictions from data. Low-code tools such as Notion, Stripe, Zapier and Shopify are used daily by professionals around the world.

Low-code development platforms bring a plethora of benefits to the users involved in the application-building process, but also to the organisations. Some of them include:

- **Faster route from innovation to revenue:** Low-code tools allow employees to test and iterate innovative ideas at a rapid pace by building prototypes and solutions. This dramatically reduces the time to test, validate and deliver from weeks to days. This can not only lead to benefits in terms of time spent but also in cost savings achieved through not investing in unsuccessful projects.

- **Increased operational efficiency:** While the world is rapidly transformed by software, it is estimated that less than 0.3% [9] [10] of the world's population has basic coding skills. The demand for coding skills far outstrips supply. While more professionals are starting to upskill, organisations leveraging low-code tools can grow faster. They further benefit from optimally focusing on higher-level strategic work rather than automatable, repetitive tasks.

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[5]https://www.gartner.com/en/newsroom/press-releases/2022-12-13-gartner-forecasts-worldwide-low-code-development-technologies-market-to-grow-20-percent-in-2023

[6]https://powerapps.microsoft.com/en-us/low-code-platform/

[7]https://www.forbes.com/sites/moorinsights/2022/11/15/sap-empowers-anyone-to-build-applications-and-automate-tasks-in-their-own-environment/?sh=6dc0d9be7617

[8]https://aws.amazon.com/sagemaker/canvas/

[9]https://www.worldometers.info/world-population/

[10]https://www.statista.com/statistics/627312/worldwide-developer-population/

- **Improved employee productivity and satisfaction:** As more professionals who have an aptitude for technology get into the job market, low-code tools allow them to leverage their digital skills to create impactful solutions. These tools require less experience and thus can be part of reskilling and upskilling initiatives. Employees are empowered to solve technical issues themselves and can lay the ground for advancing their own careers. This demonstrably leads to higher motivation and job satisfaction.

# 3. Low-Code for Earth Observation

Just as the “low-code” approach has propelled software development (builder.ai), marketing (webflow.io), and sales (zendesk.com), low-code can really accelerate the wider adoption of  Earth observation (EO), notably to accelerate the sustainability transition. Getting unique insights from EO is not straightforward: various and complex stages of analyses and interpretation are required between acquiring satellite data and translating those into actionable insights. This is where low-code solutions deliver immense acceleration and value to organisations, removing layers of complexity and enabling rapid leverage of EO for integration into sustainability applications.

Earth Blox, pictured below, is an example of a low-code platform specifically designed for EO applications. It allows users to derive insights from petabytes of planetary scale datasets with a simple and intuitive drag-and-drop interface. Earth Blox's code-free, Lego-like modular blocks enable users to rapidly map and quantify activities such as deforestation and mining, monitor supply chains, manage post-disaster recovery efforts and support nature-based solutions. Users of Earth Blox can access built-in analyses from an existing library of workflows, tailor their own workflows using the modular drag-and-drop interface, or develop bespoke analyses and custom applications together with the Earth Blox development team.

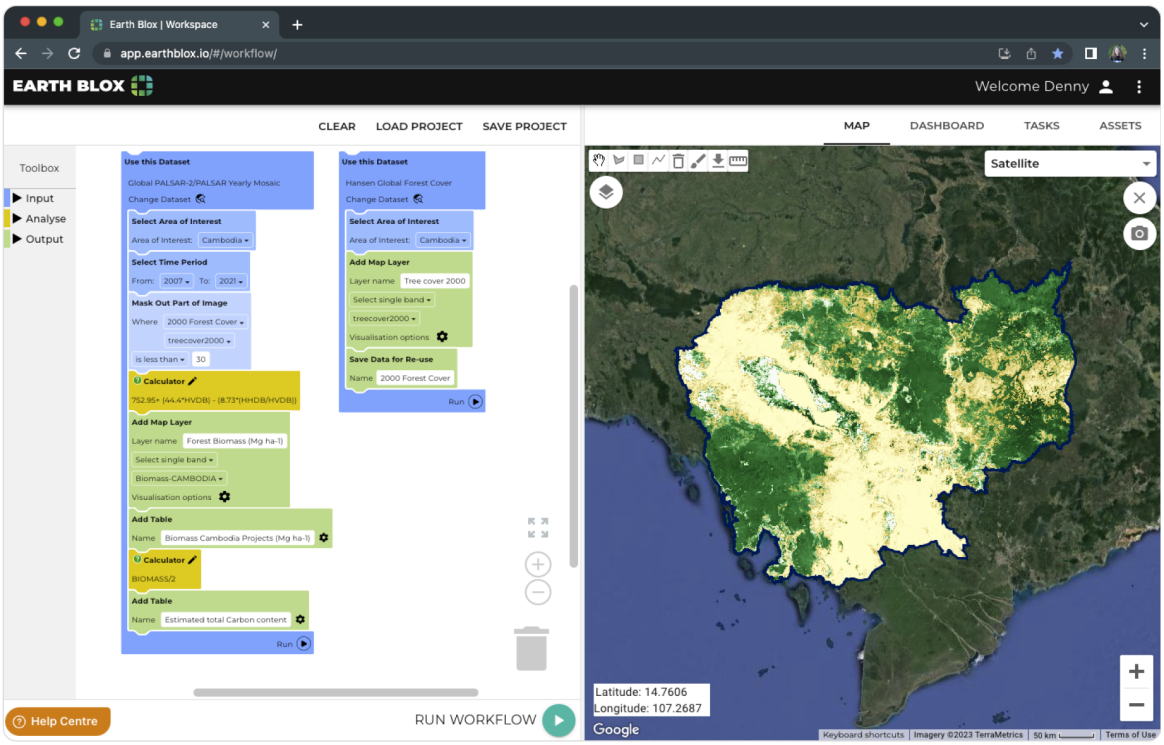


Figure 4: Low-code Earth Observation platform from Earth Blox (Source: Earth Blox).

# Analysis: User Profiles of Earth Observation Low-Code Platforms

In general, users interacting with and benefiting from EO can be classified into three categories: the experts, the analysts and the executives. The following figure summarises the user profile:

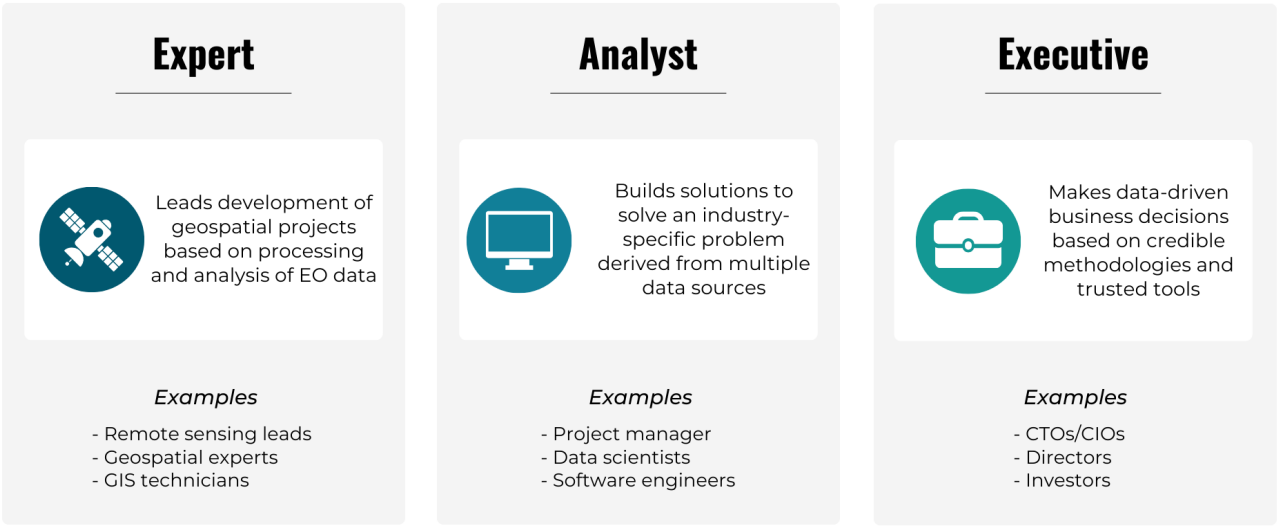


Figure 6: User profiles in Earth Observation for low-code platforms.

Low-code EO platforms have obvious benefits for non-experts. The benefits to the experts, particularly with respect to time savings realised through rapid prototyping and delegation of repetitive analyses, need to be underscored.

The following table summarises how low-code EO platforms are relevant for the three user profiles and the potential benefits and expectations pertaining to each category.

| User Profiles | Relevance | Benefits | Expectations |
|---|---|---|---|
| Expert  | Improve the individual and the team productivity by reducing time spent on mundane, repetitive tasks | Deliver the heavy lifting needed that will result in time gained for doing complex, in-depth analysis | Data integrity and transparency along with verifiable, credible methods backed by scientific and technical expertise |
| Analyst  | Provide an option to build customised applications that can deliver insights from EO data to be used for further analysis | Opportunity to build applications with EO despite having limited to no skills and expertise in EO | Deliver an intuitive, user interface that prioritises the 'job to be done' while requiring limited training and technical expertise |
| Executive  | Availability of a tool that can be used to build actionable dashboards leveraging objective EO datasets and verifiable methodologies | Cost savings thanks to employee productive time saved, effective resource allocation, and improved operational efficiency | Enable the development of applications across relevant use cases on a local and global scale, on-demand with a fast turnaround |

Figure 7: Relevance, benefits and expectations of low-code EO platforms for all user profiles.

# 4. Use Cases for Low-Code Development in Earth Observation

The applications of EO are spread across a number of use cases and industry verticals. A selected few are highlighted in this section, along with an analysis of the benefits of using low-code platforms for conducting EO data analysis.

## I. Nature-Based Solutions

Nature-based solutions (NbS) are actions and policies that protect, manage and restore natural ecosystems while addressing societal challenges[11]. Originally coined by the World Bank, NbS involves working with nature to address societal challenges (such as climate change, biodiversity loss and deforestation). EO has been used extensively to support NbS actions and policies, notably by monitoring, reporting and verifying [12]:

- Deforestation
- Historical land use/land cover change
- Sustainable reforestation
- Forest inventory and carbon assessments
- Carbon monitoring and sequestration
- Biodiversity and ecosystem accounting

Let's take a sample use case to illustrate this point: *Estimating forest cover loss over a specific time period within an area of interest*. Several solutions exist in the market, each making use of different data sources and processing techniques with different levels of accuracy and precision. A low-code platform like Earth Blox allows users to get started with analyses immediately and compare the performance of these different data sources and algorithms for their needs. The customisation of solutions further enables users to layer multiple, diverse datasets to build comprehensive, tailored insights for greater situational awareness. Earth Blox offers high-resolution imagery allowing users to zoom into areas of interest and visualise what's happening on the ground in near real-time. Likewise, users can further complement their understanding with further analyses of environmental factors, such as fire, flood, land cover change, forest, mangroves, and population growth.

[11]https://climatechampions.unfccc.int/what-are-nature-based-solutions-and-how-can-we-finance-them/
[12]https://www.admcf.org/wp-content/uploads/2022/10/Accounting-for-Biodiversity-Full-Report-Jan2023.pdf

The following table outlines the benefits of using Earth Blox, a low-code EO platform, versus using traditional geospatial solutions. Benefits can vary widely depending on use cases. Those presented in the table below are indicative for running a representative query: for instance, assessing the amount of forest loss and subsequent land cover for a given region and time period. The cost savings generated by using low-code platforms for deriving insights are an important benefit.

| Criteria | Traditional Geospatial Solutions | No-Code EO Platform (Earth Blox) | Benefits of No-Code EO Platform |
|---|---|---|---|
| Project Lead Time | 2 weeks to 4 weeks | 1 to 2 days | Ability to leverage pre-built blocks and available workflows to build a deforestation monitoring solution |
| Prototype Lead Time | 3 days to 1 week | 15 minutes to 2 hours | Rapid turnaround for building initial prototypes on-demand leading to effective project viability assessments |
| Resources Required (Personnel) | 5 to 7 people | 1 to 2 people | Cost savings achieved using the no-code platform for conducting analysis, supported by the Earth Blox expert team |

Figure 8: Comparison of benefits between traditional geospatial solutions and low-code EO platform

## II. Environmental Monitoring and Compliance

While national and international public bodies have long used EO data and services to monitor and protect the environment, the sustainability transition and regulation are now driving demand from the corporate sector[13].

EO is used in screening for **Environmental, Social, and Governance (ESG)** as it provides valuable information about the sustainability practices of companies and the impact of their operations on the environment and society. EO has a role to play in assessing and reporting on each of the ESG factors:

- **Environmental performance monitoring**: Measuring greenhouse gas emissions, deforestation, water use, and land-use change.
- **Social impact assessment**: Engagement with local communities or monitoring the effects of a company's operations on air and water quality in nearby areas.

[13]https://www.euspa.europa.eu/sites/default/files/uploads/euspa_market_report_2022.pdf

- **Governance assessment**: Monitoring compliance with environmental regulations or tracking the transparency of a company's reporting on sustainability issues.

The **Task Force on Nature-related Financial Disclosures (TNFD**) reports *"more than half of the world's economic output – US$44tn of economic value generation – is moderately or highly dependent on nature*[14]*"*. TNFD was established in 2021 to develop a framework for companies and financial institutions to report on their impacts and dependencies on nature and support the transition to a nature-positive economy. While TNFD is a voluntary framework, it is expected to be adopted by regulators in the same way as the Task Force on Climate-Related Financial Disclosures (TCFD) framework[15].

EO data provides insights into the state and trends of natural ecosystems and the impact of human activities on them. EO is used for reporting to TNFD in the following ways:

- **Ecosystem mapping:** Mapping forests, wetlands, and grasslands to assess the extent and distribution of different types of ecosystems and their vulnerability to human activities.
- **Ecosystem health monitoring**: Monitoring the health and integrity of ecosystems over time by tracking changes in vegetation cover, water quality, and other indicators of ecosystem health. This information is used to assess the impact of human activities on ecosystems and identify areas of high risk or opportunity for conservation and restoration.
- **Impact assessments**: Measuring the impact of human activities on ecosystems, such as deforestation, land-use change, and pollution. This information is used to quantify the extent and severity of these impacts and to support informed decision-making around mitigation and remediation strategies.

Low-code EO platforms provide a faster route to developing and operationalising environmental reporting solutions in-house. They enable the handling and analysis of large and disparate EO datasets without having to rely on everything being customised or outsourced. This gives the sustainability or business intelligence unit full control over timelines and budgets.

## III. The Financial Sector and Insurance

The past eight years have been the warmest on record. Over the past fifty years, natural disasters such as floods, droughts and wildfires have also increased by a factor of five[16],

[14]https://tnfd.global/about/#challenge

[15]https://greenly.earth/en-gb/blog/company-guide/the-taskforce-on-nature-related-financial-disclosures-everything-you-need-to-know

[16]https://public.wmo.int/en/media/press-release/weather-related-disasters-increase-over-past-50-years-causing-more-damage-fewer

causing hundreds of billions of dollars in losses on an annual basis[17]. Ecosystem degradation now affects global trade, putting nearly 58 trillion USD at risk[18] (two-thirds of our global economy).

This is why industry-led initiatives such as the Net Zero Banking Alliance, TCFD and TNFD, and transformational environmental regulations are driving action. The EU Green Deal and the EU Deforestation Regulation (EUDR)[19] are noteworthy. The EUDR mandates that all exports and imports of commodities and their derived products (palm oil, soy, cattle, wood, cocoa, rubber and coffee) be free from deforestation and forest degradation. To meet targets and reporting requirements, the financial sector now requires data which are often owned by third parties and inaccessible. That's where satellite imagery becomes essential.

Innovative solutions are available to lenders, insurers, reinsurers and other stakeholders. Rapid and timely insights from EO data help institutions monitor and set alerts on climate and nature impacts, risks, and opportunities for their clients.

Use cases are diverse and include:

- Deforestation monitoring and alerts on supply chains for commodities such as palm oil, soy, cattle, wood, cocoa, rubber and coffee.
- Natural disaster monitoring for fire, flood, droughts, pests, and diseases.
- Verifying client claims on improved practices (such as agrivoltaic set-up and regenerative agriculture) for preferential incentives and financial rates.

Due to their intuitive user interface and uncomplicated functionality, low-code EO platforms allow analysts to get rapid insights for their specific needs without seeking geospatial expertise. As an example, customers of Earth Blox in the insurance industry use the platform to regularly assess the likelihood of environmental risks such as severe flooding, fires, and hurricanes to underwrite claims. The benefits of low-code EO platforms include for the finance and insurance sectors include:

- **Growth acceleration:** enabling the team to deliver 10x the amount of risk assessments without adding additional staff.
- **Portfolio diversification and competitive advantage:** effectively, rapidly and reliably estimating impacts and risks (in the case of the customer above, forest burn scars, wildfires, and drought) anywhere in the world, including for areas with limited or no field data.
- **Reputational risk management:** documenting decision-making and claims using verifiable EO data and transparent scientific and peer-reviewed methodologies.

[17]https://www2.deloitte.com/be/en/pages/financial-services/articles/insurance-companies-climate-change-risk.html
[18]https://www.forbes.com/sites/feliciajackson/2023/05/24/with-58-trillion-at-risk-are-you-ready-for-nature-risk-reporting/
[19]https://environment.ec.europa.eu/topics/forests/deforestation/regulation-deforestation-free-products_en

- **Reduced lead time:** completing analyses in minutes (instead of days to months with conventional methods).

## Significance of Low-Code Earth Observation Platforms for Capacity Building

Aside from the commercially focused use cases discussed above, the significance of this technology in education and training is crucial. The evolution of the EO sector over the past decade, along with the rise in the launch of both public and private sector EO satellites, has resulted in the rapid growth of acquired geospatial data. This has inevitably led to increased demand for geospatial skills in the market.

A report from the UK Geospatial Commission that analysed job postings across the country found a remarkable increase in demand for geospatial talent across multiple sectors[20]. As such, training the existing workforce and educating upcoming generations becomes vital. EO data has a fundamental role to play in building solutions to address the ongoing biodiversity, environmental and climate crises, as well as implement policies that are aimed at solving them[2122]. As such, demand for EO skills and EO-driven analysis is expected to grow in the coming years, highlighting the importance of geospatial education for the future workforce.

Low-code EO platforms such as Earth Blox bring the following benefits to geospatial education and training, applicable for both students as well as working professionals:

- ➔ A practical training method teaching geospatial data handling and interpretation without having to learn how to code.
- ➔ An improved reach of students and professionals from a range of disciplines by eliminating the coding barrier to EO studies.
- ➔ A remote-focused education module with a cloud-based tool could reduce education inequality and spread geospatial knowledge around the globe.

[20]https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1073139/_Demand_for_Geospatial_Skills__report_.pdf

[21]https://climate.esa.int/en/evidence/role-eo-understanding-climate-change/

[22]https://www.frontiersin.org/articles/10.3389/fenvs.2022.941490/full

# 5. Outlook for Low-Code in Earth Observation

EO has a crucial role to play in our responses to addressing the biodiversity, environmental and climate crises and thus enables impact. With advancements in launch vehicles bringing down the costs of launching satellites and with innovation progress in spaceborne remote sensing instruments, we are poised to continue receiving more insights on our planet from satellites than ever before. We could soon have thousands of petabytes of data downlinked on a daily basis for data-driven decision-making.

Yet, this data will only be useful if used. The majority of users interested in leveraging the value of EO remain impeded by the scarcity of available EO expertise and programming skills and the high cost of consultancies. To scale the value of EO data beyond the space industry, solutions democratising EO, with a low barrier to entry, are needed.

A low-code platform like Earth Blox fills an important gap in the EO market. With its simple interface, it allows anyone to conduct EO analysis for actionable insights. The use cases are diverse, and users can be found across a variety of sectors, from NGOs to global Fortune 500 companies.

## About Earth Blox

Built by a team with extensive scientific and technical expertise, Earth Blox provides climate and nature analytics from satellite imagery, and other geospatial data, to help businesses accelerate their sustainability transition. The software maps and analyses key metrics for biodiversity, water and carbon across forestry, agriculture, and financed and insured assets worldwide.

Modular blocks allow users to build customisable and repeatable analyses in minutes on global datasets from Earth Engine, Planet and other satellite data providers. Ownership and control of data inputs and methodologies give full transparency in reporting to customers and stakeholders. The cloud-native, reactive and serverless architecture enables fast processing of petabytes of data for rapid analyses.

Our customers include ADM Capital Foundation, Climate Impact Partners, ForestRe, Ecologi, MercyCorps, The Nature Conservancy, and Veritree. Earth Blox is a Google Cloud Advantage Partner, Earth Engine expert, and a member of the TNFD (Taskforce on Nature-Related Financial Disclosures) Forum.

The Earth Blox team includes world experts in radar, optical and lidar, and PhDs in data science, who are committed to accelerating and increasing the adoption of satellite imagery insights for the sustainability transition.

Learn more at earthblox.io

## About TerraWatch Space

TerraWatch Space is a strategic advisory and communication firm exclusively focused on the Earth observation sector, working with public and private organizations globally on strategic, commercial, marketing policy-related and due diligence assignments.

Founded by Aravind Ravichandran, a recognized expert and communicator in the Earth observation (EO) and wider space industry, TerraWatch has experience delivering go-to-market and positioning studies, commercial strategy and due diligence assignments for startups, large enterprises, space agencies and investors. Aravind is also the author of the popular TerraWatch Space newsletter providing analysis and insights on the EO sector as well as the host of the TerraWatch Space podcast aimed at demystifying EO for all.

Learn more at terrawatchspace.com



Google Cloud Ready Sustainability

TNFD Forum Member