

# increase

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4	Tecnalia	Spain	TECN
5	CSTB	France	CSTB
6	KU Leuven	Belgium	KUL
7	VITO	Belgium	VITO
8	Institute of Baltic Studies	Estonia	IBS
9	Onyx	Spain	Onyx
10	Soltech	Belgium	Solt
11	SunStyle	France	Sus
12	Climacy	Switzerland	CLIM
13	Focchi	Italy	Focc
14	BECSA	Spain	BECS
15	Bouygues Construction	France	BYCN
16	Metabuild	Germany	MTB
17	CEInorme	Italy	CEI
18	EuropeOn	France	EU-on
19	Solar Power Europe	Belgium	SPE
20	European Builders Confederation	Belgium	EBC
21	Euskal Trenbide Sarea	Spain	ETS
22	Podgorica	Montenegro	POD



## EXECUTIVE SUMMARY

Increase is an innovation project aiming to promote the uptake of integrated photovoltaic (IPV) systems by delivering innovations in IPV modules, systems, design, and operation. To test IPV innovations in real-life conditions, the project conducts nine demonstrations across Europe. Two of the demonstrations require the export of standard IPV products from the EU to a non-EU country (both located in Montenegro). To strengthen market acceptance, the research and development activities are underpinned by a strong layer of user feedback and co-creation, which rely on collecting data from individuals. Some of the outreach and value chain engagement activities are targeted to stakeholders in Ukraine, which is currently in war. The project also applies artificial intelligence (AI) solutions in smart energy control systems that perform and suggest actions to users for optimizing energy use. All of these activities raise potential ethical issues, which are analyzed in this handbook.

This Ethics Handbook outlines the principles, procedures, and tools for ensuring an ethical management of the project activities. It also outlines the overarching ethics principles followed throughout the project. The key ethics principles include responsible research and innovation (RRI), research integrity, transparency, and commitment to environmental sustainability.

The handbook provides a detailed mapping of potential ethical issues in the project by work packages and tasks, and discusses the mitigation measures.

Since Increase involves human participants in the project activities, detailed guidelines are provided on how to ensure voluntary participation, data minimization and purpose limitation, and respect of data subjects' rights. Ethical guidelines regarding the deployment of AI include developing transparency of the algorithmic systems, and collecting and processing personal data for the smart energy control systems only upon informed consent.

The deliverable concludes with concrete guidance materials – the Ethics Checklist (Annex I), the standard Informed Consent Template (Annex II) and a sample Informed Consent Template for inclusion of participants in project stakeholder database (Annex III).



## GLOSSARY

**Algorithmic transparency** – a principle according to which algorithmic models and decisions should be transparent and understandable to the people who use, regulate, and are affected by algorithmic systems

**DNSH** ('Do No Significant Harm') – the goal of refraining from supporting or carrying out economic activities that significantly harm EU environmental objectives

**Equal treatment** – the principle that there shall be no direct or indirect discrimination based on racial or ethnic origin, sex, religion or belief, disability, age or sexual orientation<sup>1</sup>

**Ethics** – the moral issues that arise in relation to conducting an activity (such as research or innovation), including issues related to the protection of data subjects and the environment

**GDPR** – The General Data Protection Regulation (Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data). GDPR stipulates the principles and rules for the collection, processing, storage and dissemination of personal data in the EU.

**Gender equality** – the concept that women, men and people with non-binary gender identities have equal conditions, treatment and opportunities for realizing their full potential human rights and dignity, and for contributing to (and benefitting from) economic, social, cultural and political development<sup>2</sup>

**Informed consent** – a key research transparency and accountability tool that enables individuals to control the use of their data by explicitly consenting to the terms of data use before agreeing to participate in research

**Personal data** – any information relating to an identified or identifiable natural person, including but not limited to name, an identification number, location data, an online identifier or factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person<sup>3</sup>

**Privacy** – a fundamental right which refers to people's control and ability to make decisions about their data (e.g. who, how, when and for which purpose can process their data)

**Research integrity** – the process of conducting research in a way which allows stakeholders and the public to trust the methodologies and findings of research

**RRI** (Responsible Research and Innovation) – an approach that anticipates and assesses the potential implications and societal expectations to research and innovation by involving stakeholders and aligning outcomes with the expectations and ethical values of society

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<sup>1</sup> Definition based on the European Migration Network's (EMN) Asylum and Migration Glossary: [https://home-affairs.ec.europa.eu/networks/european-migration-network-emn/emn-asylum-and-migration-glossary/glossary/principle-equal-treatment\\_en](https://home-affairs.ec.europa.eu/networks/european-migration-network-emn/emn-asylum-and-migration-glossary/glossary/principle-equal-treatment_en)

<sup>2</sup> Adapted version of the UNICEF's definition: <https://www.unicef.org/rosa/media/1761/file/Genderglossarytermsandconcepts.pdf>

<sup>3</sup> Definition adapted based on the GDPR: <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32016R0679#d1e1489-1-1>



## 1. INTRODUCTION

Increase is an innovation project that aims to develop novel technological solutions for using solar energy. It focuses on advancing the uptake of integrated photovoltaic (IPV) systems by delivering innovations in IPV modules, systems, design, and operation, with the aim to improve the aesthetical appearance of IPV products, reduce their environmental impact, improve fire resistance, reduce glare, and prevent fouling.

To test the innovations, the project conducts nine demonstrations in real-life conditions. The Increase research and development activities are also underpinned by a strong layer of user feedback and co-creation to strengthen market acceptance. These activities involve collecting input from various stakeholders and individuals through surveys, workshops, and other means of engagement. This document, Ethics Handbook (Deliverable 9.3), outlines the principles and procedures to be followed in the Increase project to support an ethical management of all project activities. Building on the ethics self-assessment report conducted in the proposal phase, the handbook focuses on the following ethical aspects:

- involvement of human participants in co-creation and outreach activities;
- collection of (a limited amount) of personal data from individuals;
- deployment of AI-assisted smart energy control systems in two demonstration sites;
- export of IPV products from the European Union (EU) to non-EU countries in relation to the pilot activities in Montenegro;
- outreach activities in Ukraine in light of the ongoing war.

The handbook gives an overview of the ethical issues involved in these activities and provides guidelines and tools (including informed consent templates and an ethics checklist) for mitigating the foreseeable ethical risks and ensuring that all project activities are carried out in a lawful manner (foremost in accordance with the GDPR) and in line with ethics principles. It also describes the responsibilities for documenting ethics-related processes. Moreover, the handbook outlines the overarching ethics principles – responsible research and innovation, and commitment to environmental sustainability – that will guide Increase partners throughout project implementation.

The Ethics Handbook is closely related to the Increase Data Management Plan (Deliverable 9.2), which specifies the procedures for handling (non-personal) data processed or generated in the course of project work. The guidelines provided in the handbook also form part of the quality assurance policy described in more detail in the Project Handbook (Deliverable 9.1).





## 2. OVERARCHING ETHICS PRINCIPLES

The Increase project partners commit to conducting all project activities in an ethical and responsible manner, respecting human dignity, equality, and the rights and interests of research participants. They also refrain from causing significant harm to the environment and consider environmental sustainability throughout project activities. As a rule, all research and innovation activities that involve people or have an impact on people and their environment must be examined for their ethical implications. Below, the key ethics principles followed in the project are discussed in more detail.

**Responsible research and innovation (RRI)** is an approach that anticipates and assesses the potential implications and societal expectations to research and innovation by involving stakeholders throughout the process and aligning outcomes with the expectations and ethical values of society.<sup>4</sup> RRI connects different aspects of the relationship between research and innovation and society, including public engagement, gender equality, open access, and ethics.<sup>5</sup>

**Research integrity** forms a cornerstone of the research work in the Increase project. This means conducting research according to standards and good practices, in a transparent and reflexive manner.<sup>6</sup> When implementing research and development activities, Increase partners follow the Charter of Fundamental Rights of the European Union, the European Convention on Human Rights, and the standards set in the ALLEA European Code of Conduct for Research Integrity<sup>7</sup>. The research activities are guided by the four core principles of research integrity, as defined in the ALLEA code of conduct:

- **Reliability**, including reliable design, methodology, analysis, and use of resources;
- **Honesty**, i.e. developing, conducting, reporting, and communicating research in a transparent, fair, full, and unbiased way;
- **Respect** for colleagues, research participants, research subjects, society, ecosystems, cultural heritage, and the environment;
- **Accountability** for the research, its management and organization, and for its wider societal impacts.

Among these principles, Increase devotes special attention to **equal treatment** and respecting the diverse backgrounds and experiences of the people involved in different project activities. When selecting participants for project activities, Increase partners aim for:

- **diversity** in terms of age, gender, cultural and ethnic background, and other relevant characteristics, depending on the project activity;
- providing meaningful participation opportunities to **disadvantaged stakeholders**, adapting participation processes and meeting venues to the needs of disadvantaged stakeholders if need be (e.g. ensuring physical accessibility of venues, providing translation and needs-based assistance);
- **gender balance and inclusivity**, i.e. taking means to foster a balanced composition of participants in the project teams as well as workshops and stakeholder engagement events, and ensuring that all people feel respected and empowered to contribute, regardless of their gender identity.


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<sup>4</sup> Definition based on the ORION project, <https://www.orion-openscience.eu/resources/rri>

<sup>5</sup> RRI Tools, RRI in a nutshell, <https://rri-tools.eu/about-rri>

<sup>6</sup> RRI Tools, How to promote research integrity, <https://rri-tools.eu/how-to-pa-ethics>

<sup>7</sup> ALLEA, The European Code of Conduct for Research Integrity (2023), [https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/european-code-of-conduct-for-research-integrity\\_horizon\\_en.pdf](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/european-code-of-conduct-for-research-integrity_horizon_en.pdf)



The project consortium actively supports the EU's objectives on gender equality to ensure equal opportunities and treatment for persons of all sexes and gender identities and to combat any form of discrimination. In addition to the requirements of the Grant Agreement and the Treaty on European Union (Articles 2 and 3) regarding non-discrimination and equal opportunities of men and women, the project aims to contribute to the objectives of the EU Gender Equality Strategy for 2020-2025<sup>8</sup>. Increase partners are expected to proactively promote gender balance and equality in their organizations, including both men and women in their work and management, including technical work related to the development of IPV solutions. Efforts should be made to involve diverse genders in defining the expectations and requirements to the technologies developed in the project. This includes providing opportunities for people with non-binary gender identities to participate and taking measures to ensure a safe space for participation for everyone.

The partners are also expected to challenge gender stereotypes in recruitment and assigning roles and responsibilities in their organizations, and improve the work-life balance of their employees to promote equal sharing of family responsibilities between women and men.

The project governance will give full attention to achieve gender balance for the project contributors. All project partners support the participation of diverse genders in their research, innovation, management and stakeholder engagement activities. The gender aspect will be monitored as part of the project quality assessment and reported in periodic reports.

Increase partners commit to handling all project participants with respect, keeping in mind their best interests. This includes **full transparency** about the research process and commitment to processing participants' personal data only based on their **informed consent**, in full compliance with the General Data Protection Regulation (GDPR), national regulations and research ethics principles. The transparency dimension also includes providing **open access** to project publications, and following the **FAIR data principles** (findable, accessible, interoperable and reusable data)<sup>9</sup> when publishing open data. The Increase policy regarding open access is further specified in the project Data Management Plan (D9.2).

To ensure an ethical and responsible research and innovation process, partners are encouraged to make use of the following resources:


- The **Ethics Checklist** provided in **Annex I** of this Ethics Handbook. The checklist helps partners check their work against key ethical standards and analyze the ethical implications of the deliverables, milestones, and project activities.
- The **RRI Toolkit** provides practical tools and training materials to guide stakeholder engagement, innovation design, and dissemination of results: <https://rri-tools.eu>
- **FOSTER** platform provides training and resources on open science: <https://fosteropenscience.eu>

**Commitment to environmental sustainability** is becoming an integral part of RRI and is a particular priority for the Increase project. First, the Increase project aims to foster innovation in the use of solar energy to promote clean energy and contribute to the EU's climate goals. Second, the project follows the '**Do No Significant Harm**' (**DNSH**) principle in line with the European Green Deal objectives. This means refraining from carrying out economic, research and innovation activities that significantly

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<sup>8</sup> European Commission, A Union of Equality: Gender Equality Strategy 2020-2025: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0152>

<sup>9</sup> OpenAIRE, How to make your data FAIR, <https://www.openaire.eu/how-to-make-your-data-fair>



harm environmental objectives.<sup>10</sup> Environmental sustainability goals will be pursued in two types of activities:

- The IPV systems installed in the demonstration sites will be produced applying environmental impact reduction as a guiding principle (in addition to IPV's positive effects on climate change mitigation, the activities seek to avoid substantial negative effects on climate change adaptation, biodiversity and ecosystems, and circular economy).
- When implementing other project activities (events, travels), the impact on environmental sustainability will be considered to the extent possible.

To reduce harm to environment, the project partners will consider the following aspects when conducting or participating in project events:

- When travelling for project-related events (especially internationally), partners will prefer modes of transportation with a smaller environmental footprint, e.g. using trains instead of airplanes when possible and practicable.
- Consortium meetings will be organized in places accessible by public transport for the majority of partners.
- Project meetings will be organized in hybrid form where possible to allow for remote participation and minimize the need to travel.
- With the exception of General Assemblies, project meetings will be held online as much as possible.
- Participation in international conferences and fairs will be carefully considered, weighing the potential effects of participation against the environmental footprint of participation.
- Project workshops and other events will aim for a low environmental footprint, selecting environmentally conscious venues where possible, avoiding the use of single-use items and unnecessary printing, taking care of recycling and waste reduction, and preferring locally sourced, sustainably produced and plant-based food.
- Consortium members will exchange good practices of applying the DNSH principle in the biannual consortium meetings to encourage exchange of experiences and mutual learning.

The following resources may provide useful guidelines for environmentally sustainable practices:

- European Commission, “**7 steps for greener events**”:  
[https://commission.europa.eu/about-european-commission/departments-and-executive-agencies/interpretation/7-steps-greener-events\\_en](https://commission.europa.eu/about-european-commission/departments-and-executive-agencies/interpretation/7-steps-greener-events_en)
- Solar Power Europe, **Solar Sustainability Best Practices Benchmark**:  
<https://www.solarpowereurope.org/insights/thematic-reports/solar-sustainability-best-practices-benchmark>

### 3. SPECIFIC ETHICS ISSUES IN THE INCREASE PROJECT

Due to the nature of the project activities, the following aspects of the project may, in principle, raise ethical issues:

- involvement of **human participants** in the co-creation processes and stakeholder engagement activities;
- collection of **personal data** from the individuals involved;

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<sup>10</sup> European Commission, Knowledge for Policy, Glossary: [https://knowledge4policy.ec.europa.eu/glossary-item/do-no-significant-harm\\_en](https://knowledge4policy.ec.europa.eu/glossary-item/do-no-significant-harm_en)

- deployment of **Artificial Intelligence (AI)** solutions in smart energy control systems;
- export of IPV products from the EU to **non-EU countries**;
- engagement of stakeholders and conducting activities in **Ukraine** in light of the ongoing war and the related security challenges.

The next sections will outline the ethical concerns in more detail based on an assessment of the foreseeable risks, and propose measures to mitigate the risks.

### 3.1. OVERVIEW OF ETHICS ISSUES BY WORK PACKAGE

The project work plan comprises nine work packages (WP), which contribute to delivering and testing the innovations, ensuring impact and uptake, and effective coordination of the partners' efforts. The WPs focus on the following objectives:

- **WP1** (Materials, processes and designs for advanced Integrated PV Modules) – technical work on IPV innovation at module level
- **WP2** (Integration of advanced PV modules into buildings and infrastructures) – work on technical structures and electrical connections to enable PV integration
- **WP3** (Design and Operation for optimal economic decarbonization and energy integration) – technical work on IPV design optimization and control of yield and consumption
- **WP4** (Performance evaluation and Validation for demonstrations) – pre-demonstration testing
- **WP5** (Demonstrations) – demonstrations to test IPV innovations on real buildings and infrastructure objects
- **WP6** (Transversal innovation assessment and coordination) – transversal steering of the co-creation processes in the demonstrations, and innovation assessment
- **WP7** (Value chain engagement and acceptance) – engagement of stakeholders across the IPV value chain, tackling barriers to market uptake, contribution to standardization
- **WP8** (Impact creation) – communication, dissemination and exploitation
- **WP9** (Project management, and project impact assessment) – project coordination and administrative tasks, including provision of ethics guidelines and monitoring ethics compliance

As WPs 1-2 involve technical design and production of integrated PV solutions with no direct engagement with users and stakeholders, no specific ethical issues are foreseen in relation to these work packages. The guidelines for handling the technical data produced and processed in these work packages (including data covered by Intellectual Property Rights) are provided in Data Management Plan (D9.2) and its subsequent updates.

The table below summarizes the key ethics issues per Increase work package (WP) and tasks (T), as foreseen at the beginning of the project. The ethics issues are labelled as follows:

- HP – human participants
- PD – processing of personal data
- AI – deployment of AI solutions
- NEU – export of (non-data) materials to non-EU countries
- UA – activities in Ukraine (complex security situation)

The table lists the specific ethics measures that Increase partners should apply to address ethical issues in particular project tasks. In addition to these specific measures, partners should follow the overarching ethical guidelines and recommendations provided in Section 2 throughout project work.

Relevant tasks	Activities involved	Ethics issues		Mitigation measures
<b>WP3 – Design and Building Operation for optimal economic decarbonization and energy integration</b>				
T3.5 Optimal operational control maximizing self-consumption and minimizing emissions	Collection of user preferences and energy consumption data from the operation of demonstrations to improve AI models for the smart energy control systems, which enable automated control decisions and provide advice to users for optimizing energy use	AI	Transparent and lawful use of energy consumption data; algorithmic transparency	Provision of adequate information on the AI models and AI-assisted decisions; designing transparency features into the systems; data collection based on informed consent
<b>WP4 – Performance evaluation and validation for demonstrations</b>				
T4.3: Aesthetical evaluation	Stakeholder workshops at pre-demonstration sites, online feedback from diverse audiences to the aesthetical aspects of IPV module design	HP PD	Ensuring that participation is voluntary; lawful and transparent use of participants' data	Informed consent forms; communicating participants' rights
<b>WP5 – Demonstrations</b>				
Task 5.2: (Functional) design for the demonstrations	Setting up local co-creation groups at demonstration sites, exchanges between knowledge/industrial partners and local co-creation groups to facilitate the selection of designs	HP PD	Ensuring voluntary participation; lawful and transparent use of participants' data	Informed consent forms; communicating participants' rights
Task 5.4: PV integrated in new and existing buildings	Energy consumption data collected from a private household in the Switzerland pilot	PD	Transparency and lawfulness of the use of private data	Informed consent forms
	Application of smart control systems in Switzerland (residential) and Montenegro (administrative building) pilots	AI	Algorithmic transparency; transparent and lawful use of residents' and users' data in the smart control system	Provision of adequate information on the AI models and AI-assisted decisions; designing transparency features into the systems
	IPV products exported from the EU to demonstration sites in Montenegro	NEU	No issues foreseen (non-hazardous materials, no dual-use technology)	Not necessary
<b>WP6 – Transversal innovation assessment and coordination</b>				

Task 6.1: Steering the co-creation process	Engagement of end-users and other local stakeholders in the demonstrations through co-creation workshops (incl. online discussions if need be)	HP PD	Ensuring voluntary participation; lawful and transparent use of participants' data	Informed consent forms; communicating participants' rights
<b>WP7 – Value chain engagement and acceptance</b>				
Task 7.2: Roundtables with construction sectors, PV sector, DSOs, regulators, architects, financing industry, and planning/permitting bodies	Two sets of roundtables in selected countries to discuss barriers to market uptake of IPV solutions, plus one roundtable in Ukraine	HP PD	Ensuring voluntary participation; lawful and transparent use of participants' data	Informed consent forms; communicating participants' rights
		UA	Ensuring security of participants	Events transferred to other countries in case of ongoing war or security threats
Task 7.3: Towards unlocking the potential for integrated PV in Ukraine	Implementation of a co-creation approach and assessment of the business cases for selected IPV projects in Ukraine; workshops with stakeholders (e.g. regulators, investors, architects, industry) to discuss the needs and potential for the uptake of IPV solutions in Ukraine to prepare the country's post-war rebuilding	HP PD	Ensuring voluntary participation; lawful and transparent use of participants' data	Informed consent forms; communicating participants' rights
		UA	Ensuring security of participants	Events transferred to other countries in case of ongoing war or security threats
Task 7.6: Financing integrated PV projects	Online workshops with selected financing professionals to discuss existing and new financing models for integrated PV	HP PD	Ensuring voluntary participation; lawful and transparent use of participants' data	Informed consent forms; communicating participants' rights
T7.8 Active exchanges with local, national, European and Ukrainian policy makers	Lunch meetings in Kyiv with policymakers working on energy and construction related topics	UA	Ensuring security of participants	Events transferred to other countries in case of ongoing war or security threats
<b>WP8 – Impact creation</b>				
T8.1 Stakeholder mapping at European and country level	Development of a database of stakeholders interested in engaging with the project	PD	Lawful and transparent use of personal data	Informed consent (given online) to being added to the project stakeholder database
T8.2: Communication, dissemination, and exploitation strategy	Surveys to assess stakeholders' knowledge gaps and needs	HP PD	Ensuring voluntary participation; Lawful and	Informed consent forms; communicating participants' rights



			transparent use of personal data	
WP9 – Project management, and project impact assessment				
Task 9.3: Project impact assessment	Development of online surveys for the assessment of the longer-term project impact, setting up a database of contacts, collecting baseline-level input from all stakeholders	HP PD	Ensuring voluntary participation; transparent use of participants' data; lawfulness of maintaining a contact database	Informed consent forms for participation in research; explicit consent for inclusion in stakeholder database

### 3.2. INVOLVEMENT OF HUMAN PARTICIPANTS AND COLLECTION OF PERSONAL DATA

Most Increase work packages involve human participants in the project activities. The types of stakeholders engaged in research, demonstrations and market uptake activities include citizens (incl. users of demonstration buildings and infrastructure objects), representatives of the construction and energy industry, policymakers, architects, designers, developers, urban planners, engineers, financing professionals, academia, and R&D industry. In most cases, people are invited to participate due to their professional roles to solicit their expert opinion. In one case (the demonstration at the Hansa Kool in Tartu, Estonia), the co-creation activities in WP6 involve school students (see more details in Section 3.2.3).

Any activity that involves collecting input from individuals, either in their capacity as experts or as citizens, shall be implemented in accordance with the GDPR (Regulation (EU) 2016/679), and relevant national legislation (e.g. data protection acts), following the core principles below:

- **voluntary participation** – any participation in project activities is purely voluntary and based on participants' interest, no one will be coerced or manipulated to participate;
- **data minimization** – the collection of personal data should be limited to information that is absolutely necessary for the purpose, the need to collect any category of personal data will be carefully weighed before starting data collection;
- **purpose limitation** – personal data is only processed for a specific, clearly described purpose;
- **respect of data subjects' rights**, in particular the right to be informed about the purpose of the research, how participants' data will be used, the right not to participate, right to withdraw consent to data processing, and right to request rectification or deletion of their data;
- personal data will be collected only upon the data subjects' **explicit informed consent**.

Examples of relevant categories of personal data to be collected in the Increase research and demonstration activities include name, profession, organizational affiliations, e-mail, gender, and in some cases audio or video data and photos taken at project events (mostly for project dissemination purposes).

For the pilot in St Sulpice (Switzerland), energy use data will be collected at a household level to test and improve the smart energy control system.

Special categories of personal data (i.e. data of a sensitive nature) will not be collected.



### 3.2.1. Participant recruitment

Participants are recruited in project activities in a GDPR-compliant way. This means that after establishing first contact, prospective participants will be given information on the content and objectives of the project and the specific activity which they have been invited to. Participation in further activities will be based on explicit consent. The persons will be asked if they wish to be invited to project events and be added to the project stakeholder database.

Care is taken to ensure that potential participants understand the purpose and conditions of participation. To this end, communication is adapted to the needs of the target group in terms of language and content (e.g. providing information in the person's mother tongue where possible, using simple language and visual cues if needed). Those invited to participate will always be given the opportunity to ask questions and provided the contact details of a project representative who can answer additional questions.

### 3.2.2. Ensuring informed consent to participate

**Informed consent** procedures are a key mechanism for ensuring the lawful and ethical engagement of private persons in research and innovation activities. For all activities (workshops, focus groups, roundtables, meetings, surveys), where input and personal data will be collected from individuals, participants will be requested to provide informed consent to signal if they agree to participate on the given conditions.


An important element of any informed consent is the participant's **right to withdraw the consent** at any time without negative consequences for them. This right should be explicitly acknowledged and highlighted when seeking consent.

As a rule, the informed consent is obtained in writing (by means of a signed and dated consent form, in the case of minors signed by their legal representative). In the case of an online survey, the consent is obtained electronically. In this case, questions can only be answered with the respondent's prior consent or declaration of acknowledgement of the preceding information (the consent can be signaled, for example, by ticking a box).

As a minimum, an informed consent form should contain:

- brief background information on the project;
- purpose of the research/activity;
- information on the voluntary nature of participation;
- what data will be collected;
- how the data will be used in project outputs (typically in anonymized and/or generalized form);
- information on the use and storage of audio/visual data such as photos, videos, audio recordings (if relevant);
- data processing procedures (e.g. anonymization, pseudonymization);
- duration and location of data storage, related security measures;
- the data subject's rights (in particular the right to withdraw consent, and request access, rectification or deletion of their personal data);
- risks and benefits for the participant;
- the organizations and contact persons responsible for the data processing, including information and contact details of the person (the organization's data protection officer) from whom the participants can request correction/deletion of their data;
- an explicit declaration of having read and understood the terms of participation;
- name, date and signature of the participant.





Useful resources:

- **Annex 2** of this handbook provides a template informed consent form, to be adapted the specifics of the event in which it is used. Partners can use their own standard templates or develop new templates, provided that the forms meet the requirements of the GDPR and the general guidelines given in this handbook.
- **Article 7** of the GDPR stipulates the general conditions for consent:  
<https://gdpr.eu/article-7-how-to-get-consent-to-collect-personal-data/>

When designing informed consent forms, the project partners are recommended to:

- use clear and plain language, adapted to the audience;
- in local-level activities, use a locally spoken language if possible;
- make it clear what exactly participants are agreeing to;
- emphasize the voluntary nature of participation and the participant's right to withdraw participation at any time, without penalties or negative consequences.

Informed consent sheets will be securely kept on file by the partner responsible for organizing the activity.

### 3.2.3. Participation of minors

As part of WP5 and WP6, the pilot at the Hansa Kool (a secondary school in Tartu, Estonia) will involve school students in some of the co-creation activities to collect students' ideas for and feedback to the pilot IPV greenhouse. As a rule, personal data will not be collected from minors and input from the activities involving minors will be used in an aggregated and anonymized format. If any personal data is collected (e.g. in the form of an audio recording or photos of the event), informed consent will be obtained in advance both from the parents/legal representatives and the children according to the Hansa Kool's standard and GDPR-compliant data protection policies and procedures. Hansa Kool will be the primary data controller and data processor and will share data with the project partners in an anonymized or pseudonymized form.

When obtaining consent from children, information about the project and purpose of participation will be presented in simple language and any pressure to participate will be avoided. As a rule, the publication of photos or videos where children are clearly recognizable will be avoided. Written statements of informed consent will be stored by the Hansa Kool.

### 3.2.4. Processing of personal data

The procedures for processing the collected personal data will comply with the GDPR and relevant national legislation of the countries where the activities are carried out (including the demonstration countries Belgium, Estonia, France, Montenegro, Spain, Switzerland). The Increase partner organization that collects personal data for any project activity is considered the **data controller** of that dataset in the sense of the GDPR. The partners processing the data are considered **data processors**. As a rule, the data controller is also the processor of the data in the Increase project. The data controller will make sure that personal data is processed lawfully, securely, and in line with the informed consent collected from the participants. The following measures will be applied to ensure an ethical processing of the data:

- Encryption of personal data;

- Pseudonymization of the data, i.e. replacing identifiable information with random codes, so that the personal data can no longer be attributed to a specific person;
- Personally identifiable information (e.g. name) will be kept separately from the pseudonymized data and from the code key enabling to re-link the data;
- Only authorized members of the project team will have access to the data;
- As a rule, project partners will work with pseudonymized datasets. The group of team members with authorized access to the original data will be kept limited;
- The data is stored securely in a cloud, password-protected computer or, in the case of paper documents (e.g. consent forms), in locked file cabinets.
- The partner collecting the data (data controller) will ensure to store the data only on GDPR-compliant storage located in the EU or Switzerland.
- Identifiable data concerning individuals is not shared with any organization external to the Increase consortium or to other Increase partners.
- If it is necessary to share the data with project partners (for processing within the purpose stated in the informed consent forms), the data will be shared based on signed agreements between partners, whereby the receiving partners take the responsibility to use the data confidentially and in line with the consent given by participants.
- Project reports and publications will use the data in an aggregated, generalized and anonymized form. Any participant data described in the reports will be anonymized or pseudonymized.
- As a rule, identifiable personal data will be deleted as soon as it is no longer necessary (e.g. after finalizing a written summary of a workshop). Aggregated/pseudonymized data may be preserved for 5 years after the end of the project for record-keeping purposes as per the Grant Agreement).


### 3.3. DEPLOYMENT OF AI

In WP3, the components and interfaces for an AI-assisted smart control system will be developed to enable users to generate energy cost savings via smart management of flexible energy assets, using strategies such as increasing self-consumption, offering grid services or engaging in peer-to-peer trading. The system will output both automatic control actions and information for users to consider manual action. The smart control systems will be installed and tested in two WP5 demonstrations: 1) a private single-family building in St Sulpice (Switzerland) and 2) an administrative building in Podgorica (Montenegro). The testing involves collecting actual energy consumption data from these buildings to assess the performance and improve the AI-driven smart control systems. This activity raises two ethics aspects: 1) transparency of the algorithmic systems that perform and suggest actions to users for optimizing energy use, 2) collection of personal data (real energy consumption data) from a private household as part of the demonstrations.

**Algorithmic transparency** refers to the concept that the people who use or are affected by algorithms should have a basic level of understanding of how the algorithms work to be able to make informed decisions about their use or challenge algorithmic decisions. In essence, AI systems tend to function as “black boxes” due to the complexity of the parameters and interactions involved. Depending on the type and use of an algorithmic decision, algorithmic transparency may refer to the code, logic, model, goals (e.g. optimization targets), decision variables, or other aspects considered to provide insight into the way the algorithm performs.<sup>11</sup> Transparency may be global or local, either providing transparency on the system behavior for any kind of input, or seeking to explain a specific input-

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<sup>11</sup> European Parliament, A governance framework for algorithmic accountability and transparency, [https://www.europarl.europa.eu/RegData/etudes/STUD/2019/624262/EPRS\\_STU\(2019\)624262\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2019/624262/EPRS_STU(2019)624262_EN.pdf)



output relationship. Two main kinds of measures can be taken to increase the transparency of algorithmic models and outputs<sup>12</sup>:

1. Designing **intrinsic transparency features** into the technologies.
2. **Open communication** with users: explaining how the algorithms work and explaining the outputs of algorithms. Relevant transparency measures include providing algorithmic factsheets, transparency labels, giving information on attribute importance and attribute influence, data visualizations, dashboards of algorithms (see the textbox “Useful resources” below for references to sources providing more information on different transparency measures).

The possibility of integrating (further) intrinsic transparency mechanisms into the algorithms used in the Increase smart control system may be limited due to technological constraints and will be assessed by the responsible technical partners, depending on the types of algorithms used.

As the smart control systems tested in some Increase pilots will use data from the pilot buildings, it is crucial to openly communicate what the system does and how it uses data to ensure users’ trust in the system. The second type of (communication-related) transparency measures can be created for all algorithms, regardless of their type. Therefore, the Increase technical partners are highly recommended to implement at least one of them. The possibility of implementing particular transparency measures will be assessed by the responsible technical partners. When designing transparency measures, the technical partners are recommended to ask for users’ feedback to assess whether the measures have improved users’ understanding of the system, and enhance the measures based on feedback.

When implementing any transparency measures, attention should also be paid to weighing the security implications of any given transparency measure, and ensuring a high level of security of the systems to prevent data and security breaches.

Since the EU is preparing a regulation to harmonize the rules on AI (the “AI Act”)<sup>13</sup>, which is expected to enter force in 2026, the partners developing AI systems are recommended to align with the requirements of the proposed regulation, which focus on improving the safety of AI technologies and their compliance with fundamental rights and EU values.


As a second ethics issue, **energy consumption data** will be collected from an office building in Podgorica, Montenegro and a private household in St Sulpice, Switzerland (demonstration buildings) to feed into the smart control systems (initially developed using synthetic data), with the aim to compare actual measurement data on self-consumption results with the simulation data. The demonstration building in St Sulpice is a family house seeking to receive an energy upgrade to a net zero-energy building by installing IPV roof tiles. Demonstration activities will therefore involve data collection from private individuals (at a household level).

According to the opinion of the European Data Protection Supervisor, energy consumption data from smart meters can be considered personal data since the data are associated with an identified or identifiable user and can disclose information on the energy usage and hence the personal daily life

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<sup>12</sup> Andrew Bell, Oded Nov, and Julia Stoyanovich. 2023. The Algorithmic Transparency Playbook: A Stakeholder-first Approach to Creating Transparency for Your Organization’s Algorithms, [https://dataresponsibly.github.io/algorithmic-transparency-playbook/resources/transparency\\_playbook\\_camera\\_ready.pdf](https://dataresponsibly.github.io/algorithmic-transparency-playbook/resources/transparency_playbook_camera_ready.pdf)

<sup>13</sup> For an overview of the status of the AI Act as of December 2023, see <https://www.consilium.europa.eu/en/press/press-releases/2023/12/09/artificial-intelligence-act-council-and-parliament-strike-a-deal-on-the-first-worldwide-rules-for-ai/>



of the data subject.<sup>14</sup> By revealing details about the personal life of natural persons, unauthorized access to the data may pose risks of unwanted profiling and surveillance of natural persons.<sup>15</sup>

To mitigate the risks resulting from unwanted and unauthorized processing of the data, the collection of data from the smart control system should be based on a written **informed consent** of the inhabitants of the demonstration building. When designing the consent form, the responsible Increase partners should follow the stipulations of the GDPR and the standards and guidelines provided in this handbook.

Useful resources:

- **Algorithmic Transparency Playbook** by the New York University Center for Responsible AI provides guidelines and best practices for designing and implementing algorithmic transparency: [https://dataresponsibly.github.io/algorithmic-transparency-playbook/resources/transparency\\_playbook\\_camera\\_ready.pdf](https://dataresponsibly.github.io/algorithmic-transparency-playbook/resources/transparency_playbook_camera_ready.pdf)
- **Draft EU AI Act (COM/2021/206 final)**: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52021PC0206>
- **Standard informed consent template** provided in **Annex II** and a sample form provided in **Annex III** of this handbook could be used as examples to draft the consent form for data collection

### 3.4. EXPORT OF MATERIALS TO THIRD COUNTRIES

The export of PV products from the producers in the EU to the demonstration sites in Montenegro (an upper-middle income country<sup>16</sup>) as part of Task 5.4 is not foreseen to raise ethical issues. The materials exported are standard IPV products (colored PV, ventilated façade modules), which have an entirely civil purpose. No dual-use items will be exported.

### 3.5. ACTIVITIES IN UKRAINE

One of the additional goals of the Increase project is to support the post-war reconstruction in Ukraine with a view to helping Ukraine transition to sustainable energy solutions. Therefore, several tasks in WP7 foresee discussion and outreach events in Ukraine. These include engagement of experts to assess selected building and infrastructure projects in Ukraine for a New European Bauhaus-based co-creation approach, roundtables with the construction and PV sectors, regulators, architects, and other stakeholders to discuss barriers to market uptake, and a meeting in Kyiv with policymakers working on topics related to energy and construction. Due to the ongoing war on the territory of Ukraine, it is vital to ensure the security and health of all participants and avoid putting people in potentially dangerous situations due to participation in Increase activities.


The events in Ukraine are scheduled for Months 42 and 52 of the project, i.e. for the years 2027-2028. As it is not possible to predict how the security situation in Ukraine will progress, the Increase project

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<sup>14</sup> EDPS Formal comments on the draft Commission Implementing Regulation on interoperability requirements and non-discriminatory and transparent procedures for access to metering and consumption data, [https://edps.europa.eu/system/files/2022-09/22-08-24\\_access-metering-and-consumption-data\\_en.pdf](https://edps.europa.eu/system/files/2022-09/22-08-24_access-metering-and-consumption-data_en.pdf)

<sup>15</sup> Hatzakis, T., Rodrigues, R., & David, W. (2019). Smart Grids and Ethics. ORBIT Journal, 2(2), <https://doi.org/10.29297/orbit.v2i2.108>

<sup>16</sup> World Bank Country and Lending Groups, <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519>



remains open to divert from the original workplan and implement a 'Plan B' to achieve the project goals. In case the situation in Ukraine continues to pose health and security risks due to war or the implications of war, Increase will transfer the activities planned in Ukraine to other countries, keeping in mind the following criteria: 1) security and safety of the environment for all participants; 2) logistical accessibility of the meeting sites for participants from Ukraine. Increase project partners will closely monitor the situation and the resulting security risks, and develop a contingency plan to be able to reorganize the planned activities well on time before the scheduled events.

## 4. MANAGEMENT AND REPORTING PROCEDURES

### 4.1. PROCEDURES AND RESPONSIBILITIES


To ensure the compliance of project activities with the ethics principles and procedures outlined in this handbook, the following procedures are foreseen:

- Each **partner responsible for a specific project activity** is also responsible for taking the measures to ensure the activity is carried out in an ethical manner and in accordance with relevant regulations (e.g. GDPR).
- The **partners responsible for project deliverables and milestones** will undertake a check on ethics to ensure alignment with the ethical requirements as part of the quality assurance procedure. The deliverables and milestones will be checked (where applicable) based on the Ethics Checklist (**Annex I**).
- The **partners responsible for implementing activities involving human participants** are responsible for obtaining the informed consent of participants, proper anonymization/pseudonymization and secure storage of the personal data collected, and keeping the informed consent forms on file.
- **IBS**, as the leader of Task 9.2 (Ethical requirements' management) provides an ethics tracker in the Increase project's common work space (MS SharePoint/Teams) to monitor the use of ethics measures in project activities. Partners responsible for implementing activities with ethical implications (e.g. workshops or surveys involving human participants) are responsible for regularly updating the tracker.
- **Task leaders** are responsible for ensuring the partners contributing to the respective task provide the necessary information to the project-level ethics tracker.
- **Work package leaders** will aggregate monitoring information on the activities conducted in the respective WP based on the ethics tracker (and other sources if need be), to provide input on the implementation of ethics-related procedures to the periodic reports to the European Commission (submitted every 18 months).

The guidelines provided in this handbook represent the minimal requirements for ethics management. In addition to following the guidelines, Increase project partners must examine the local regulations within their respective countries. Should these regulations impose additional requirements or restrictions that affect project work, partners must adhere to them and promptly inform the Project Coordinator. This will enable a discussion on the necessary subsequent actions.

### 4.2. DATA PROTECTION OFFICER

Increase has established the role of a data protection officer (DPO) for the project, who coordinates correct data handling according to the guidelines of D9.2 (Data Management Plan) and D9.3 (Ethics Handbook).



The contact details of the project DPO are:

Name: Lorenz Van Damme

Organization: Th!nk E

E-mail: [lorenz@think.e.be](mailto:lorenz@think.e.be)

In addition to project-level DPO, each organization collecting data as part of the project is responsible for appointing a contact person within their organization to liaise with the project DPO on matters regarding data handling in the Increase project. The contact person can be the partner organization's DPO (if this role has been designated pursuant to Article 37 of the GDPR), or another employee of the organization, if the organization is not obliged to appoint a DPO.

## 5. CONCLUSIONS

This handbook outlines the key ethics principles to be followed in the Increase project, and suggests procedures and tools to ensure an ethical management of the project activities. The key overarching ethics principles to be followed throughout project activities include responsible research and innovation (RRI), research integrity, transparency, and commitment to environmental sustainability.

While the overarching principles are relevant for all project work, certain project tasks need to integrate additional ethics measures due to the nature of the activities. The tasks involving interaction with stakeholders need to apply measures to safeguard the rights and wellbeing of human participants and ensure that personal data is always processed in accordance with the GDPR and other relevant regulations. Personal data collection should be guided by the principles of data minimization and purpose limitation. Participation should always be voluntary and personal data should be processed based on data subjects' explicit informed consent. This includes the right to withdraw consent.

The tasks involving the development and implementation of AI solutions in smart energy control systems should apply measures to ensure the transparency of the AI algorithms. The responsible technical partners are highly recommended to apply open communication measures to explain how the algorithms work and how they use data. This handbook provides links to useful resources that could be consulted for ideas and guidelines on such measures. The processing of private energy consumption data for smart control systems should be based on data subjects' informed consent.

The partners responsible for outreach activities in Ukraine should carefully monitor the security situation in the country and reorganize or relocate the planned activities in case security risks persist. Any decisions in this regard should be guided by the goal of ensuring the safety of participants and avoid any harm to participants due to project activities.

As a rule, any partner responsible for an activity bears the responsibility for ensuring compliance with the project's ethics guidelines within the respective activity. Compliance with the ethics requirements will be monitored and reported in periodic project reports. In order to support compliance with the ethics principles discussed in this handbook, the handbook provides a template informed consent sheet and an ethics checklist in the annex, which partners are recommended to use when planning and implementing project activities.

## ANNEX I: ETHICS CHECKLIST

### Guidance to Increase partners:

This checklist provides a tool for checking the potential ethical issues that may arise in the course of project activities. It also lists the key measures that could be used to ensure compliance with ethics principles and mitigate potential risks. More information and references to additional resources on the measures can be found in the main body of the Increase Ethics Handbook.

Partners implementing project tasks can use this as a reminder of the key issues that should be kept in mind when designing and implementing the activities. Partners responsible for deliverables and milestones are recommended to use this checklist to verify whether the key ethics issues have been considered in the preceding work.

Ethics issue	Questions to consider	Key ethics compliance/risk mitigation measures	Relevant handbook sections
<p><b>Are you conducting research activities as part of the project?</b></p>	<p>How are Responsible Research &amp; Innovation principles followed in the research?</p> <p>What measures are in place to ensure research integrity?</p>	<p>Careful and responsible design of research activities, responsiveness to stakeholders' expectations and needs</p>	<p>2</p>
<p><b>Does your research involve the direct participation of humans?</b></p>	<p>Have participants explicitly agreed to participate in the research?</p> <p>How is equal treatment and gender equality ensured in the activities?</p> <p>How can the activities be designed to enable equal participation?</p> <p>How could the participation of diverse stakeholders be facilitated, including disadvantaged people?</p> <p>Are some of the participants minors?</p>	<p>Informed consent forms signed by participants</p> <p>Inclusive design of research activities</p> <p>Accessibility measures (e.g. accessible meeting venues, websites, use of simple language, translation)</p>	<p>3.2, 3.2.2</p>

		Obtaining informed consent from minors' parents/legal representatives; avoidance of collection of personal data from minors	
<b>Does your research involve personal data collection and/or processing?</b>	<p>Has informed consent been obtained from participants?</p> <p>Does the informed consent form include all necessary information to ensure the transparency of research and participants' awareness of their rights?</p> <p>Is the data processing conducted in accordance with the GDPR and relevant national regulations?</p>	<p>Informed consent forms</p> <p>Development of GDPR-compliant technical and organizational procedures for data processing</p>	3.2.2, 3.2.4
<b>Does your project work involve further processing of previously collected personal data?</b>	<p>Is the further processing within the scope of the data subjects' informed consent?</p> <p>How can the security and integrity of the data be ensured in the process of transferring the data from the original storage for further processing?</p>	<p>Informed consent forms</p> <p>Use of secure systems for data transfer, measures to prevent unauthorized access to data</p>	3.2.2, 3.2.4
<b>Does your project work involve activities in locations that may pose security risks to participants (e.g. conflict or war zone)?</b>	<p>Do the current security conditions in the location pose any security risks to participants? Would participation in project activities place the participants under any danger?</p> <p>If the conditions are considered safe, is there a risk the conditions may quickly worsen?</p>	<p>Avoidance of conducting activities in locations where there may be security risks to participants; using online tools if possible; transferring the planned activities to alternative locations</p>	3.5
<b>Are you conducting innovation activities with environmental implications?</b>	<p>How could the 'do no significant harm' (DNSH) principle be followed to prevent adverse impacts to environmental objectives?</p>	<p>Application of the DNSH principle, assessment of diverse impacts on environment</p>	2



<p><b>Are you implementing technological solutions deploying AI models?</b></p>	<p>What measures can be introduced to increase the transparency of the algorithms used?</p> <p>How can transparency and security related objectives be balanced in an optimal way?</p>	<p>Algorithmic transparency measures, open communication with users</p>	<p>3.3</p>
<p><b>Are you organizing project events?</b></p>	<p>Does the event need to involve a physical meeting? Can it be organized (partly) online?</p> <p>Could the event be timed to run before/after/in parallel with other events attended by the same group of stakeholders?</p> <p>How could the environmental impact of the event be reduced?</p>	<p>Enabling hybrid event formats and online participation</p> <p>Measures to reduce the environmental footprint of events (e.g. reduction of waste, recycling, use of environmentally sustainable venues)</p>	<p>2</p>
<p><b>Are you planning participation in events that involve travelling?</b></p>	<p>Is travelling necessary to attend the event? Are there opportunities to participate online?</p> <p>What means of transportation could be used to reduce the carbon footprint of travelling?</p>	<p>Use of hybrid formats and online participation</p> <p>Preferring transportation means with lower carbon footprint</p> <p>Participation in carbon offsetting programs</p>	<p>2</p>

## ANNEX II: STANDARD INFORMED CONSENT TEMPLATE

### **Guidance to Increase partners:**

- Please adapt the template below to the purpose and specifics of the activity you are organizing. You can also use your own templates, provided that it meets the minimum standards described in Section 3.2.2 of this handbook
- The text highlighted in yellow should be changed/adjusted as needed.
- The text in grey denotes instructions to assist the adaptation of the template. Please remove the instructions after finalizing the form.
- In the case of local-level engagement events (e.g. co-creation workshops for demonstrations), the template should ideally be translated into local language(s). Please delete these instructions from the final template.
- Please consult Annex III of the Ethics Handbook for a sample consent form for inclusion of participants in project stakeholder database

## INFORMED CONSENT FORM FOR PARTICIPATION IN INCREASE PROJECT ACTIVITIES

### **PROJECT BACKGROUND**

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Increase: Effective advancements towards uptake of PV integrated in buildings & infrastructure

Project duration: October 2023–March 2028 (54 months)

Funder: European Union (Horizon Europe), grant agreement no. 101136112

**Increase** is an innovation project promoting the adoption of novel technological solutions for using solar energy. The project focuses on developing and testing **integrated photovoltaic (IPV) systems**. IPV systems are innovative solutions where the electricity-generating elements are integrated into construction components such as roof tiles, façade modules or noise barriers. This makes them different from traditional solar panels, which are standalone products that can be mounted on different surfaces like rooftops or walls. Increase introduces innovations that improve the aesthetical appearance of IPV products, reduce their environmental impact, improve fire resistance, reduce glare, and prevent fouling.

Increase tests these innovations on real buildings and infrastructure objects in 9 demonstrations in Belgium, Estonia, France, Montenegro, Spain, and Switzerland. The demonstrations will be co-created with users of the buildings, citizens of the demonstration areas, and other stakeholders such as the construction and energy sector, architects, and policymakers. Input and feedback from stakeholders is collected through co-creation workshops, discussions, and online engagement.

The Increase project is coordinated by the Belgian consultancy Th!nkE and involves 21 partner organizations representing industry, research and public administration.

More information on the project can be found at [...\[ link to website\]...](#)



## PURPOSE OF YOUR PARTICIPATION

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We are inviting you to participate in a [title of event, e.g. co-creation workshop] to contribute your [expertise/ideas/opinions/other] to the [type of activity, e.g. Increase demonstration in (...demonstration location...)/assessment of market potential for IPV/ etc...].

Your participation will help us [describe purpose of the activity, e.g. understand stakeholders' expectations to IPV systems/make design choices/develop the demonstration solution in (...demonstration location...)].

## WHAT KIND OF DATA WILL BE COLLECTED?

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If you agree to participate, we will collect and process the following data about you [add/delete data categories as relevant]:

- Name
- E-mail address
- Profession
- Organizational affiliation
- Your opinions on the issues discussed at the event
- Audio recording/photographs/videos of the discussion
- ...

We are foremost interested in your [expert knowledge/ideas/opinions]. We will process other personal data only to keep track of the number and type of participants in the project events, analyze the opinions of different types of stakeholders, and/or produce dissemination materials for the project.

## HOW WILL THE DATA BE PROCESSED?

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The personal data we collect will be processed in accordance with the European Union's General Data Protection Regulation (GDPR, Regulation (EU) 2016/679) and relevant national legislation in [France/Spain/Estonia/Belgium/Switzerland/Montenegro/other].

The data you provide will be processed by [name of partner organization] and securely stored in this organization's database. [Name of partner organization] will take the necessary measures to ensure the data can only be accessed by authorized parties.

[Delete if not relevant:] The data may be shared with INCREASE partner organizations [names of partner organizations] for the purpose of completing the research. The data will only be shared in a pseudonymized format and will not include your name or contact details.

The following procedures will be applied in data processing:

- After collection, the data will be **pseudonymized** – any identifying information (e.g. your name or e-mail) will be given a unique random code and stored separately from the other data. The encoded data cannot be linked to specific individuals. The code key for decoding the data will be stored securely and kept separate from the original data, as well as from the pseudonymized data. Only a designated member of the project team will have access to the code key and will only use it if you wish to exercise your right to access, rectify or delete your personal data.

- The data generated by your participation will only be used in the project publications (e.g. project reports, policy papers, research articles) in an **anonymized and aggregated** form. Any statements referenced or cited in the publications will not be associated with identifiable persons.
- *[Delete if not relevant:]* The audio recording of the event will only be used for note-taking purposes. Only the research team will have access to the recordings. The recording will be deleted immediately after completing written notes of the discussion, and the written notes will not include any identifiable personal data.
- *[Delete if not relevant:]* The photographs and/or video recordings of the event will only be used for dissemination and project record-keeping purposes and will not be linked to your name or personal details if published.
- Your personal data will be stored for up to 5 years after the end of the study. After this period, your personal data will be permanently deleted, unless required by law.

## RISKS AND BENEFITS

By participating in the Increase *[add title of event, e.g. co-creation workshop]*, you will have the opportunity to learn more about integrated PV products, contribute to innovation in photovoltaic systems and have your say in designing the future of solar energy. You will also receive first-hand access to the results of the Increase project.

No risks are foreseen in relation to your participation as we will only collect a minimal amount of personal data and use your data in an anonymous way in project reports and publications. We will not collect any sensitive data.


## YOUR RIGHTS

Your participation in the project activities is **voluntary**. You have the right to **withdraw your consent** to processing your personal data at any time, without negative consequences. You do not have to give us reasons if you decide to withdraw your consent. Please note that if you withdraw your consent in the future, the lawfulness of any data processing based on your consent before the withdrawal will not be affected.

You also have the right to **receive information** of your personal data that we have stored, and **request correction or deletion of the data**. These rights may be subject to conditions and limitations, in accordance with the applicable national and EU law.

## CONSENT

	Please tick	
	YES	NO
I have read and understood the information in this consent form.		
I consent to the processing of my personal data for the INCREASE project for the purposes described in this form.		
I understand that participation in the project activities is voluntary, and I understand my right to withdraw my participation at any time without negative consequences.		
<i>[Please delete if not relevant]</i> I consent to the event being audio recorded for note-taking purposes.		



[Please delete if not relevant] I consent to the use of my photographs and videos recorded at the workshop for project dissemination.		
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Name	
Signature	
Date	

## ADDITIONAL INFORMATION

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If you have any further questions regarding the Increase project, please contact [*Name of contact person*] at [*Email*].

If you wish to withdraw your consent, exercise your rights on your personal data, or if you have any questions about the processing of your personal data, please contact [*Name of Data Protection Officer at the partner organization*] at [*Email*].

If you would like to seek advice on the applicable data protection legislation or issue a complaint about the use of your personal data, you can contact [*Name of the relevant national data protection authority*] at [*Email*].



## ANNEX III: SAMPLE INFORMED CONSENT FORM FOR INCLUSION IN PROJECT CONTACT DATABASE

### INCREASE STAKEHOLDERS DATABASE – CONSENT FORM<sup>17</sup>

#### PRESENTATION OF INCREASE

Increase “effective advaNCements towaRds uptakE of PV integrAted in buildingS & infrastruCTurE”, is a 4 ½ year Horizon Europe project, aiming to accelerate the market uptake of building and infrastructure-integrated PV technology systems across Europe, through technological innovation, quality and standardisation.

#### WHY HAVE YOU BEEN ASKED TO TAKE PART?

Stakeholder engagement is at the core of the Increase project through co-creation, involvement and participatory processes. Interactions across various sectors, exchanges of policies, dialogues with investors, and assessments of country-specific business cases will guide the exploitation efforts towards achieving widespread market adoption of building and infrastructure-integrated PV technology.

#### WHAT INFORMATION IS COLLECTED?

Personal identification information, including name, email address, company/institution, phone number (optional), the role of your company/institution with relation to the project, country.

#### HOW IS THE DATA COLLECTED?

You provide most of the collected data. Your data is collected and processed when you register online to the project mailing list or register to project events.

#### HOW IS THE INFORMATION USED?

Your personal data are collected to send you emails or newsletter and inform you about future events organised by the project and other activities of the Increase consortium. Your data will be only used in the context of the Increase project and by the project consortium.

#### WHAT ARE YOUR DATA PROTECTION RIGHTS?

- Right to information: you are informed about the processing and purpose of your personal data.
- Right to access: you have the right to request for copies of your personal data.
- Right to rectification: you have the right to request to correct or supplement your data.
- Right to be forgotten: you have the right to request to erase your personal data
- Right to limit the processing: you can ask to (temporarily) stop processing your personal data.
- Right to data portability: you have the right to request the transfer of your collected data to another organisation, or directly to you

**Any further queries?** If you need any further information, you can contact **Name of contact person** at **Email**.

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<sup>17</sup> This informed consent form has been prepared by Solar Power Europe for Work Package 8



## **CONSENT**

By subscribing to the mailing list, I agree to be contacted by the Increase project team, managed by Thi!nkE.

- I consent to the use of my personal data according to what has been presented to me in writing
- The purpose of the project has been explained to me in writing
- I understand that I can withdraw my consent at any time and my contact details and information will be removed from the database
- It has been explained to me how my data will be managed and that I may access it on request
- I agree for my data to be retained in the "Increase Stakeholders Database" and be made available to project partners

Date

Signature

# PARTNERS

Th!nk E



EPFL



Climacy

CSTB  
*le futur en construction*



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