

Methodological guide

Inuk Carbon Credit Certification Methodological Guide

*The guide outlines the eligibility criteria and certification process for carbon credit projects under the **Inuk standard**, a European carbon standard that certifies only projects located in the EU [except Sweden and Finland], the UK, and Switzerland*

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1. Eligibility Criteria

1.1 Measurability

1.2 Reality and effectiveness

1.3 Additionality

1.4 No double counting

1.5 Co-benefits

1.6 Environmental & social do not harm

1.6.1 Safeguard Mechanisms

1.6.2 Risk Taxonomy

1.6.3 Regulatory Framework

1.7 Leakage & Substitution

1.8 TRL

1.9 Core business principle & Target alignment

1.10 Minimum impact

1.11 Blockchain integration

1.12 Permanence

2. Certification Process (5 Phases)

3. Key Features

3.1 Eligibility Criteria

3.2 Detailed Documentation

1. Eligibility Criteria

1.1 Measurability

Projects must provide (A) a baseline scenario based on real data and (B) production data or equivalent over the project's lifetime.

A. Baseline scenario

The baseline scenario, or "baseline," is the cornerstone of any carbon credit project. It represents the level of greenhouse gas emissions that would have occurred in the absence of the project. This scenario serves as the point of comparison for quantifying the emission reductions attributable to the project.

The Inuk standard relies exclusively on proven baseline scenarios over a minimum period of 3 years. Consequently, it does not cover the following situations (non-exhaustive list):

- Decarbonization projects that do not replace an existing solution
Example: Installing photovoltaic panels to power a new facility in an area that previously had no supply
- Decarbonization projects based on behavior changes that are difficult to quantify
Example: Installing an EV charging station without usage targets or data on prior habits
- Decarbonization projects based on a partial view of the value chain
Example: Installing a hydrogen project without traceability of the electricity source used for its production and without traceability of its end use

Project type	Accepted data for the baseline scenario
Replacement of installations using fossil fuels with renewable energy	Historical consumption of the fossil source within the project's boundary over the previous three years

Project type	Accepted data for the baseline scenario
Significant energy efficiency improvements that reduce fossil energy consumption	Historical consumption of the fossil source within the project's boundary over the previous three years
Renewable electricity generation where it feeds into a power mix dependent on fossil fuels	GHG emission data for the relevant grid mix (Grid Emission Factor, GEF) in the territory over the last three years
Technological innovations that eliminate the use of fossil fuels	Full GHG assessment of the conventional solution that the innovation intends to replace, based on physical data

Each baseline scenario is established according to a specific methodology for each project, available on the IGLU platform.

Uncertainty on measurements is **minimized by design (benchmarked at 5%)** through the exclusive use of **IoT sensors and direct APIs** for primary data collection. This minimizes the representativeness and accuracy risks typically associated with manual data entry.

B. Production data over the project's lifetime

The Inuk Standard is built on the IGLU technological solution, which permanently and durably records on the blockchain every physical data point used to build the carbon credit.

Accordingly, projects eligible under the Inuk Standard must be able to provide data that is reliable, accurate, and verifiable.

Project type	Accepted data for the project scenario
Replacement of installations using fossil fuels with renewable energy	Data collected on a best-endeavours basis, according to the operational constraints of the project. Where possible, data collected on a daily basis (D+1) via APIs or IoT sensors. If not feasible, a weekly, monthly, or quarterly collection is acceptable, provided the data retains its daily granularity.

Project type	Accepted data for the project scenario
Significant energy efficiency improvements that reduce fossil energy consumption	Depending on the project's technology: - Renewable heat production data in kWh recorded daily with D+1 availability - Energy consumption data in kWh recorded daily with D+1 availability for energy efficiency projects - Any other data capture that verifies the project's effective operation
Renewable electricity generation where it feeds into a power mix dependent on fossil fuels	Project production data in kWh, recorded daily with D+1 availability
Technological innovations that eliminate the use of fossil fuels	Project production data according to the functional unit defined by the project's associated methodology, recorded daily with D+1 availability

1.2 Reality and effectiveness

Projects must demonstrate **an effective transition** from fossil fuels to decarbonised solutions.

The following are eligible:

- Replacing fossil fuel-based installations with renewable energy sources, *e.g. installing a solar thermal power plant to replace a gas heating system.*
- Significant improvement in energy efficiency, reducing fossil fuel consumption, *e.g. installation of a waste heat recovery unit, allowing gas furnaces to be shut down*
- The production of renewable electricity where this is integrated into an electricity mix dependent on fossil fuels: *e.g. installation of a wind power project in Poland, installation of a solar park in oil-dependent non-interconnected areas.*
- Technological innovations enabling the elimination of fossil fuel use, *e.g. low-carbon cement project in Vendée*

- Avoidance of fossil fuel-based industrial processes through the integration of circularity models, *e.g. circular economy project in the textile sector*

All projects are subject to an in-depth study that includes:

- A comprehensive GHG assessment of all emissions associated with the construction, operation and maintenance of the project;
- A life cycle assessment (LCA) of the key components of the project;
- A comprehensive technical report
- A feasibility study (if necessary)

Projects shall undergo an in-person or remote site audit within two years of the project's crediting period start date. The purpose of this site audit is to confirm that:

- The project exists and is functional
- The scale of the project is in line with the description
- Key processes operate as described in the project PDD

Projects that are in the planning phase and seeking carbon finance to fund investments shall prove that the project will actually occur, and will begin operations within 2 years of certification. Proof may include contracts with suppliers of key inputs or receipts from purchase of key machinery.

1.3 Additionality

The principle of additionality is fundamental to carbon credit certification. A project is considered additional if it can demonstrate that the emission reductions would not have occurred in a "business as usual" scenario.

Additionality must be demonstrated in several ways:

Regulatory additionality	• The project must go beyond existing and planned regulatory requirements • Regulatory monitoring must be carried out to anticipate legislative changes • Sector standards and best market practices must be taken into account
Financial additionality	• A detailed financial analysis demonstrating that the project is not financially viable without carbon credits • Calculation of the IRR (Internal Rate of Return) with and without

	carbon credits • Comparison with standard profitability thresholds for the sector • Identification of other available sources of financing and justification of their insufficiency
Technological additionality	• Demonstration that the proposed technology is not yet widely deployed in the local context • Analysis of technological barriers and how carbon credits can help overcome them • Assessment of technological maturity and associated risks

Inuk assess all of the additionality criteria listed above, with particular attention paid to **financial additionality**. The most common cases of financial additionality that we encounter are as follows:

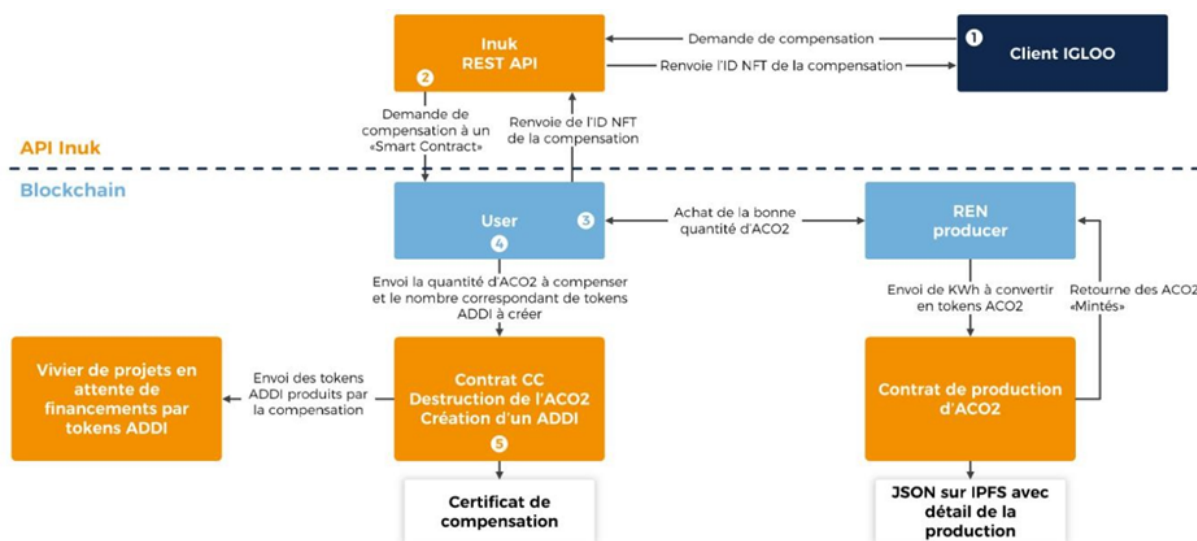
- The project is too small to be financed by traditional players in its sector (e.g. infrastructure funds).
- The cost price of the product generated by the project is significantly higher than the conventional alternative on the market (e.g. low-carbon cement is 30% more expensive than Portland cement).
- The business model requires a contractual framework that is unusual for the sector (e.g. a 20-year commitment for the off-taker of MWh of renewable heat, versus 2 to 3 years for a gas contract).

In order to determine financial additionality, the following documents must be provided:

- A comprehensive business plan, including proposed sources of financing and valuation of products other than carbon credits (e.g. MWh)
- A comprehensive market analysis, with a 5-year projection for products other than carbon credits (e.g. MWh)
- Details of the financing plan, including potential subsidies and grants, and, where applicable, proof that these are not sufficient to make the project viable.

1.4 No double counting

The final stage of the data collection process involves tokenising ICCs. Each tonne of CO₂ avoided is converted into a unique digital token, enriched with all the project's metadata. These tokens are non-fungible digital assets (NFTs) that retain the complete history of their creation and guarantee that double counting is impossible.



Schematic description of the ICC tokenisation process – Source: Inuk

These tokenised carbon credits are traded on the IGLU platform, which is specially designed to maintain maximum security. The platform allows buyers to access all information relating to each ICC.

For more details, please refer to the [Double counting policy document](#).

Interaction with Regulatory Instruments

Inuk ensures that emission reductions are not double-counted toward any other mandatory mitigation scheme.

- **EU-ETS Check:** Projects falling under the scope of Directive 2003/87/EC (EU-ETS) are strictly ineligible.
- **Public Subsidy Adjustment:** If a project receives significant national subsidies (e.g., French ADEME grants), the financial additionality analysis must prove that the carbon credit revenue is still required to reach the sector's standard IRR.

1.5 Co-benefits

Projects certified by INUK must demonstrate a systemic positive impact beyond their direct contribution to greenhouse gas reduction or avoidance. Each project shall generate tangible, measurable, and verifiable environmental or social co-benefits, in addition to its quantified climate benefits.

Co-benefits must result directly from the implementation of the project and not from external or unrelated developments. They must be substantial, evidenced, and aligned with the United Nations Sustainable Development Goals (UN SDGs), which serve as the reference framework for their identification and evaluation.

Relevant domains may include, but are not limited to:

- preservation and restoration of local biodiversity (SDG 14 & 15)
- reduction of air, water, or soil pollution (SDG 3, 6, 12)
- rehabilitation of industrial brownfields or degraded territories (SDG 11 & 15)
- creation of local employment and capacity-building in transition-related sectors (SDG 4 & 8)
- contribution to European energy and industrial sovereignty (SDG 4 & 9)

The demonstration of co-benefits must rely on primary project data, carbon quantification results, life cycle assessment (LCA), or other recognized scientific sources. The methods, assumptions, and tools used for assessing co-benefits shall be clearly described in the project's technical documentation and be subject to independent verification.

1.6 Environmental & social do not harm

INUK-certified projects must not cause significant environmental or social harm under any circumstance. All potential risks must be identified, mitigated, and monitored through a structured assessment and validation process.

1.6.1 Safeguard Mechanisms

Stakeholder consultation

Project Developers must conduct a transparent and well-documented consultation process with relevant local stakeholders — including residents, communities, municipal authorities, and other affected parties — to: (i) identify unintended consequences, (ii) collect feedback, and (iii) ensure social acceptability.

The final outcomes and responses to the public consultation are compiled in a report, which is made publicly available. A direct link to this report is included in the Project Design Document (PDD) for full transparency.

Note that the local consultation can highlight the need to create a benefit-sharing plan if the project identifies a specific need to enhance its social acceptability or its positive local impact.

Risk assessment

Project Developers must evaluate potential environmental and social risks throughout the project lifecycle, including adverse effects such as land use change, biodiversity loss, pollution, resource depletion, rebound effects, or exposure to harmful substances. Each methodology provides specific guidance for identifying and addressing these risks.

1.6.2 Risk Taxonomy

Risk assessments must cover at minimum the following categories, the impacts of which must be avoided and minimized:

Category	Requirements
Labor rights and working conditions	Safe and healthy working conditions · Fair treatment, non-discrimination, equal opportunities · Prohibition of forced labor, child labor, and trafficked persons · Protection of contracted workers employed by third parties
Resource efficiency and pollution prevention	Minimize pollutant emissions to air · Minimize discharges to water, noise, and vibration · Minimize waste generation and release of hazardous materials, chemical pesticides, and fertilizers
Land acquisition and involuntary resettlement	Minimize forced physical and/or economic displacement
Biodiversity conservation and sustainable management of living natural resources	Avoid/minimize negative impacts on terrestrial and marine biodiversity and ecosystems · Protect habitats of rare, threatened, and endangered species, including connectivity areas · Do not convert natural forests, grasslands, wetlands, or high conservation value habitats · Minimize soil degradation and erosion · Minimize water consumption and water stress
Human rights and stakeholder engagement	Non-discrimination and respect for human rights · Compliance with the International Bill of Human Rights and universal instruments ratified by the host country · Take into account and respond to local stakeholders' views
Gender equality	Equal opportunities regardless of gender · Protection against and appropriate response to violence against women and girls · Equal

Category	Requirements
	pay for equal work

1.6.3 Regulatory Framework

Projects must comply with all applicable local, national, and European regulations, as well as relevant international conventions and best practices.

INUK's exclusive focus on European projects (EU [except Sweden and Finland], the UK, and Switzerland) provides an additional guarantee: the European Union enforces some of the world's most stringent environmental, labor, and health & safety standards, supported by robust enforcement mechanisms.

Evidence of compliance: where a project has already undergone regulatory procedures involving environmental and social impact assessments, public consultations, and the granting of relevant permits or operating authorizations — as is systematically the case for all INUK-certified projects — such documentation constitutes direct evidence of compliance with INUK's "Do No Harm" requirements. These elements are reviewed and validated by independent third-party verifiers.

INUK operates exclusively within the EU EU [except Sweden and Finland], the UK, and Switzerland. Within this geographic scope, Indigenous Peoples and Local Communities (IP/LCs) as defined by the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) are generally not present. Consequently, the requirement for Free, Prior, and Informed Consent (FPIC) — a mechanism designed specifically to protect indigenous populations under international frameworks — is not applicable to projects certified under the INUK Standard. This mechanism is not designed for the European regulatory and social context, where different legal protections for citizens and residents are already in force.

The INUK Standard distinguishes clearly between:

- IP/LCs (UNDRIP definition): distinct indigenous groups with specific social, cultural, or economic rights under international law — not present within INUK's geographic scope.
- Local stakeholders: residents, communities, municipal authorities, and other affected parties — the relevant actors for INUK projects.

1.7 Leakage & Substitution

INUK-certified projects are structurally designed to eliminate the risk of carbon leakage through a rigorous substitution logic. **Leakage** — the indirect transfer of greenhouse gas emissions outside the project's boundaries — typically occurs when emission-generating activities are relocated or when upstream or downstream effects offset the project's benefits. INUK prevents such risks by requiring that every certified project *replaces* an existing high-emission activity rather than *adds* new capacity or shifts production elsewhere.

The principle of **substitution** is thus integral to INUK's leakage prevention framework. Each project must demonstrate that its outputs realistically and efficiently substitute those of the baseline scenario, delivering equivalent functions and services. This ensures that the project leads to an absolute reduction in emissions rather than a relative shift in where or how those emissions occur. Baseline scenarios must be established using verifiable physical data, enabling accurate comparison and quantification of avoided emissions.

Because INUK operates exclusively within the European energy sector — where the objective is the progressive replacement of fossil-based systems with low-carbon alternatives — all certified activities inherently serve a substitution function. They do not expand fossil capacity, displace industrial activity, or generate rebound effects; instead, they accelerate the structural phase-out of fossil energy.

While the standard focuses heavily on energy, it includes circularity in intense fossil fuel industries, such as the "Textile second life" methodology. For these circular fashion projects, the project must prove it replaces an existing high-emission activity, such as the production of new garments. The risk of a rebound effect, where cheaper second-hand clothes lead to increased total consumption, must be analyzed in the project's Risk Assessment Template. If the activity is found to generate a rebound effect that offsets the climate benefits, it would fail the measurability or substitution criteria and would not be issued credits.

Within this framework, the traditional concept of leakage becomes largely irrelevant: by design, INUK projects deliver net decarbonization within a highly regulated European environment that enforces transparency, traceability, and compliance with strict environmental and industrial standards.

1.8 TRL

INUK certifies only technologies that have reached a sufficient level of maturity to ensure reliability, scalability, and measurable climate impact. **Each project must demonstrate a Technology Readiness Level (TRL) of at least 6,** corresponding to a technology successfully demonstrated in a relevant operational environment.

This requirement guarantees that INUK-certified projects rely on proven, deployable solutions rather than experimental or untested prototypes. The TRL assessment forms part of the project validation process and is supported by technical documentation, operational data, or third-party certifications demonstrating that the technology performs as expected under real-world conditions.

This approach minimizes the risk of underperformance, ensures that emission reductions are real and verifiable, and strengthens investor confidence in the integrity of ICCs. By focusing on advanced yet scalable technologies, INUK promotes the industrialization of decarbonization solutions across Europe, accelerating the transition toward a low-carbon economy.

1.9 Core business principle & Target alignment

The Inuk Standard applies a fundamental eligibility criterion whereby carbon credit certification is exclusively extended to project developers whose primary business activity constitutes the decarbonizing intervention itself.

This methodological constraint ensures direct causality between carbon finance and the acceleration of emissions reduction activities, thereby safeguarding against the dilution of additionality through cross-subsidization within diversified business portfolios.

This principle establishes that eligible project developers must demonstrate that their operational "Raison d'être" is intrinsically aligned with the decarbonization activity generating carbon credits.

This Core Business Additionality Principle thus serves as a structural safeguard ensuring that carbon credits certified under the Inuk Standard represent demonstrably additional emissions reductions, with a transparent and auditable nexus between carbon finance and measurable climate impact. By restricting certification to entities whose organizational DNA is fundamentally

decarbonizing in nature, the principle mitigates the risk of greenwashing and upholds the environmental integrity of issued carbon credits

In addition, Inuk has a Target alignment principle to ensure that ICCs fund technologies that will remain viable and low-impact in the near future. Inuk does not issue ICCs for projects with only meager improvements over the baseline scenario, nor projects developers that are not solely focused on low-carbon activities.

Avoided emissions must be aligned with the European Union's target emission reductions for the project's sector from 2020 to 2030:

- Transport & Mobility: 17%
- Construction & Housing: 73%
- Agriculture: 58%
- Industry & Waste: 47%
- Energy: 45%

For more details, please refer to the [European Union's 2040 targets document](#).

1.10 Minimum impact

INUK certifies only projects demonstrating a significant and measurable contribution to decarbonization. Each project must achieve a minimum verified reduction or avoidance of **500 tonnes of CO₂ equivalent per year** over its crediting period. This threshold ensures that ICCs correspond to impactful, scalable mitigation actions capable of materially advancing Europe's transition away from fossil fuels.

Exceptions may be granted for projects with lower annual volumes when they present a strong strategic relevance for the decarbonization of hard-to-abate sectors, or when they enable the deployment of breakthrough technologies with high replication potential.

The **crediting period is set at five years**, renewable by successive five-year cycles. At each renewal, projects must undergo a complete revalidation process under the most recent version of the INUK Standard, ensuring ongoing alignment with scientific progress, technological evolution, and European climate objectives.

In addition, the certification team review projects annually to ensure no major

changes occurred, and that the project's eligibility and additionality are maintained over time.

1.11 Blockchain integration

Once collected, the data is integrated into the blockchain system. This step transforms raw data into certified, immutable information. **Each batch of data is given a unique identifier and is accompanied by essential metadata that allows its origin and context to be traced.** Blockchain technology ensures that this information cannot be modified once it has been recorded.

The decentralised approach enhances the reliability of the system by ensuring that each record is verified and validated by independent parties. The complete history of changes is retained, creating an unalterable audit trail.

Inuk technology operates on the basis of a *smart contract* and two separate tokens:

- **The ACO2 token** represents the volume of CO2 avoided by a project owner over a given period of time. It is calculated on the basis of actual physical data, collected directly from the project owner's site. It can be traded directly via the IGLU platform.
- **The ADDI token** makes it possible to track the financing of additionality. Each time an ACO2 token is sold, an ADDI token is created, making it possible to accurately and tamper-proof track the amount of additional financing generated by this transaction.

transaction. It is then allocated to an additional project in order to guarantee traceability.



Schematic description of the process of creating and tracking ICCs on the blockchain – Source: Inuk

1.12 Permanence

The sustained mitigation of emissions requires both technical durability and operational continuity. Inuk Standard therefore requires evidence of facility sustainability, including demonstrated equipment lifespan and documented maintenance protocols.

Avoidance credits issued by Inuk Standard are not subject to reversal risk, as they represent emissions avoided during a specific monitoring period and do not correspond to a physical carbon stock. This fundamental distinction differentiates avoidance credits from sequestration-based credits, which face potential loss through natural events or storage failure.

Inuk's methodology relies on ex-post issuance: credits are generated only after the actual avoidance has been verified through measured physical data, never on the basis of forecasted reductions. Quantification uses systematic comparison between two scenarios — the baseline (measured from historical data) and the project scenario (monitored through continuous data collection) — both grounded in verified empirical evidence.

Project discontinuation — including return to baseline practices or cessation of mitigation activities — does not retroactively invalidate already-issued credits for prior verified periods. Rather, it interrupts future credit eligibility. This risk is managed through mandatory annual ex-post verification, which detects any material change in project operational status and prevents issuance of credits for subsequent periods if continuity is compromised.

Because avoidance credits represent emissions already avoided and verified in completed periods, they require no credit reserve (buffer pool) to offset non-permanence risk. The only permissible exception to credit validity is documented error, as detailed in Section

Although highly unlikely, a carbon credit cancellation can occur in case of error, as detailed in section .

2. Certification Process (5 Phases)

The certification process developed by Inuk is designed to be as simple and reliable as possible, relying on a comprehensive analysis of the project across all its dimensions (technical, environmental, carbon, and financial).

The successful completion of the certification process is based on a partnership approach, during which Inuk supports each project developer throughout all stages.

At the end of the process, the project developer gains access to the IGLU platform, where they can consult all documentation, the conversion factor and underlying calculations, daily collected data, and the carbon credits available on the platform.

Certification with Inuk is free of charge for the project developer, as is the use of our traceability technology. However, certain fees may apply on a case-by-case basis for studies not previously conducted by the project developer (e.g., GHG assessment, LCA, etc.).

- **Phase 1: Pre-evaluation (Weeks 1–2):** Preliminary eligibility check and confidentiality agreement.
- **Phase 2: In-depth study (Weeks 3–5):** Development of the Monitoring Plan, including GHG/LCA integration, financial analysis, and on-site visit or remote audit.

- **Phase 3: Validation (Weeks 6–10):** Comprehensive technical review by independent experts/VVB and mandatory public stakeholder consultation.
- **Phase 4: Registration (Weeks 11–12):** Final validation by the SAB, contract signing, and IGLU platform account setup.
- **Phase 5: Monitoring & Blockchain Registration (From Week 13, ongoing):** Start of daily automated data collection, conversion to carbon tokens (ACO₂), and quarterly internal verification

3. Key Features

3.1 Eligibility Criteria

- The project enables the immediate and permanent cessation of fossil fuel use
- The project is located in Europe (EU + UK)
- The project replaces an existing situation that can be measured precisely and reliably (baseline scenario)
- The project developer is independent and holds majority ownership if the project is structured as an SPV
- The project developer can provide daily measurement and production data
- The project demonstrates proven financial additionality
- The project has no negative externalities (e.g., impacts on biodiversity, air or soil pollution, land artificialization, etc.)
- The project is small or medium in scale

3.2 Detailed Documentation

Project Qualification

- Project description note
- Technical dossier
- Complete GHG assessment of the project (construction, operation, and maintenance)

- Life Cycle Assessment (LCA) of key equipment
- Analysis of externalities (positive and negative)

Financial Additionality

- Complete detailed business plan
- Financing plan
- Details of the contractual framework with any clients for products other than carbon credits
- Detailed project cost plan (construction, operation, and maintenance)

Legal Documents and Governance

- Legal structure of the project (SPV, project developer subsidiary, etc.)
- Detailed project shareholding and cap table

Technology and Data

- Opening of an API line for daily data retrieval (D+1)
- Alternatively, provision of a secure channel for data collection