



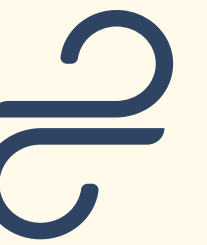
Flore de Durfort  
CEO & Co-Founder



## RFNBO certification “IRL”: What Works, What Doesn’t

April 11th, 2025





**“Certified Green” will distinguish winners from losers in the renewable fuels space.**

Price premiums

Subsidies

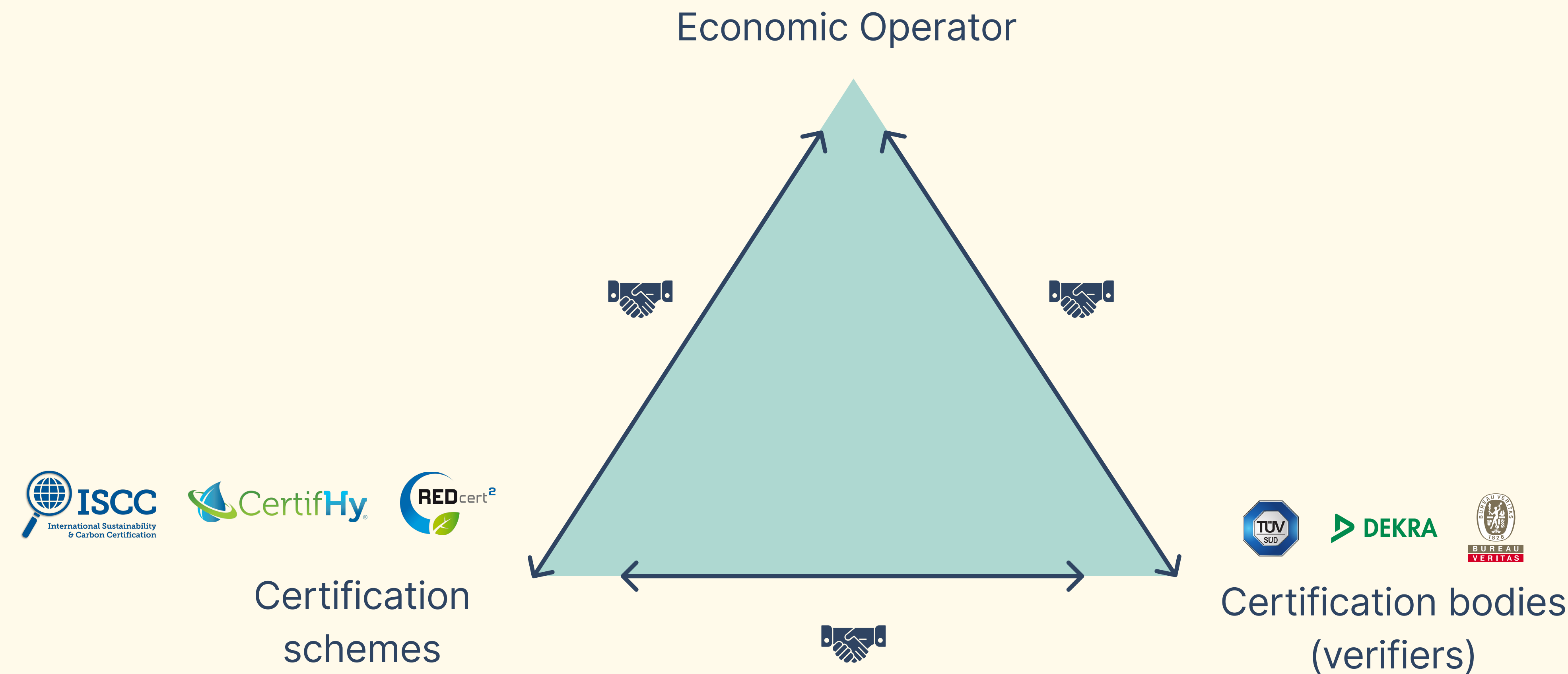
International trade







# In principle, it's straightforward.





Today's compliance & certification processes can hardly scale to the extent required by complex & fast-changing regulation.

Manual

Tedious

Reliant on multiple stakeholders



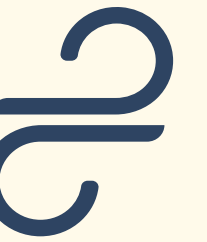


# Translating requirements from schemes alone takes weeks

200+ requirements

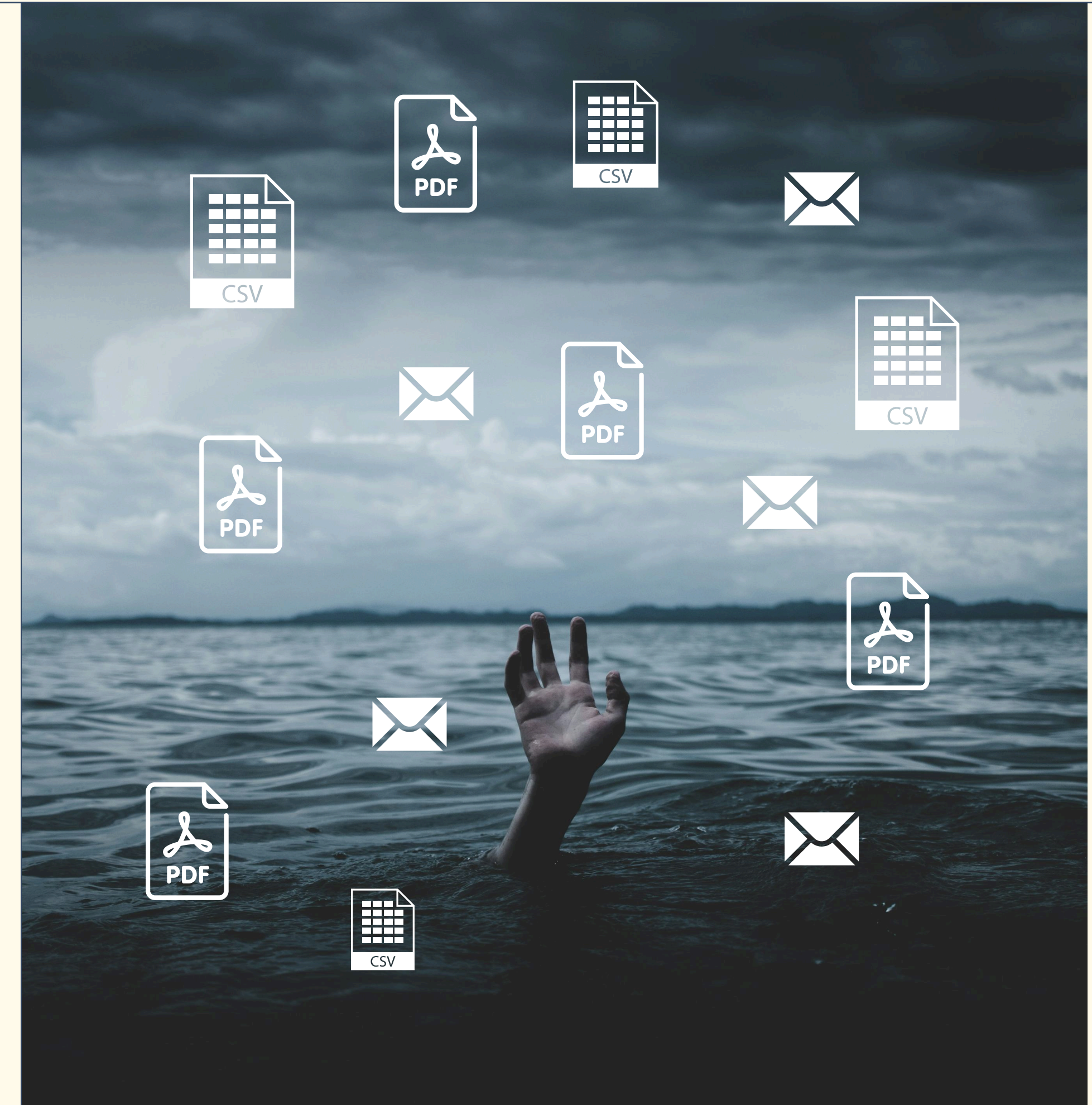




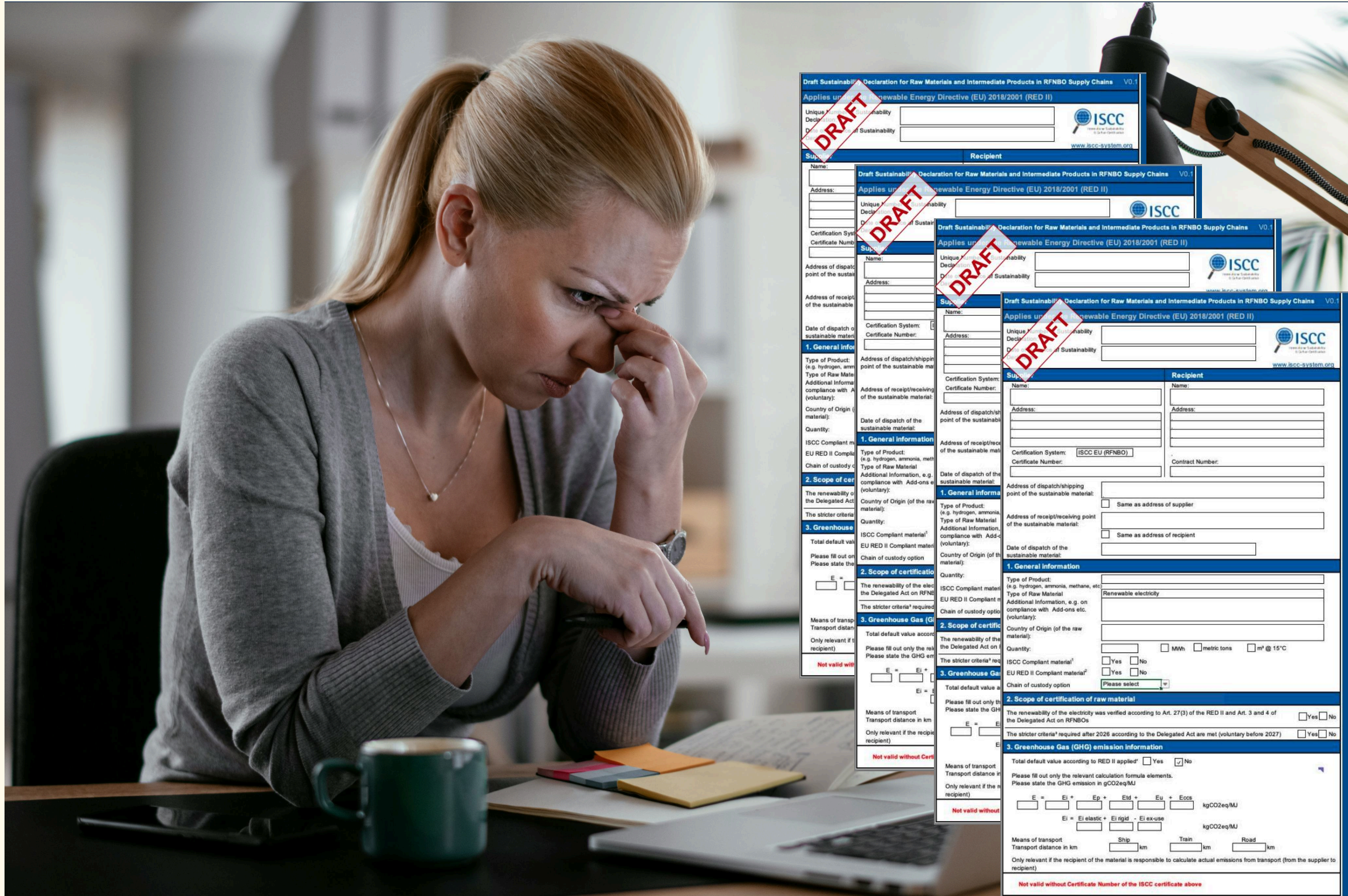


Data ingestion and processing requirements add complexity.

**70000+**  
data points & files / site / year







Create sustainability claims for every product. batch.

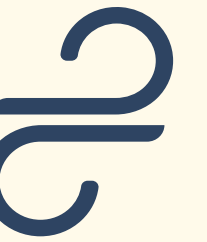
GHG calculation

4 Eye principle

72h after delivery

Logistics





# Transform thousands of evidences into auditable, verifiable claims.

Documentation

Reconciliation

Verification







**Building trust with  
offtakers, investors and  
subsidy agencies on  
“certifiability” is a success  
factor from day one.**

Compliance & CI Modeling

Power sourcing

Pre-certification



# The DIY Path

Complex & tedious

High maintenance

Data & tech intensive

# The BIG4 Path

Extremely costly incl. maintenance

Knowledge loss to 3rd party



# The Ideal Path

You are **confident** that your certification workflows are always on top of regulatory change.

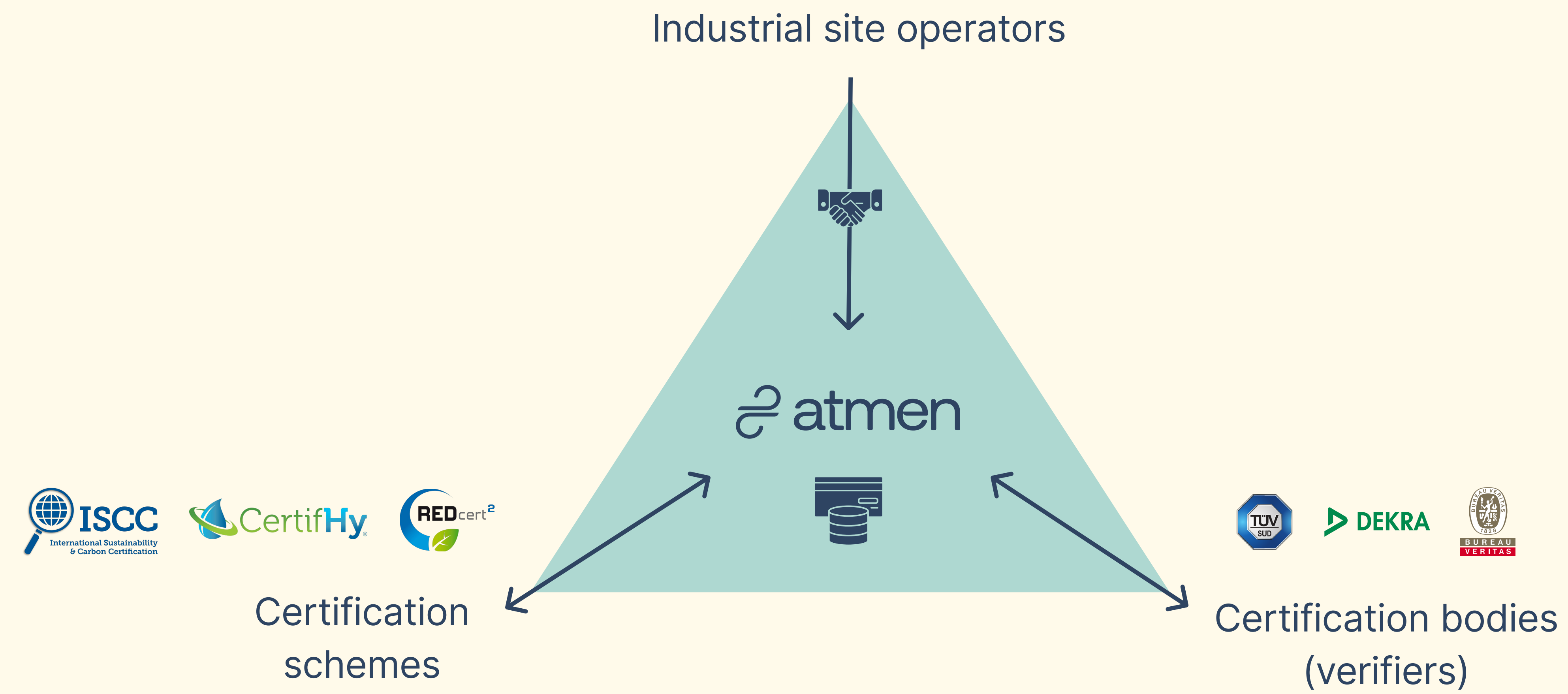
Your supply chain and operations are **optimized** FOR sustainability before they even exist.

Compliance and certification don't rely on tedious work but are seamlessly **embedded** in your operations.





# Atmen eliminates friction, provides scalability, enables optimization.







# Atmen onboarded 19 supply chains across 9 countries

Compliance Modelling

France

Hydrogen, Aviation Fuel, Methanol

Germany

Hydrogen

United States

Hydrogen, Ammonia

Tunisia

Hydrogen, Ammonia

Morocco

Hydrogen, Ammonia

Algeria

Hydrogen, Ammonia

Iceland

Hydrogen, Ammonia

Spain

Hydrogen, Methane

Belgium

Hydrogen

Power Procurement Optimisation

Germany

Hydrogen

Belgium

Hydrogen

Automate

France

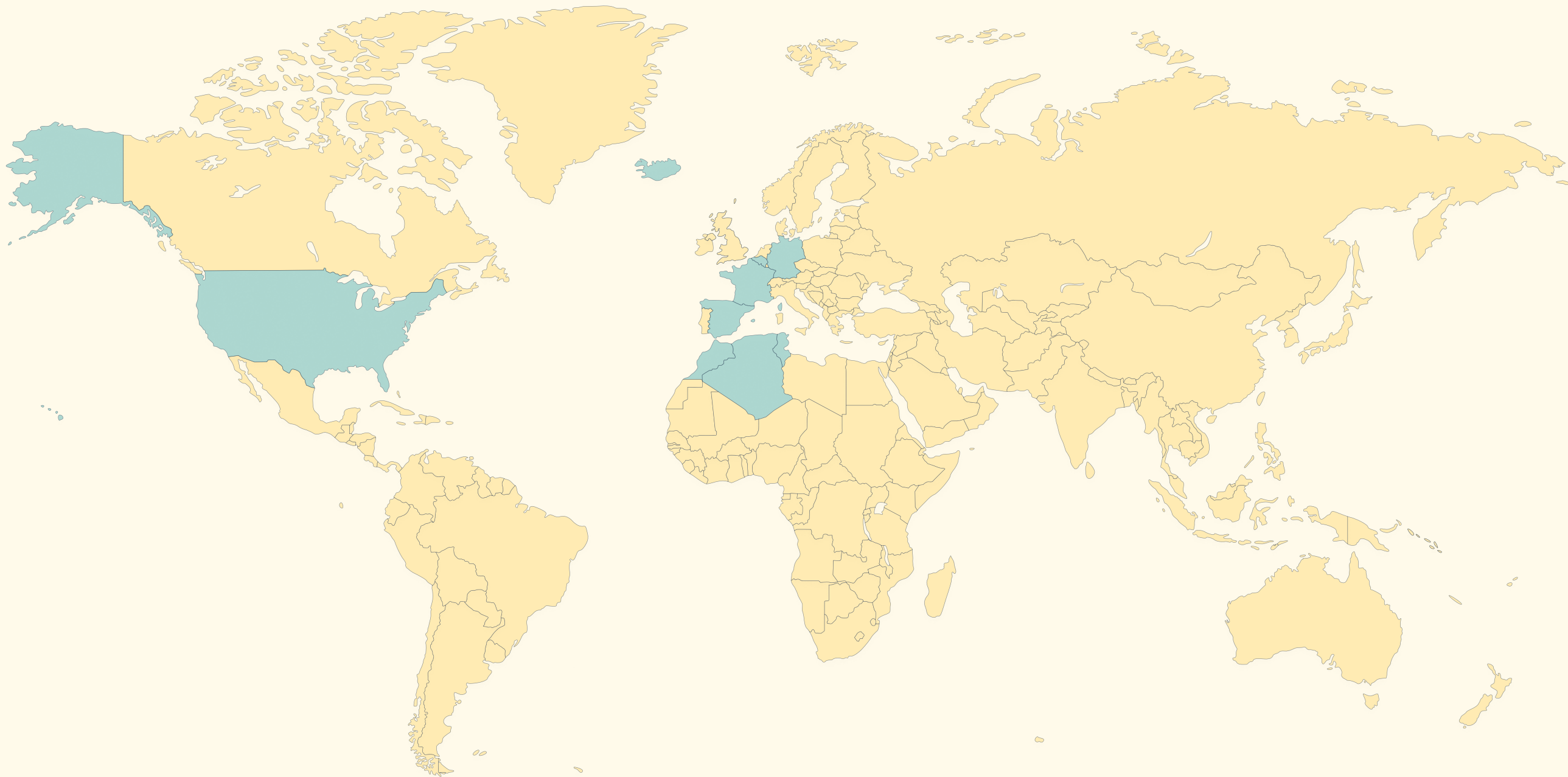
Hydrogen

Spain

Hydrogen, Methane

Germany

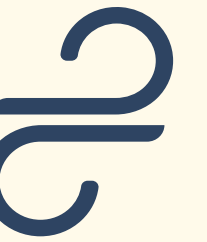
Hydrogen, Methane



Certification bodies working with our customers:







# 1.

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Technology-enabled attributes tracking is a **no brainer** for industrial companies to **future proof themselves**.

# 2.

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Certification challenges **aren't** just addressed by "A TECH". Up-to-date **regulatory and certification knowledge** are key.

# 3.

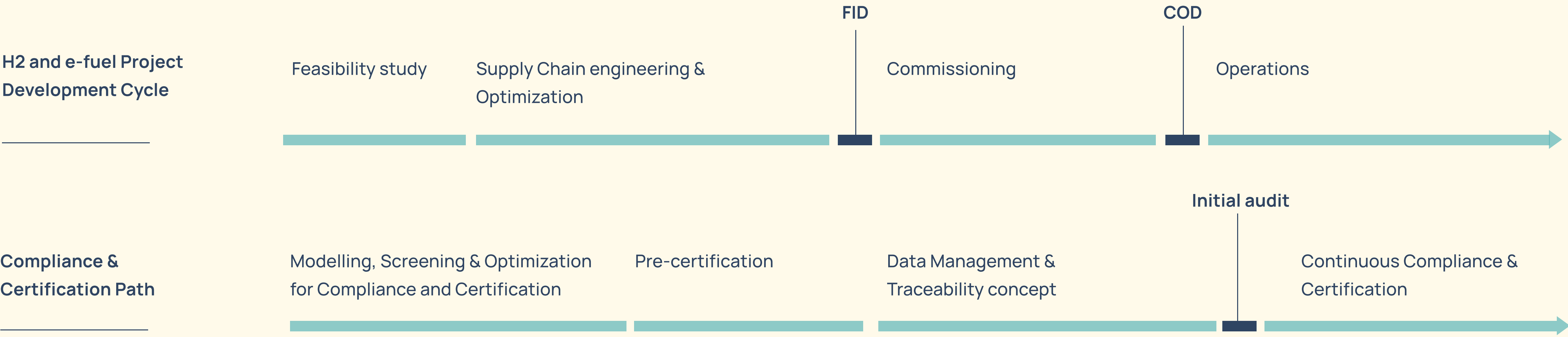
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Certification quickly becomes an **optimization game**: how to optimally calibrate your supply chains to ensure market access and achieve offtaker goals, while minimizing LCOH? → **Start early**.





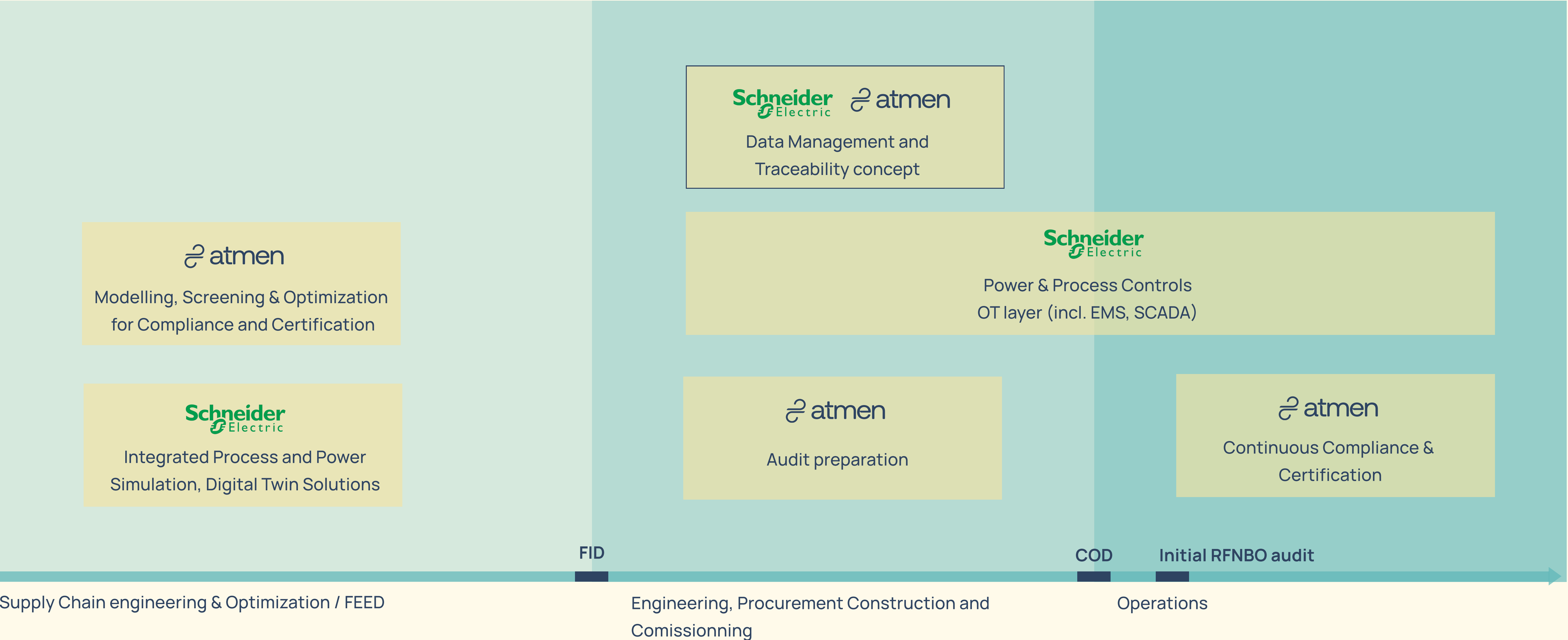
# Sustainability certification is a journey, from project inception to operations.







# Solutions along the Power-2-X Project Development Lifecycle







# How Does it Work?

Offtakers

Manage offtakers and configure how you would like to prioritise their RFNBO deliveries.

+ ADD A NEW OFFTAKER

View: All offtakers All locations Clear

PepsiCo

France

RFNBO %

on track

85

target: 70

CARBON INTENSITY gCO2e/MJ

on track

4.2

target: 6.0

RED II RFNBO (EU)

LOW CARBON

GlassFabrik

Germany

RFNBO %

on track

85

target: 70

CARBON INTENSITY gCO2e/MJ

on track

4.2

target: 6.0

RED II RFNBO (EU)

Mass Balance

Month-to-date 01.07-27.07

Input

Solar Asset

2567 MWh

Input

Wind PPA #1

2567 MWh

Input

Wind PPA #2

2567 MWh

Input

Meter reading

Input

Grid Mix Electricity

2567 MWh

Output

Hydrogen

234.54 tonnes | 7.2gCO2e/MJ

Storage

234.54 tonnes | 8.50gCO2e/MJ

Batch

ID #4567

6.3 tonnes | 8.0gCO2e/MJ

PoS Issuance

Batch

ID #4567

3.3 tonnes | 10.0gCO2e/MJ

PoS Issuance

Batch

ID #4567

5.2 tonnes | 8.3gCO2e/MJ

PoS Issuance

Batch

Delivery

GlassFabrik

85% RFNBO | 8.3gCO2e/MJ

Credit Batch

ID #4567

78% RFNBO | 10.2gCO2e/MJ

Delivery

PepsiCo

89% RFNBO | 9.5gCO2e/MJ

atmen

Home

SHORTCUTS

Compliance Monitor

Company Overview

PRODUCTS

Pre-COD

Compliance Monitor

Green Power Procurement Optimisation

Virtual Certification Expert

Auditor RFP tool

Post-COD

Automate

Company Overview

Site management

Offtakers

Green Power Matching

Traceability

Audits

Support

Home / Automate / Audits

Audits

+ ADD AUDIT

AUDIT MANAGEMENTDOCUMENTSCONTROLS

Show: All sites All Statuses Clear

ISCC EU - RFNBO

Audit ongoing

VIEW AS AUDITOR

TÜV SUD

Noor HYDROGEN

Observation window: 10.10.2023 - 09.10.2024

November 11, 2024

Audit starts

February 11, 2025

Audit ends

Audit progress

0% evidence accepted

Not ready for audit (165)

Accepted by auditor (0)

Flagged by auditor (0)

Non-applicable (0)

Ready for audit (38)

ISCC EU - RFNBO

Auditor invited

VIEW AS AUDITOR

TÜV SUD

Aura HYDROGEN

Observation window: 01.01.2024 - 31.12.2024

February 10, 2025

Audit starts

April 12, 2025

Audit ends

Audit progress

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# Automated Attributes Tracking & Certification

- ✓ Embed Regulatory & Compliance guidelines in your industrial stack
- ✓ Monitor Product Attributes across your supply chain
- ✓ Issue Proofs of Sustainability in one click

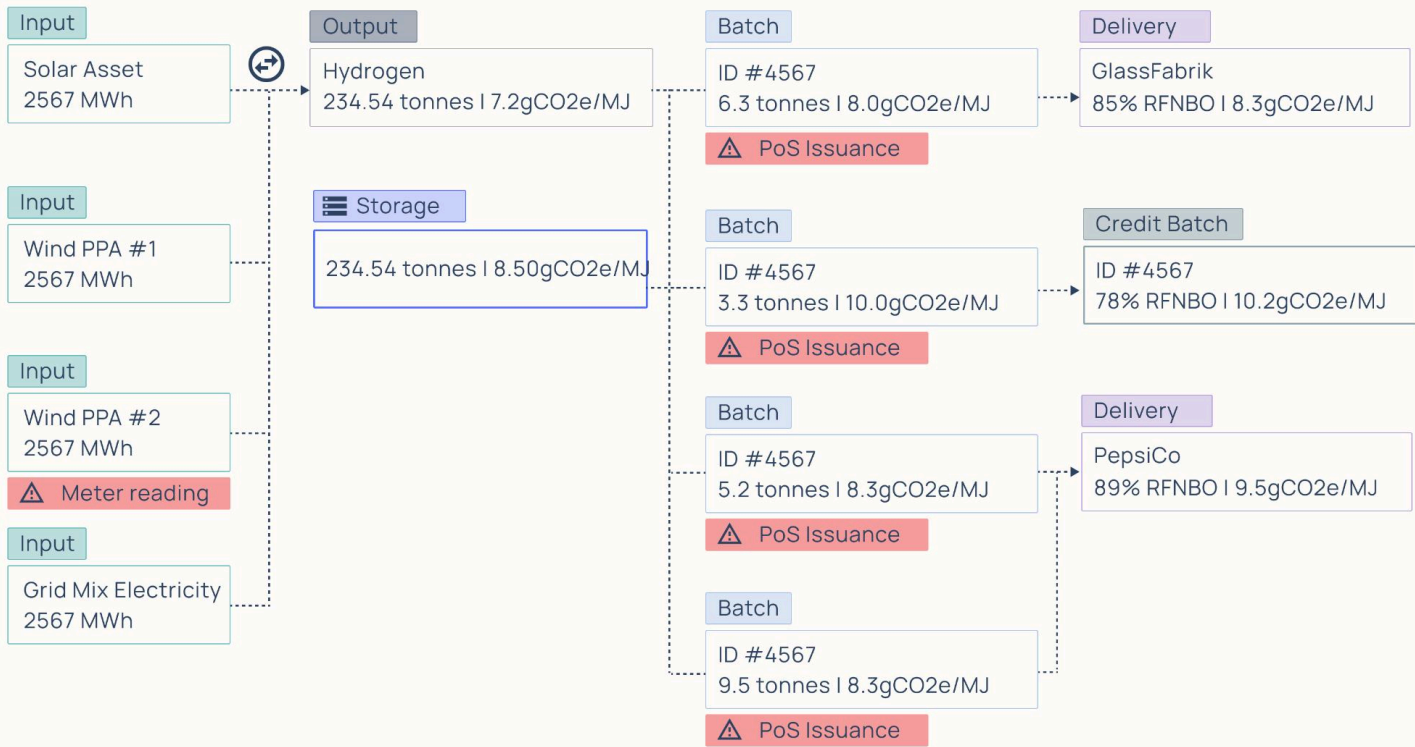
Noor

MONITOR

CLOSE

Mass Balance

Month-to-date 01.07-27.07



Proof of Sustainability Applies under Renewable Energy Directive (EU) 2028/2001 (REDII)		atmen	
Unique number of Sustainability Declaration: 451		Certificate number: 898765	
Date of issuance of Sustainability Declaration: 01.03.2024		Certification System: ISCC EU (RFNBO)	
<b>Supplier</b>		<b>Recipient</b>	
Name: Noor Renewables		Name: Kalista Chemie	
Address: 87, Riad St.		Address: Impasse des riens	
4567, Tangier, Morocco		69564, Peyre, France	
		Contract number: 45673	
Address of dispatch: Same as address of supplier			
Address of receipt/receiving point: Same as address of recipient			
1. General information			
Type of product: RFNBO - Hydrogen			
Type of raw material: Electricity			
Fuel precursor support received: tax exemptions, tax refunds, feed in tariffs			
Country of Origin (of raw material): Morocco			
Quantity: 45 metric tonnes, MWh			
ISCC Compliant material: Yes, No		EU RED II Compliant material: Yes, No	
Chain of custody option: Mass Balance			
2. Scope of certification of raw material			
The renewability of the electricity was verified according to Art. 27 (3) of the RED II and Art. 3 and 4 of the Delegated Act on RFNBOs		Yes, No	
The stricter criteria required after 2026 according to the Delegated Act are met (voluntary before 2027)		Yes, No	
3. Greenhouse Gas (GHG) emission information			
Total default value according to RED II applied		Yes, No	
Fossil fuel comparator ing CO2eq/MJ		GHG Emissions Saving in %	
Please fill out only relevant calculation formula elements and state the GHG emissions in gCO2eq/MJ			
E = Ei + Ep + Etd + Eu + Eccs			
Ei = Ei elastic + Ei rigid - Ei ex-use			
Means of Transports: Ship, Train, Road			
Transport Distance in km			
Only relevant if the recipient is responsible to calculate actual emissions from transport (from provider to recipient)			
Not valid without certificate number of the ISCC certificate above.			





# Attributes & Certificate Portfolio Management

- ✓ Automate Allocation of “green” based on Offtaker logics
- ✓ Embed “Mass Balancing” constraints

Offtakers

Manage offtakers and configure how would you like to prioritise their RFNBO deliveries.

+ ADD A NEW OFFTAKER

View: All offtakers All locations Clear

PepsiCo

France

RFNBO %	CARBON INTENSITY gCO2e/MJ
on track	on track
85	4.2
target: 70	target: 6.0

RED II RFNBO (EU)

LOW CARBON

GlassFabrik

Germany

RFNBO %	CARBON INTENSITY gCO2e/MJ
on track	on track
85	4.2
target: 70	target: 6.0

RED II RFNBO (EU)

Home / Automate / Company Overview

Company Overview

Operational Compliance - All sites

Month-to-date 01.07-29.07

78% RFNBO

10% Low-Carbon

5% Non-...

Total average GHG intensity

13 gCO2e/MJ

GHG Savings vs Grey Cradle to grave

78%

Sites' Operational Compliance

Last month 01.07-30.07 compared to Previous month 01.06-31.06

Site position	GHG Intensity (gCO2e/MJ)	% RFNBO
#1 - Fireflies	8.2 -1.0%	85 -2.0%
#2 - Noor	8.5 -1.0%	83 +1.0%
#3 - Aura	9.1 -1.0%	81 -2.0%
#4 - Rayor	10.3 -1.0%	79 -2.0%
#5 - Pleias	11.5 +2.0%	75 +1.0%

Rows per page: 10

PRODUCTS

Pre-COD

Compliance Monitor

Green Power Procurement Optimisation

Virtual Certification Expert

Auditor RFP tool

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Traceability

My Documents

Support

Developers Auditors

My tasks

Overdue

Due soon





# Documents & Audit Management

- ✓ Streamline document gathering, data reconciliation
- ✓ Fast-track and de-risk audits preparation & execution

^

v

x

Renewable Electricity Producer Self-Declaration

Document

Description

Eligible renewable electricity sourced via direct connections or with PPAs must be only supplied by renewable electricity installations which have completed and signed the appropriate ISCC self-declaration/ self- assessment.

Status

Up-to-date

Owner

John Smith

Category

Renewable Energy

Audits

Noor HYDROGEN - 10.23-09.2024

Type

Document

DETAILS

ASSOCIATED CONTROLS

AUDIT ACTIVITY

COMMENTS

01.02.02

Management System - Renewable electricity installations

Are ISCC self-declaration/self-assessment forms of all renewable electricity installations completed, signed...

02.02.01

Traceability - Renewable electricity installations

Is it ensured that eligible renewable electricity sourced via direct connections or with PPAs is only supplied by renewable...

02.02.02

Traceability - Renewable electricity installations

Are the amounts of renewable electricity supplied by the r enewable electricity installations plausible?

- Offtakers
- Green Power Matching
- Traceability
- Audits

Support

Home / Automate / Audits

Audits

+ ADD AUDIT

AUDIT MANAGEMENT

DOCUMENTS

CONTROLS

Show:

All sites

All Statuses

Clear

ISCC EU - RFNBO

Audit ongoing

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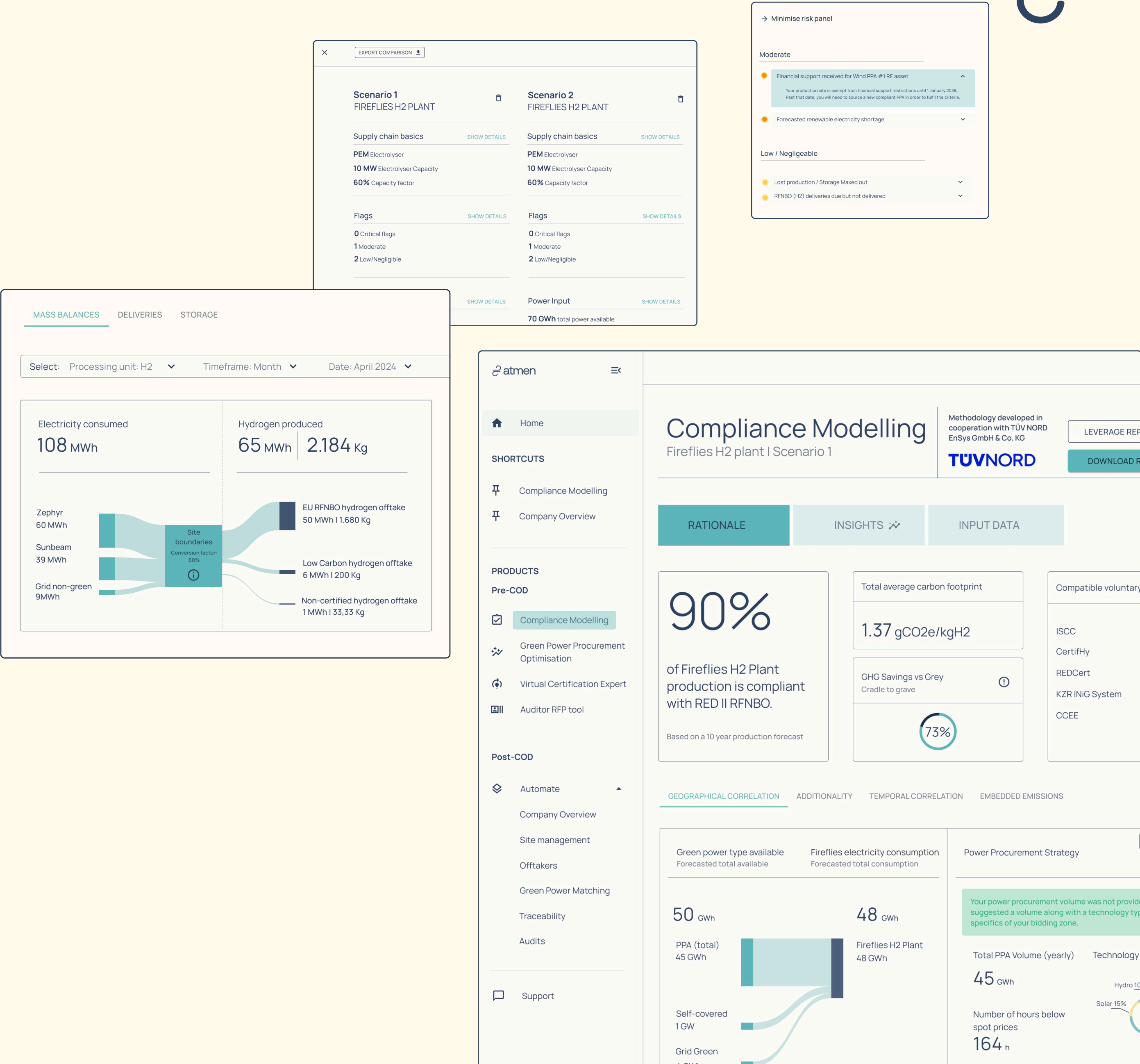
# Compliance Modelling

Methodology developed in cooperation  
with TÜV NORD EnSys GmbH & Co. KG



Feed in your plant engineering data, supply chain information, and energy inputs to:

- ✓ Simulate hourly energy flows and carbon intensity
- ✓ Screen for sustainability compliance and certifiability
- ✓ Compare different supply chain scenarios
- ✓ Simulate mass balances for each logistical unit





# atmen

Thank you!

→ [Get in touch](#)

