

User manual: Gas and hydrogen guarantee of origin service and register G-REX



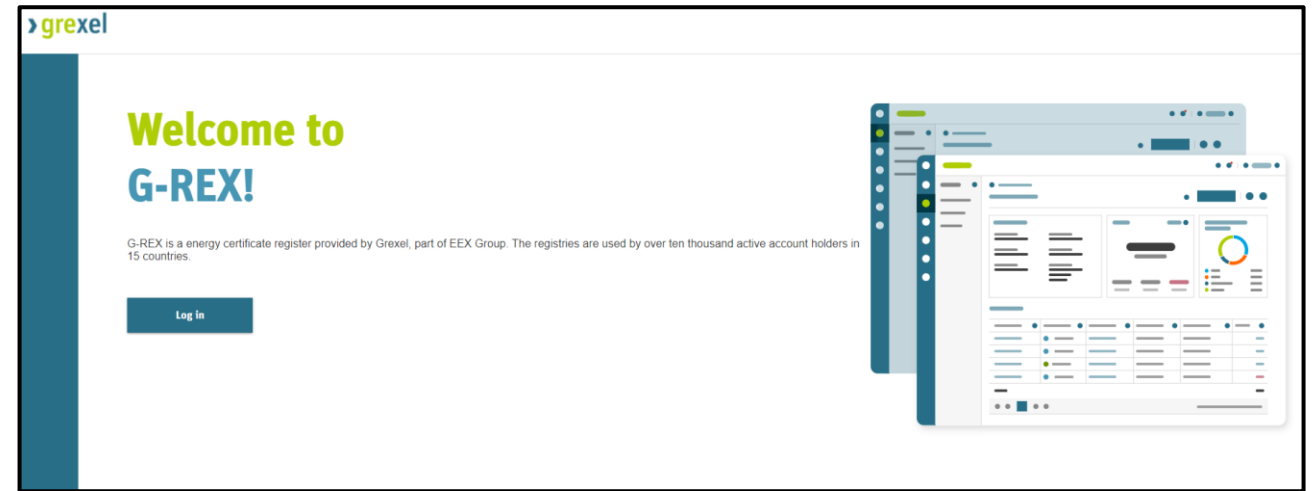
customerservice@gasgrid.fi

Heli Haapea, heli.haapea@gasgrid.fi, tel. +358 40 352 7643

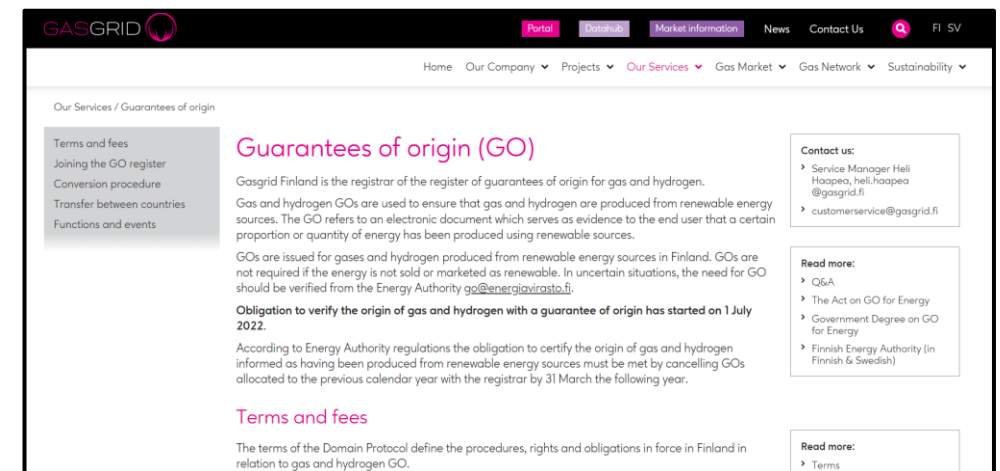
Contents

1. [General](#)
2. [Join the service](#)
3. [Create an organization](#)
4. [Log in](#)
5. [Create a production device](#)
6. [Production data, Declarations](#)
7. [Transactions](#)
8. [Logs and reports](#)
9. [Information exchange](#)

<https://grex.grexel.com/>



<https://gasgrid.fi/en/our-services/guarantees-of-origin/>



A photograph of an industrial facility, likely a refinery or chemical plant, featuring large, dark-colored pipes and valves. The scene is illuminated by the warm, golden light of a setting or rising sun, creating a strong lens flare effect. The background shows a line of trees and a clear sky. The overall atmosphere is industrial and serene.

1. General

General

- Act on Guarantee of Origin for Energy 1050/2021 (*standard CEN EN 16325 under revision*)
- Government Decree on Guarantee of Origin for Energy 1081/2021
- Gas and hydrogen guarantees of origin verify that the gas and hydrogen have been produced from renewable energy sources
- Guarantee of origin means an electronic document that proves to the end user that a certain percentage or amount of energy has been produced from renewable sources
 - The electronic document is created in the register of guarantees of origin
- For gas injected into grid as well as offgrid gas
- Certification and verification obligation from **1 July 2022**
- Communication: 1. Customer notices and 2. Notices for register users

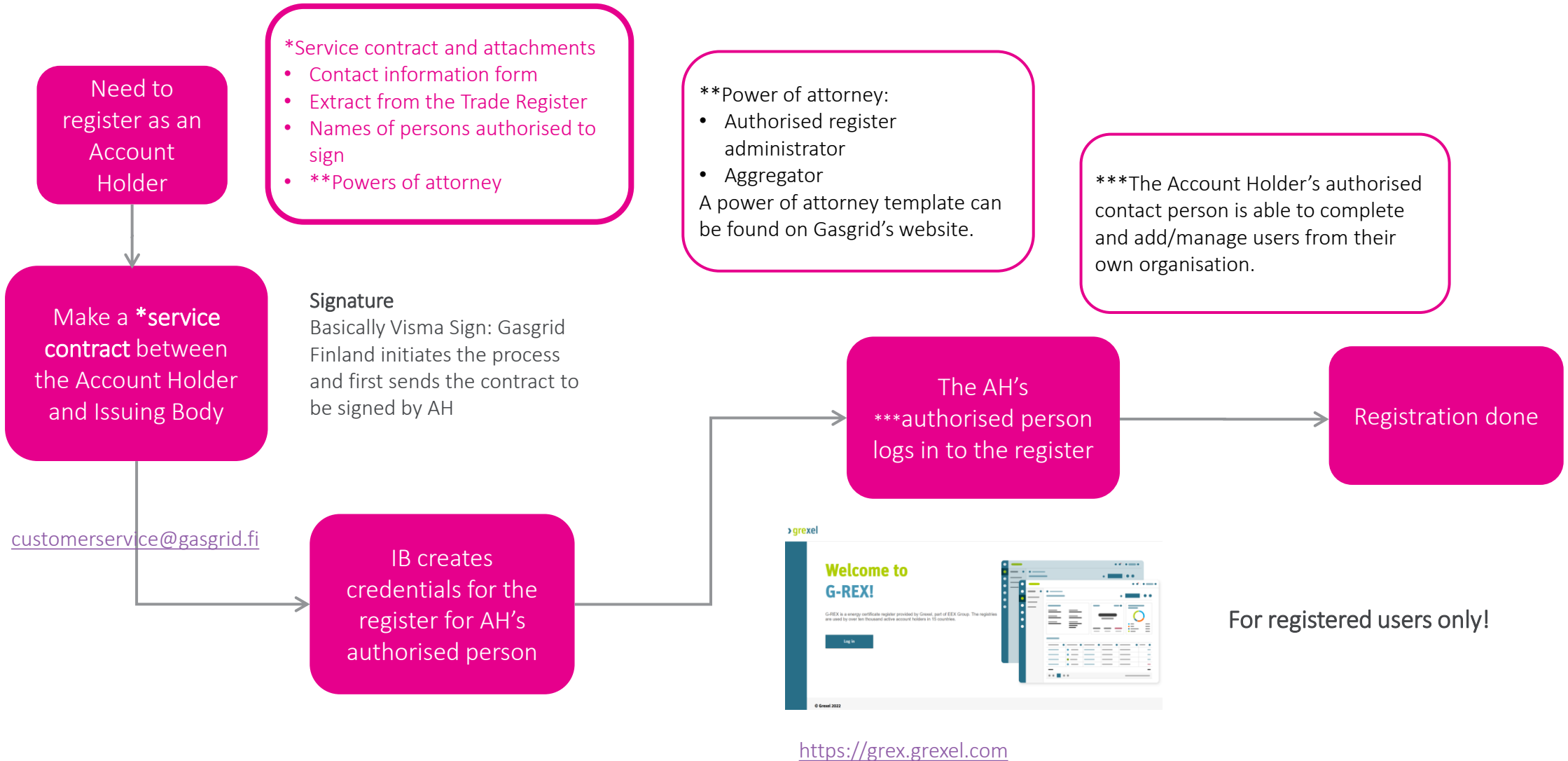
A photograph of an industrial facility, likely a refinery or chemical plant, featuring large, dark-colored pipes and valves. The scene is illuminated by the warm, golden light of a setting or rising sun, creating a strong lens flare effect. The background shows a line of trees and a clear sky. A semi-transparent dark horizontal band is overlaid across the middle of the image, containing the text "2. Join the service".

2. Join the service

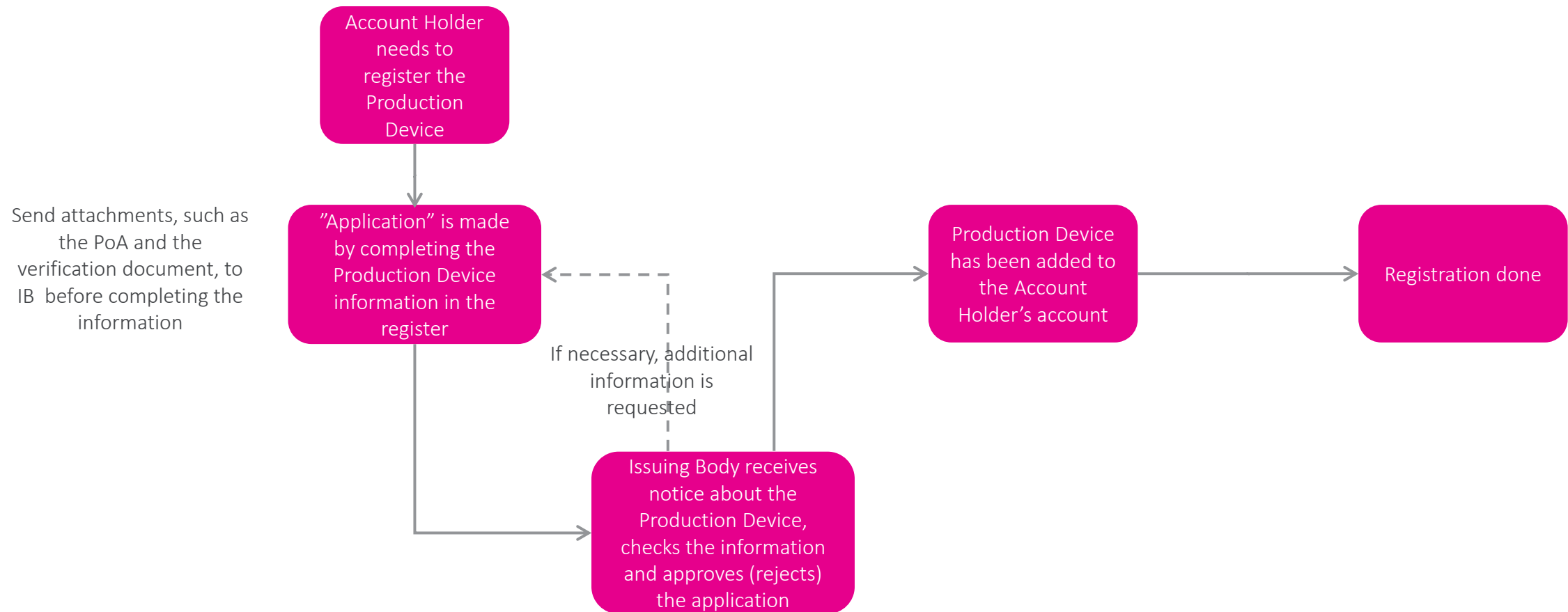
How to join the service

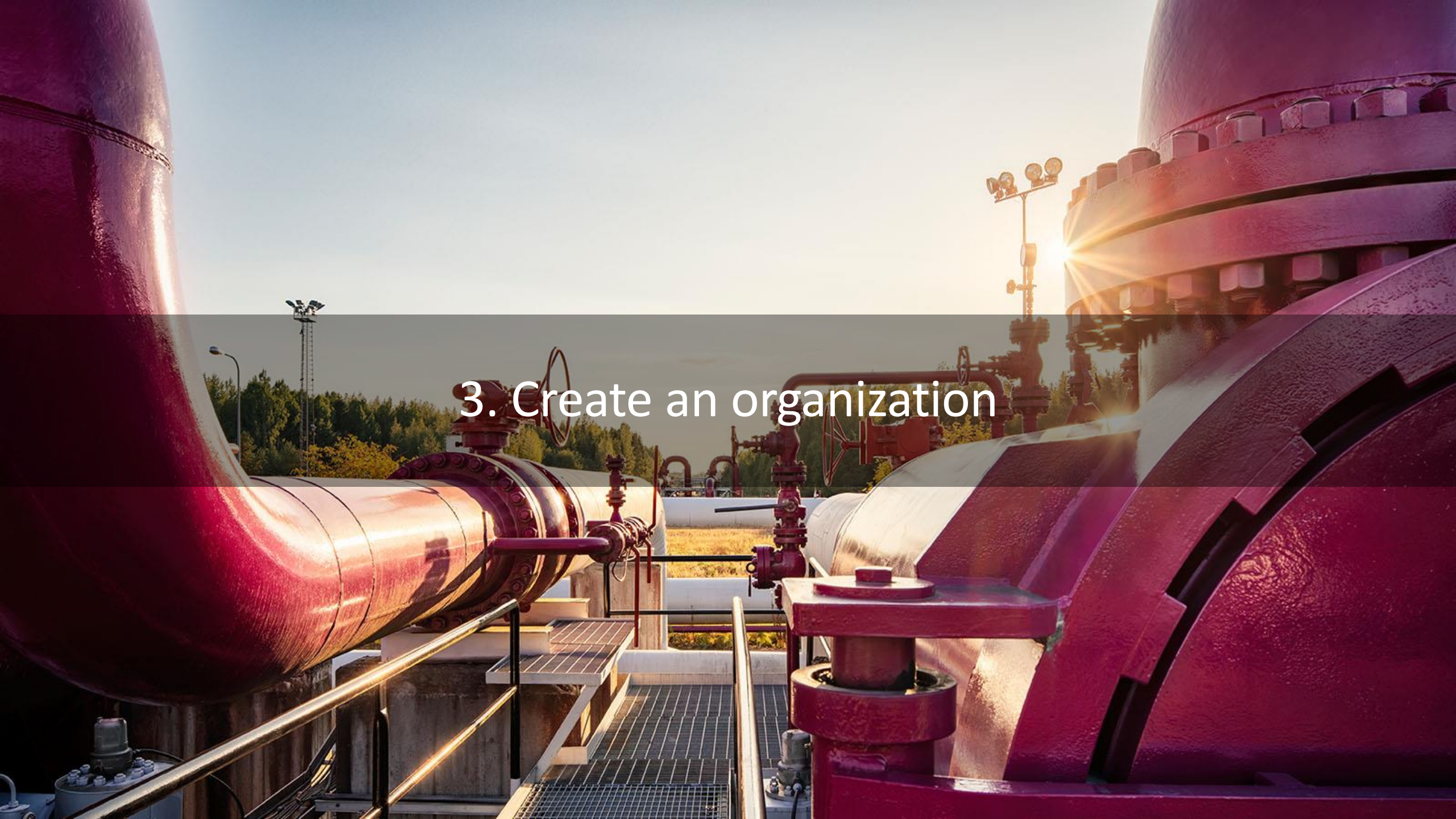
1. Read the documents, all of which you can find at <https://gasgrid.fi/en/our-services/guarantees-of-origin/>
2. Make a service contract with Gasgrid Finland (Issuing Body IB), customerservice@gasgrid.fi
 - The signature is principally done digitally using Visma Sign: Gasgrid Finland starts the process and first sends the contract to the Account Holder (AH) for signing
 - ➔ Gasgrid Finland creates the signing-in credentials for G-REX for the AH's administrator, who can add users to the register from their own organisation
 - In the event of a paper signature, send *two* copies of the signed service contract, with attachments, to Gasgrid Finland Oy, Keilaranta 19 D, FI-02150 Espoo. Gasgrid Finland will sign the contracts and return one of the copies to the contracting party.
3. The AH will be able to carry out transactions in the register and register a production device.

Account Holder (AH) registration



Production Device (PD) registration

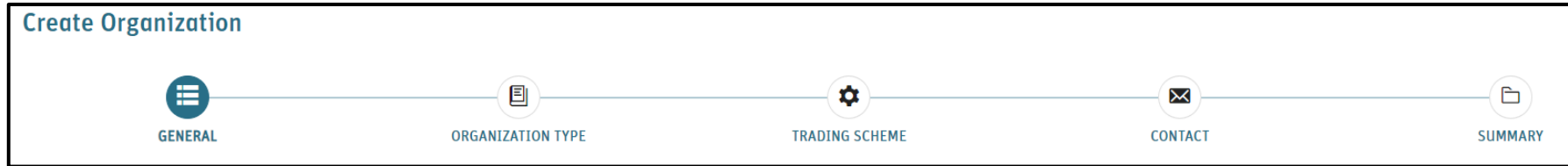


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3. Create an organization

IB creates an organisation

2. Create Organization



1. IB and AH have made a service contract
2. IB creates an organisation based on information provided by AH and creates credentials for AH's administrator
 - Organisation ID number is generated automatically
 - Domain: Finland – Biogas and Hydrogen GO
 - Organisation Standards and Trading schemes are added automatically to all three, i.e. GO, *GO-18M and GO-H2
 - IB creates a Billing reference (customer ID)
 - Role is AH Root, which has the most extensive rights to AH's organisation
 - IB adds itself as part of AH's organisation in the role of AH Root
3. Organisation type: Account holder disclosure

*GO-18M: Conversion of the voluntary Biogas Certificates into the GO's in accordance with Finnish legislation. Valid for 18 months after the last production date.

Organization ID	Organization standards
89X1C5861V	GGF
Business ID * ⓘ	Billing reference * ⓘ
12345-1	54321-6
Value Added Tax Number	
FI12345-1	

Organization Details	
GENERAL	ORGANIZATION TYPE
Select	
Account holder disclosure	3.
Measurement body	
Non account holder Account	
Producer	
Production aggregator	
Production registrar	
Account holder disclosure	
Start date *	03/12/2021



AH adds users

4. The administrator creates personal IDs (personal email) in the register for other users in the organisation ("Add user")
 - You can create viewing rights or other restricted rights also
 - AH cannot change organisation information created by IB
5. The user receives an email and logs in to the register as instructed (see page 14).
6. The user may belong to more than one organisation. The user can change organisation by selecting "Change organisation" from the menu in the upper corner.
7. AH can create a Production Device that IB approves.

Add user

First name * Last name *

Login email * Data Process Approval * ☐

The representative of the organization certifies that the person to be added consents to processing of personal data in G-REX

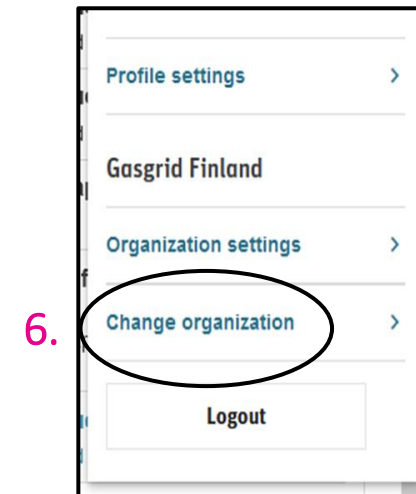
Add Organization Roles

Organization name *	Email	Mobile Phone	Office phone	Roles *	Action
89X82FB29C - Gasg...				4.	Add Cancel

No records available.

Close

AH Root
AH PD Administrator
AH PD Editor
AH PD Viewer
AH User Administrator



Roles

Account management rights (see AH manual in the register)

- **AH Root** and **AH Account Administrator** can carry out all account activities permitted for AH
- **AH Account Viewer** as the name suggests is the viewing right

Device management rights (see AH manual in the register)

- **AH Account Administrator** has no rights
- **AH Root** has all rights
- **AH PD Administrator** (e.g. manages devices), **AH PD Editor**, **AH PD Viewer** varies slightly

Organisation roles (see AH manual in the register)

- **Registrant** (Account Holder, owner, all rights)
- *Operator (meter readings)*
- ~~*Registrar (audits)*~~

Organization
Note: Plants organization role Registrant must be filled

Add Organization

Role *	Organization
Select	Type account
Select	
Operator	
Registrant	89X19F9FAM
Registrar	

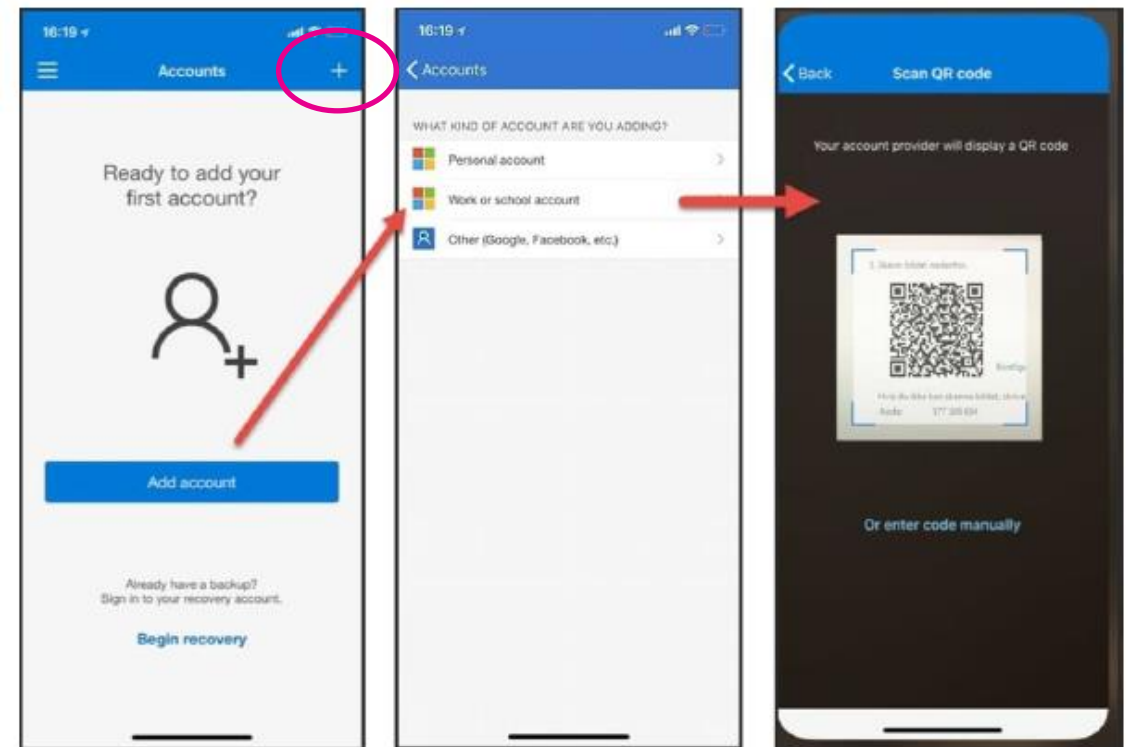
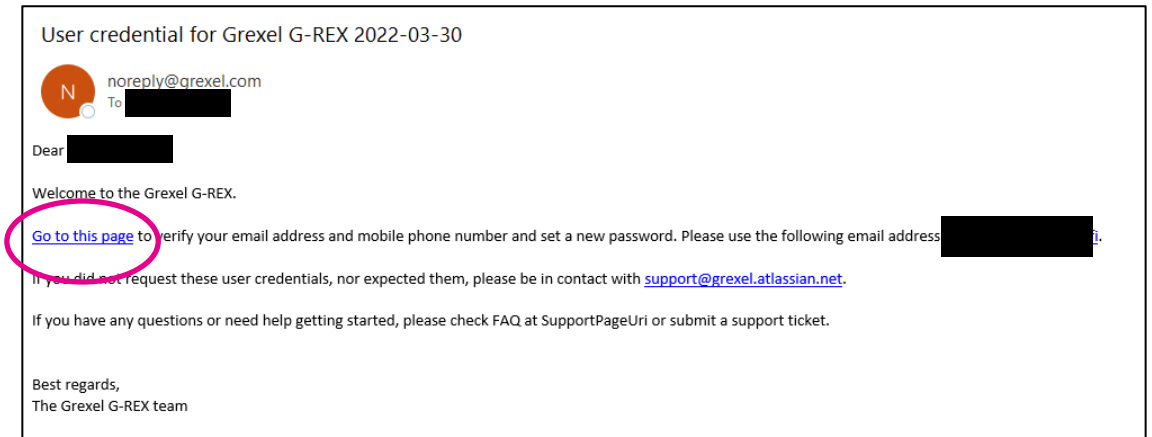
A photograph of an industrial facility, likely a refinery or chemical plant, featuring large, dark-colored pipes and valves. The scene is illuminated by the warm, golden light of a setting or rising sun, creating a strong lens flare effect. The background shows a line of trees and a clear sky. A semi-transparent dark horizontal band is overlaid across the middle of the image, containing the text "4. Log in".

4. Log in

Log in

- (Microsoft) Authenticator app for iOS/Android is required. It can be downloaded free of charge from the App store.
- **The first time** follow the link in the email message (you will also receive a verification code) and you can create a password.
 - After typing in the verification code, press "Continue" (not "Change e-mail")
 - When the log in process requests a QR code, open the Authenticator and select Add account > Work or school account and use the phone to scan the QR code from the screen.

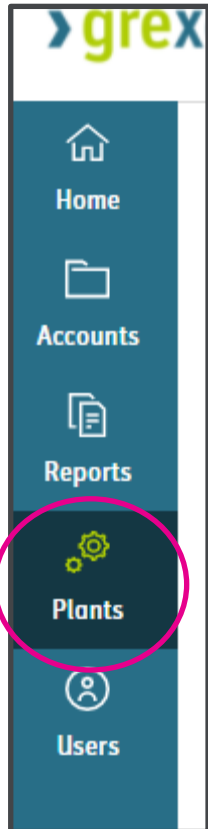
→ And log in once again (user ID, password, Authenticator number)
- **Subsequent** log ins by
 - Typing in the user ID and password and the
 - Verification number from the Authenticator (number changes every 30 sec)
- A new mobile device
 - It is also possible to backup Authenticator
 - Otherwise, the profile should be deleted before creating a new one. Then please, contact us customerservice@gasgrid.fi



A photograph of an industrial facility, likely a refinery or chemical plant, featuring large, dark-colored pipes and storage tanks. The scene is set against a sunset sky, with the sun low on the horizon, creating a warm, golden glow. A metal walkway with railings is visible in the foreground, leading towards the industrial structures. The overall atmosphere is industrial and serene.

5. Create a production device

AH: Creating a production device in the register



1. Create and store a device: Plants > Register production device
2. The user interface shows how to create a device in stages: General, Organization, Meter, License
3. The user finally saves the device information. At this stage you can still review and change the information if necessary (excludes the license).
 - *Recommendation:* It is advisable to create a device at the stage when there is a real need and verification, etc. is done.
4. After this, press "**Submit**" to send the device to IB for approval.
5. The verification document must be sent and IB background checks made before approval of the device.

Different stages



1. General

- Device name, address, GSRN, network information (distribution network, transmission network or offgrid device). The field must contain no special characters.

2. Organisation

- Role (e.g. Registrant), the account to be linked, start date

3. Meter

- Meter (metering point) ID and start date time and free-form text
→ "Grid Reference": **Transmission network** 5 digits and a letter and **distribution network** GSRN and **offgrid** for example, a description or a code
- Meter formula operator = + sign
- Coefficient = 1, relates to indirect electricity measurements so no other values

4. License


- License and support information, owner information and other attributes: production source, network ID and code, capacity, thermal value
- License "Start date": Date on which the verification document enters into force
- "End date" is the verification document audit date

Acting as an aggregator

- Manages the Production Devices of different parties as the AH
- Needs a power of attorney
- Aggregator makes transactions and is responsible for service payments towards IB
- Acts as the contact point towards IB

Change device information

1. Change device information (and e.g. change in dates indicated)
 - Initially AH emails the changed device information to IB's contact person and IB then registers and approves the information
2. Changed information can include
 - Device owner information
 - Device capacity information
 - Production source
 - Meter information

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6. Production data and Declarations

Production data

- Report production monthly for the full **calendar month**
 - Interface available
- In the view, first select the device and then the meter ID
- Next select "Add meter reading" and in the spaces below type
 - Value and unit
 - Calendar month (Start date – End date)
- Time: UTC and EET/EEST
- Gas injected into the grid
 - IB receives the data from the information exchange system or transmission network monitoring system.

Add meter reading

Selecting the period for meter reading is being done in the domain's timezone.
Domain timezone UTC: **+03:00**

Plant *

Type plant GSRN or name

Meter start date time **Meter end date time**

day/month/year hour:minute

Meter *

Add meter reading

Value *	Unit *	Start date *	End date *	Action
		day/month/year	day/month/year	<div>AddCancel</div>

No records available.

Close Save

Declarations

- Report the percentages of different sources of production for the production period
- Making a declaration applies to devices that have several different types of production
- Recommendation: AH reports the declarations monthly for the same period as production data
- IB cannot approve product data or issue certificates if no declarations have been made
- When AH has made the declarations, IB approves the declarations, production data and issues the required certificates

Declaration details			
Plant GSRN 643005592200000057 Name Markon testilaitos numero kaksi		Declaration Start date time 01/02/2022, 00:00 End date time 01/04/2022, 00:00 Status Approved	
Energy source declaration			
Percentage	EnergySourceCode	EnergySourceNameKeyword	Description
50%	F01030100	Renewable/Gaseous/Landfill gas	puolet
50%	F01030301	Renewable/Gaseous/Agricultural gas/Pig manure	puolet

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7. Transactions

Issuing

- IB issues guarantees of origin when the production data has been reported and the required declarations made
- Guarantees are issued automatically each calendar month (production period)
- No separate application is made
- Surplus overall MWh production is carried over to the following month and taken into account in future issuances
- If there are several declarations, guarantees of origin are issued for each production source
 - A certificate may contain only one production source

Transfers and cancellations

- In the G-REX an AH may transfer guarantees of origin to another AH or cancel them in accordance with consumption
- Both transfers and cancellations may be made immediately or on a scheduled basis
- The cancellation object/beneficiary is specified when cancelling
- IB approves cancellations
- Guarantees of origin allocated for a calendar year must be cancelled by 31 March of the following year
- Conversion (instruction on Gasgrid's website)
 - Contact Gasgrid to effect conversion
 - Cancellation is done in the register of sources (guarantees of origin must be valid)
 - Select "Cancellation for conversion"
 - Registrars publish the plants utilising conversion on their websites
 - An operator may need to belong to or authorise a representative for itself for more than one national guarantee of origin register

Cancellation Statement

- Includes all details of the cancellation
 - electronic, non-transferrable receipt which provides evidence of the cancellation of one or more GOs for the purpose of Disclosure of the Attributes of those GOs for the beneficiary or beneficiaries of the cancellation
- IB's signature: At this stage no separate signature goes to the register but is submitted on request

Cancellation Statement

This document certifies that the specified Guarantees of Origin have been cancelled for the benefit of the specified receiver and for the period and purpose specified herein. The environmental qualities of the associated energy have been consumed and this Cancellation Statement and these certificates may not be transferred to any party other than the energy supplier or end-consumer specified below. Onward sale of this Cancellation Statement is prohibited. Cancelled Guarantees of Origin cannot be transferred to other account holders.

Decisions made by Issuing Body of registry under Act on Guarantee of Origin for Energy are eligible for a request for an administrative review. Instructions for making an appeal is provided at: <https://gasgrid.fi/en/our-services/guarantees-of-origin/>



Transaction details Transaction type Cancellation Status Completed Transaction number 2022032900010 Total 5 Transaction Started 29/03/2022, 12:50 Transaction Completed 29/03/2022, 12:50 Public Statement		From account Organization name Helin organisaatio3 Organization ID 89X19F9FAM Domain GREX.Demo GGF Domain code FI-GGF Account number 643005922000000064 Street City Hyvinkää ZIP code 05800 Country Finland		Beneficiary Name of Beneficiary Kaasun käyttö Country of consumption Finland Organization ID 89X19F9FAM Location of beneficiary Tampere Consumption period 21/03/2022 - 22/03/2022 Usage type Disclosure Cancellation purpose lbg Type of beneficiary End Consumer	
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Volume	Certificate number start	Certificate number end	Issuing body	Energy source code	Technology code	Production StartDate	Production EndDate	Issue date	Trading schemes
5	64300592201000000000000000000064	64300592201000000000000000000068	Gasgrid Finland	F01030300	TG20000	2022-02-01	2022-02-28	2022-03-14	GGF,GO

CERTIFICATE INFORMATION

Support schemes	Standard
No support	GGF
Production support description	Investment support description
The unit of energy has not benefited from Public Support	Originating Plant has not benefited from Public Support

ISSUER

Issuing body	Issuing body code
Gasgrid Finland	89
Issuing country code	Competent authority code
FI	FI99

PLANT

Plant name	GSRN		
Helin biolaitos3	64300592200000071		
Operational date	2021-01-01		
ZIP code	City	Country	Country code
05800	Hyvinkää	Finland	FI
Longitude N	Latitude E		
Coordinate code			

ENERGY SOURCE AND TECHNOLOGY

Energy source	Technology
F01030300 - Renewable/Gaseous/Agricultural gas	TG20000 - Biogas/Gasification

ATTRIBUTES

Calorific value type	Dissemination level	Energy carrier	Network identity
Upper	4 Transferred over any other network than a Distribution or Transmission System or Closed Distribution System	Gas	4758953
Network name	Nominal capacity (kW)	Purpose	Type of Gas
Päiverkko	100000	Disclosure	Methane
Product type	Source	Use of gas (s) Transport	



Export and import of GOs (EU/EEA)

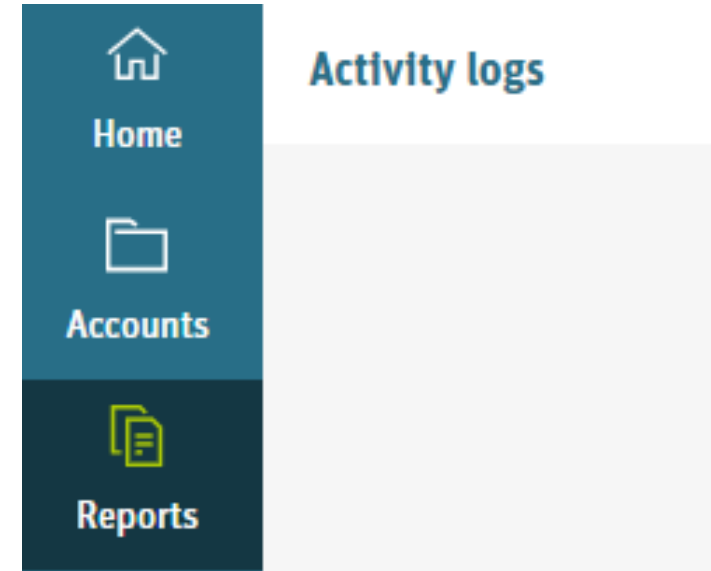
- Carried out manually by IB for now
- Contact the IB's contact person heli.haapea@gasgrid.fi or customerservice@gasgrid.fi
- Please allow enough time!

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9. Logs and reports

Activity log

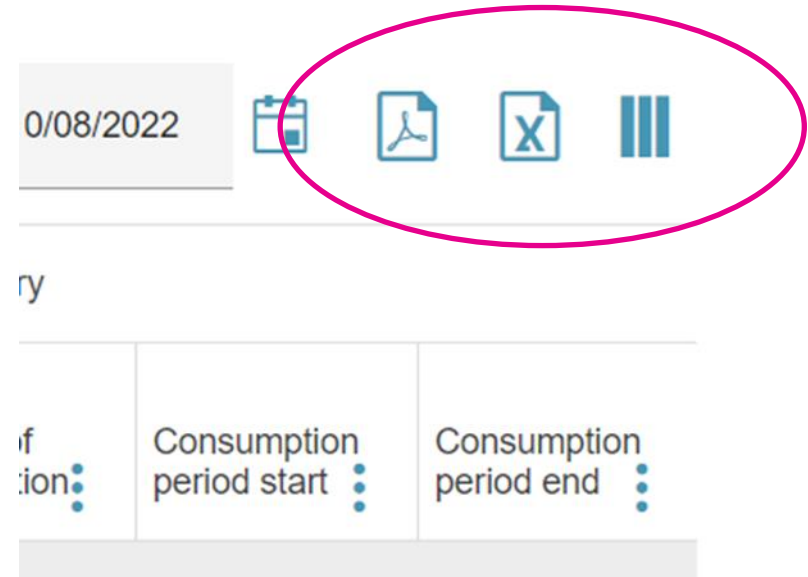
- The log includes all account and user activities
- A log entry is also made for activities carried out by the IB



Logs and reports

- The register has standard reports for AH users
- You can filter the data viewed in the reports and select which columns are shown
- You can export the data in MS Excel CSV format or print out as a PDF document

in the right upper corner:

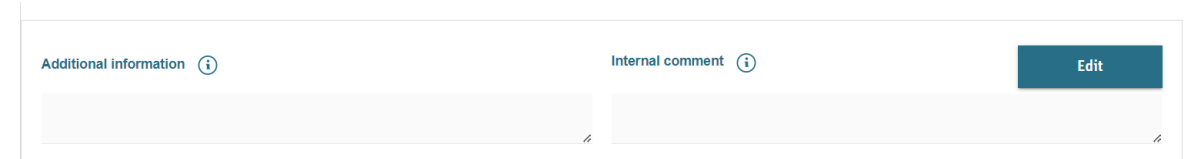


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10. Information exchange

Information exchange between AH and IB

- By email and telephone
- Develops existing information exchange in the register
 - It is possible to add Additional information or Internal comments
- In the event of problems or malfunction, please contact customerservice@gasgrid.fi



The screenshot shows a web form with two input fields. The first field is labeled 'Additional information' with an information icon (i) to its right. The second field is labeled 'Internal comment' with an information icon (i) to its right. To the right of the 'Internal comment' field is a dark blue button labeled 'Edit'. Both input fields are empty and have a light gray background.



customerservice@gasgrid.fi

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