

# Application Usage

The Application Dashboard acts as a central monitoring point for all Sites, Data, Documentation, Analytics and Reports that a Data Provider or Data Consumer may need. For the Sites themselves, this includes details on the Site status, location and organizational affiliations, as well as any relevant notifications for the project including subscription requests. Site details can also be managed such as adding/removing data sources, analytics profiles and reporting profiles (more on these below).

## Profile

Users can navigate and manage their Profile details through the dashboard as well including Identity and Account information (for both the DON and their Auth0 and Stripe account details). The details found within the DID portion of the profile is what will be used for Stream subscription management whenever applicable.

The screenshots show the DEMIA Application Dashboard interface. The left sidebar has sections for PROJECTS (Overview, Add Project) and PROFILE (AA\_Profile, Identity). The main area is titled 'Profile' with tabs for Profile, Identity, and Hedera. The Identity tab is active, showing:

Username: dyerell@demia.net  
User ID: 074f0daee02479c6b4c31b656  
DID Document ID: did:demia:0x881468f034afe2217fc6b987ba83fdfc79830fc9fb4a4034d1ab2e80463aa008

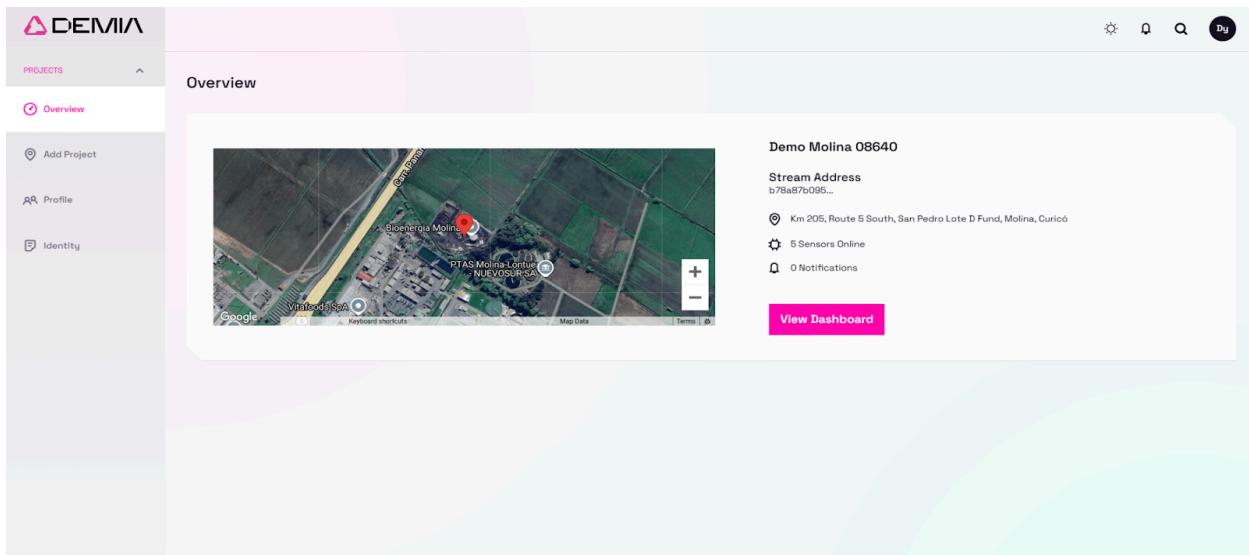
The second screenshot shows the same interface but with the Identity tab selected. It displays a table of Identity Methods:

Fragment	Type	Controller
streams_sig_keys	Ed25519VerificationKey2018	did:demia:0x881468f034afe2217fc...
streams_ke_keys	X25519KeyAgreementKey2019	did:demia:0x881468f034afe2217fc...
heder-did	JsonWebKey2020	did:demia:0x881468f034afe2217fc...
document_keys	Ed25519VerificationKey2018	did:demia:0x881468f034afe2217fc...

Showing 4 results

## Overview

At the application home page, Users can see an overview of all associated projects known to their account. For Project Developers this means the projects that they have initialized themselves, whereas for auditors this may instead be the projects that are currently slated for evaluation. The Overview shows the project location, number of online sensors, notifications relevant to that particular Site, and a button to navigate to a project specific dashboard.



## Project Dashboard

Within a Project Dashboard, a User can see their Site details with more verbosity, as well as their notifications, a map displaying the location of the site, and if it is configured, a digital twin to navigate the Data Sources being consumed from the Site. It also provides an overview of the current offset metrics as well as a Confidence Score aggregated for the project.

DEMIA

PROJECTS  
Demo Molina 08640

Dashboard

Analytics

Data Sources

Documentation

Activity

Guardian

Demo Molina 08640

Project Type: CHP Plant  
Methodology: Anaerobic Digestion Process  
Project Developer: Bio E  
Project ID: BEM

Recent Activity

View all

11,917.1 t CO<sub>2</sub>e  
Annual GHG emission reductions

993.1 t CO<sub>2</sub>e  
GHG emission reductions last 30 day

74.0 %  
Data Confidence

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GHG emission reductions last 30 day

74.0 %  
Data Confidence

Agricultural Waste

Sensor ID: Grape Harvest  
Model: Grape Harvest Waste  
View sensor

## Data Sources

A User can navigate to their Data Sources by either clicking on the sources in the digital twin, or navigating to the Data Sources tab in the side navigation menu. This page provides an overview of all the configured data sources within the Site, and provides a tool for adding additional sensors/sources to the Stream. Each source will display in a table alongside the latest reading timestamp, source details as well as an aggregated Data Confidence score for readings associated with the source.

Source	Input Type	Last Updated	Data Confidence	Data Type	Data Entry
Digestors 1 + 2	Anaerobic Digester	3 hours ago	43.2%	Sheet	Manual
Feedstock	Liquid industrial waste	3 hours ago	45%	Sheet	Manual
Flowmeter 4.3	Esters GD300-126279IR1000-V4-PORO	4 minutes ago	75.9%	Sensor	Automated
Flowmeter 4.4	Esters GD300-126279IR1000-V4-PORO	4 minutes ago	76.1%	Sensor	Automated
Grape Harvest	Agricultural Residue	3 hours ago	43%	Sheet	Manual

Once a sensor is selected, a User can view the source details including equipment information, live metering data and confidence metrics.

**Flowmeter 4.3**

**Overview** Logs

**Biogas Flow**  
Source: Flowmeter 1 Last update: 4 minutes ago Unit: 0.05 Nm<sup>3</sup>

**Flowmeter 4.3** Last 7 days

Sensor ID	FIQ_4_3_Totalizador	Accuracy	1.5
Manufacturer	Esters Elektronik	Installed on	2016
Model	EstGD300-126279IR1000-V4-PORO	Last Calibration	Never
Serial Number	1506 A 11426	Next Calibration	Soon

**Current load:** 0.00042 m<sup>3</sup>/hour  
**Daily average load:** 0.00041 m<sup>3</sup>/hour  
**Data confidence:** 75.9 %

Historical Data Chart (Last 7 days):

The chart shows Biogas Flow (m<sup>3</sup>/hour) on the Y-axis (0 to 1000000) against time on the X-axis (from 2023-01-01 to 2023-01-08). The data points are represented by pink dots, showing a fluctuating pattern between approximately 100,000 and 200,000 m<sup>3</sup>/hour.

Additionally, a User can navigate to the Logs tab and see the data for the source at a granular level, including the breakdown for individual readings with respect to their associated Annotations. An Annotation will specify in it the host, annotation type and satisfied condition for that type of annotation, which can be compared against the expected trust schema for the project, allowing a user to know where the data was sent from and whether the conditions are met for each reading individually.

10638 Records			
Timestamp	Value	Score	Address
1 minutes ago	415412.44 Nm3/hour	67	b78a8..._4befa0eb9f9d0f79138b65681
12 minutes ago	411346.66 Nm3/hour	67	b78a8..._2dce7e923a0a39ebc1acf306
22 minutes ago	414104.34 Nm3/hour	67	b78a8..._eb3920639f29bae91c4e0338
33 minutes ago	412670.8 Nm3/hour	67	b78a8..._044f3991a78063d3a6121edb
46 minutes ago	414819.12 Nm3/hour	67	b78a8..._0079abeb09e21c3a7056fbab0
57 minutes ago	415720.12 Nm3/hour	67	b78a8..._ded28633942d97ec64062434
1 hours ago	416729.44 Nm3/hour	67	b78a8..._fbfd6a299ddcab27938a07972
1 hours ago	419145.28 Nm3/hour	67	b78a8..._fb6045e9fda892fe2c7acea2
1 hours ago	420670.22 Nm3/hour	67	b78a8..._445b4b37f6aa9d01e4ff59488
1 hours ago	418911.44 Nm3/hour	67	b78a8..._0992b4a07d1ca3349bbfb28

Showing 1 to 10 of 10638 results

Annotations						
Annotations						
ID	Key	Host	Kind	Signature	Is Satisfied	Timestamp
01JGFMC394XS9XNPCTCGXZCHVJ	67caa96d875b27faadcf8dfe273c805720a6f3c2bcac	durrell-alpha	dstis	a7fc177c44c8a1cb42242ce5f0ea7ad	False	7 minut ago
01JGFMC394H4YXPKNE419G3908	67caa96d875b27faadcf8dfe273c805720a6f3c2bcac	durrell-alpha	src	1b7b2333d2b36390983c45cc2af3fa51	True	7 minut ago
01JGFMC394F45YBCJ4N2MCGWA	67caa96d875b27faadcf8dfe273c805720a6f3c2bcac	durrell-alpha	automated	d0fc0e9be0cc6090a1cbe9ead69dc85	True	7 minut ago
01JGFMC394SW0Z5X6ZV80QZK58	67caa96d875b27faadcf8dfe273c805720a6f3c2bcac	durrell-alpha	pki	67cdaba1ebfed35e2f2b904b20769	True	7 minut ago

Each reading has its Streams Message Id referenced in the table, and when clicked, a User will be forwarded to a Demia Node Explorer page that will show the raw message block data within the DON, providing transparency and attestation of its existence and encrypted state within the network.

The image consists of two vertically stacked screenshots of the Demia Node Explorer application interface, both set against a dark background.

**Screenshot 1 (Top): Block Details**

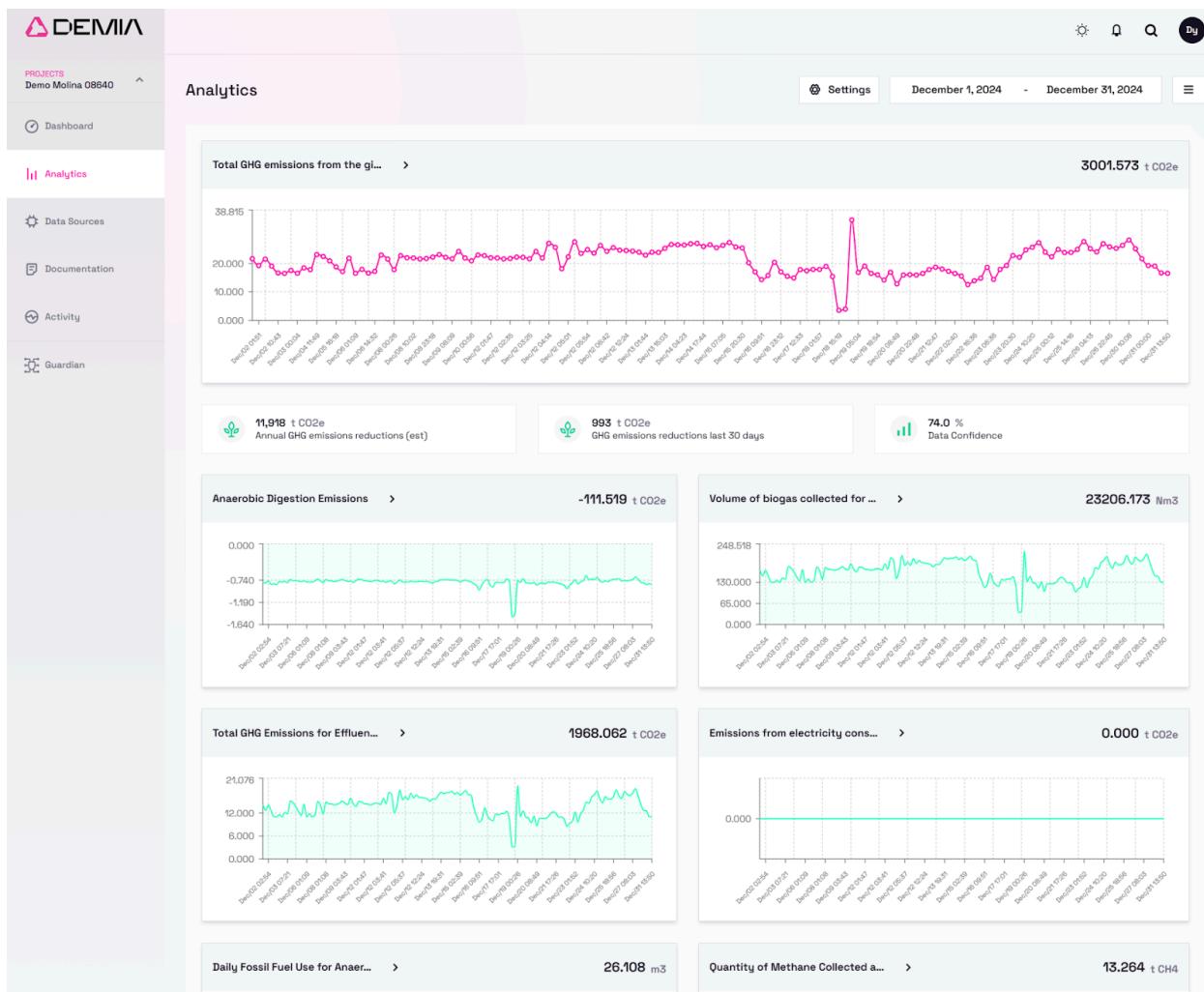
- Header:** Shows a search bar "Search the DON", a "HEALTH" status indicator, a "SYNC" status indicator, and a "BPS" counter at 0.
- Block Information:**
  - ID:** 0x98ed84a3adbddec7d1040b5243d94f5a7f7284e9190bad8038c269015b4ecd8
  - PARENT BLOCK 1:** 0x551634574a16edccfd04b0de3680f7e0b94bfbdcb5c6bb1b1921e027995df1d
  - PARENT BLOCK 2:** 0x19815159b9acae951ef03f9766bf40e87b68863500cf0161bbe0e95a3e9538eb8
  - NONCE:** 232149
- Metadata:**
  - IS SOLID:** Yes
  - LEDDER INCLUSION:** NO TRANSACTION (The block is referenced by a milestone, the data is included in the ledger, but there is no value transfer.)
- Tagged Data Payload:**
  - TAG UTF8 [33]:** 0x b8 1b fa 87 4a 89 1a c5 45 20 e1 d1 9f 8f 6a 93 69 c5 96 92 5a 78 c2 31 db f9 a4 8d 1d 76 cb 23
  - TAG HEX [33]:** 0x b8 1b fa 87 4a 89 1a c5 45 20 e1 d1 9f 8f 6a 93 69 c5 96 92 5a 78 c2 31 db f9 a4 8d 1d 76 cb 23

**Screenshot 2 (Bottom): Raw Data Hex View**

- Header:** Shows a search bar "Search the DON", a "HEALTH" status indicator, a "SYNC" status indicator, and a "BPS" counter at 0.
- Raw Data Hex:**
  - TAG UTF8 [33]:** 0x b8 1b fa 87 4a 89 1a c5 45 20 e1 d1 9f 8f 6a 93 69 c5 96 92 5a 78 c2 31 db f9 a4 8d 1d 76 cb 23
  - TAG HEX [33]:** 0x b8 1b fa 87 4a 89 1a c5 45 20 e1 d1 9f 8f 6a 93 69 c5 96 92 5a 78 c2 31 db f9 a4 8d 1d 76 cb 23
  - SIGNATURE HEX:** 0x1f695f4414b054620727a6397896446a7c9ef3b104d8b4c72569528820507e31d5c24a70b4ccf412d6af8754df936cae4fa98dc20f6d0d8333e38c790d0d
  - PUBLIC KEY HEX:** 0x870b0b686dcef3beab98fc54eebd9ff0a41d2f0e2fc4b379099a3b04c2e2e2e283
  - DATA UTF8 [312]:** 0x 00 02 30 00 04 00 00 00 01 2d ce 7e 92 2a 0e 39 eb c1 ac f3 06 b3 60 ee 1b 29 1e 24 ee b8 8c f6 59 74 bf a8 4d 00 87 b0 b8 88 dc e9 3b ee b2 8f c5 4e eb d9 f1 0a 61 d2 f0 e2 fe 4b 37 90 90 a3 b0 4a 2e c2 92 02 2d b7 67 74 8e ee 82 07 b8 0e 9c b3 d2 fe b2 67 68 bd 41 42 09 47 1b 73 2e 97 de b4 4e 42 54 97 2b a3 2b 65 c8 c9 0e 00 00 01 83 63 4b d8 3a 7d 7c 39 bd 28 ef 6d 1b 05 fb 8d 23 2f 3a 8d 44 d5 b8 70 2a 14 d5 42 d1 8f 78 88 18 00 9a 95 a7 37 39 75 b5 4d 2b f3 7a 16 aa 43 a3 3f f2 28 Bb e1 b2 f2 2c 9a b2 f5 c7 5a 11 ca eb 4d 22 8c df 1b 81 22 4c 53 e7 1c 53 3f Bb 64 fd 57 19 43 a7 81 14 aa 13 b9 77 14 df fa b6 f1 94 eb 07 03 24 c2 9e 23 e8 00 98 14 e5 aa 33 34 c2 14 36 cf e2 03 c2 77 50 ed b4 07 3d 24 08 c0 00 2e be 11 32 46 03 89 43 f5 48 17 58 b6 64 22 09 34 70 7c 48 de 6e 52 01 78 c1 de ef e5 63 56 35 7a 0d 01 5d 89 39 52 e5 0d 72 e7 cb de 03 9e fa 8a 93 41 37 c2 32 29 16 dd 35 ba ef f5 aa f7 0a

## Analytics

The Analytics page can be accessed from the side navigation menu once a project has been selected. This page contains all time series based Analytics charts defined by the attached Analytics Profiles. More than one profile can be attached to a site, and each calculation can be clicked into to expand the details. Users can choose which calculation is most important and have it defined at the top of the page, and can also toggle on and off all other calculations for the page, should they wish to reduce the size of the page and only view specific calculations (mostly relevant for profiles that contain a large number of calculations). Export functionality is also available to push all calculations into a CSV or XLXS file format.



The Details page for each calculation contains a time series chart for the calculation. Below the chart is the calculation defined in the profile, as well as a list of all static and dynamic parameters (or additional calculations) referenced in the calculation. When scrolling along the chart values, the dynamic values will update automatically to display the input value associated with that particular calculation output.



## Documentation

If there are any other files, whether required for compliance or simply to provide a central repository of information related to a site, a file storage and retrieval page is also available to upload to. Should there be equipment files, manuals, calibration certificates, or reports that are intended to be shared alongside a site subscription, they can be stored here and made available for auditing and traceability purposes.

The screenshot shows the DEMIA software interface with the following details:

- Left Sidebar:** Projects section with "Demo Molina 08640". Other options include Dashboard, Analytics, Data Sources, Documentation (which is selected), Activity, and Guardian.
- Header:** Includes a logo, user profile, and navigation icons (sun, magnifying glass, search, etc.).
- Page Title:** Documentation
- Submenu:** Project Documents (selected), Monitoring Plans, Reports, Certifications.
- Table:** A list of documents with columns: Name, Type, Size, and Last Modified.

Name	Type	Size	Last Modified
EB 75_repan22_AMS-II.N_ver 02.0.pdf	application/pdf	1.0 MB	1 seconds ago
- Footer:** Shows 1 result, Prev, Next buttons.