



VBIS

Data Standard, & Data Ecosystem

CIBSE
Aug 2025

Digitisation of the Built Environment

The Opportunity



Enable ready and cost-effective access to useful information for improving building amenity, the health, safety and productivity of occupants and the sustainability of building systems while lowering the cost of operation and ownership.

The Challenges



Digital transformation is being slowed by the lack of data interoperability.



Data is not structured or named consistently and often cannot be accessed reliably and this is significantly hindering progress.

The Data Foundation

VBIS provides an asset classification system with unique alphabetic tags and a mechanism for locating and linking data related to these asset in different systems used to construct, operate & maintain these assets.

Government & Associations VBIS Directive



Organisations who have adopted VBIS

Designers



**WOODS
BAGOT**

Conrad
Gargett

aurecon

Consultants



Beca

Builders Suppliers



MULTIPLEX



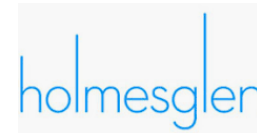
Property Managers



CBRE

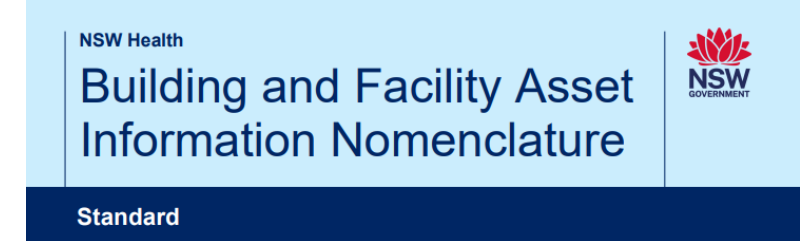
Honeywell

VBIS supports asset owners



Adoption in Health New South Wales

The Virtual Buildings Information System (VBIS) is a classification system will be implemented across NSW Health and will be used to classify all building and facilities equipment in accordance with the Building and Facilities Asset Information Nomenclature Standard.



Summary To provide information to NSW Health Organisations of the NSW Health Medical Asset and Building and Facilities Asset Nomenclature Standard for identifying and classifying medical assets.

Document type Information Bulletin

Document number IB2022_030

Publication date 01 September 2022

Author branch Asset Management

Branch contact (02) 9391 9768

Review date 01 September 2027

Policy manual Not applicable

File number H22/37976-2

Status Active

Functional group Corporate Administration - Asset Management, Governance, Information and Data, Records

Applies to Local Health Districts, Chief Executive Governed Statutory Health Corporations, Specialty Network Governed Statutory Health Corporations, NSW Health Pathology, Public Health System Support Division, Cancer Institute, Community Health Centres, NSW Ambulance Service, Dental Schools and Clinics, Public Hospitals

Distributed to Public Health System, Divisions of General Practice, NSW Ambulance Service

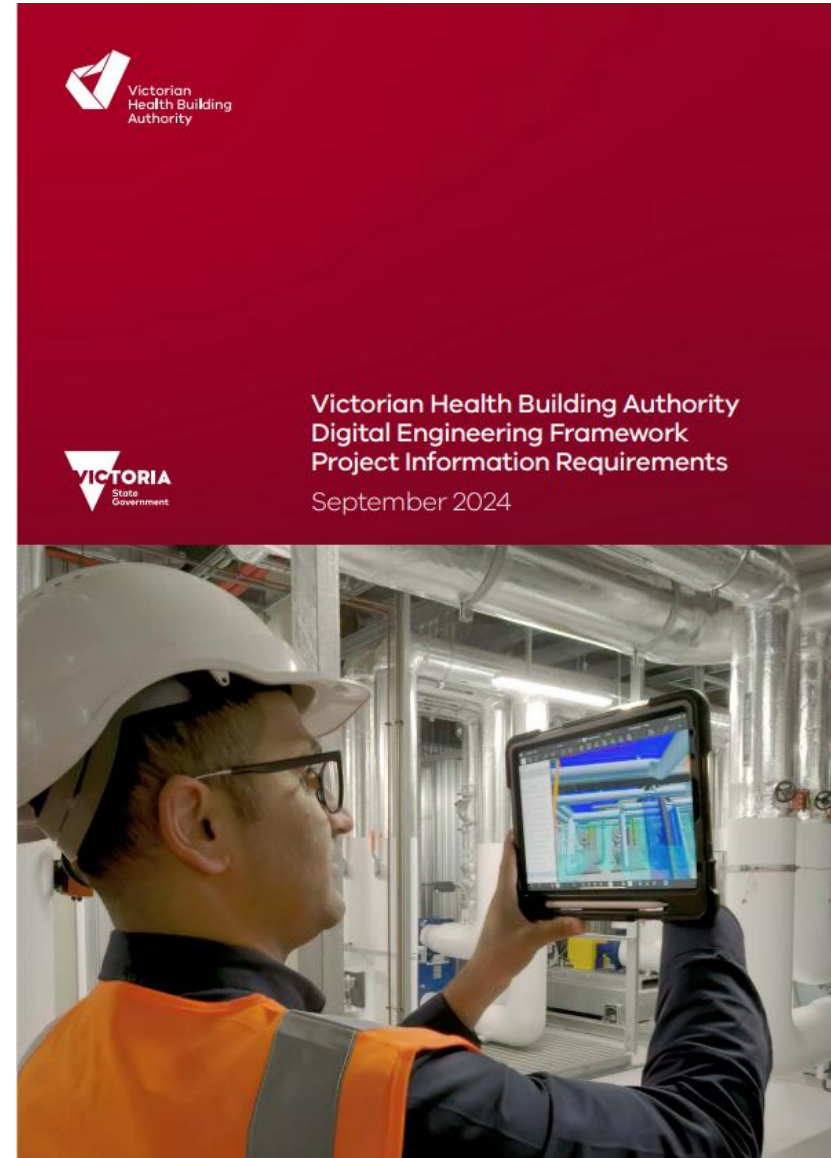
Audience Biomedical Engineers;Asset Management;Records management;Capital Works;Health service planning;Maintenance;Engineering



Adoption in Health Victoria

VHBA has adopted the Virtual Buildings Information System (VBIS) Standard as a required classification standard. This will apply to all future \$20M+ health sector construction projects in the state.

Mandating the use of the VBIS Standard establishes a common digital classification base. This will underpin the ability to readily verify, contextualise and fully leverage data.



Classify (Asset Classification)

Level 1

We start by classifying the discipline of the asset

Mechanical
Electrical
Fire
Medical
... etc.

**Mechanical
(ME)**

Level 2

Next is a Product Level detail

Pump
Fan
Switchboard
... etc.

**Pump
(Pu)**

Level 3

Then we provide detail about the product

Centrifugal end suction
Centrifugal axial split
Centrifugal in line

**In line
(CIL)**

Level 4

And when required, even more detail

Single
Dual head

**Single
(Si)**



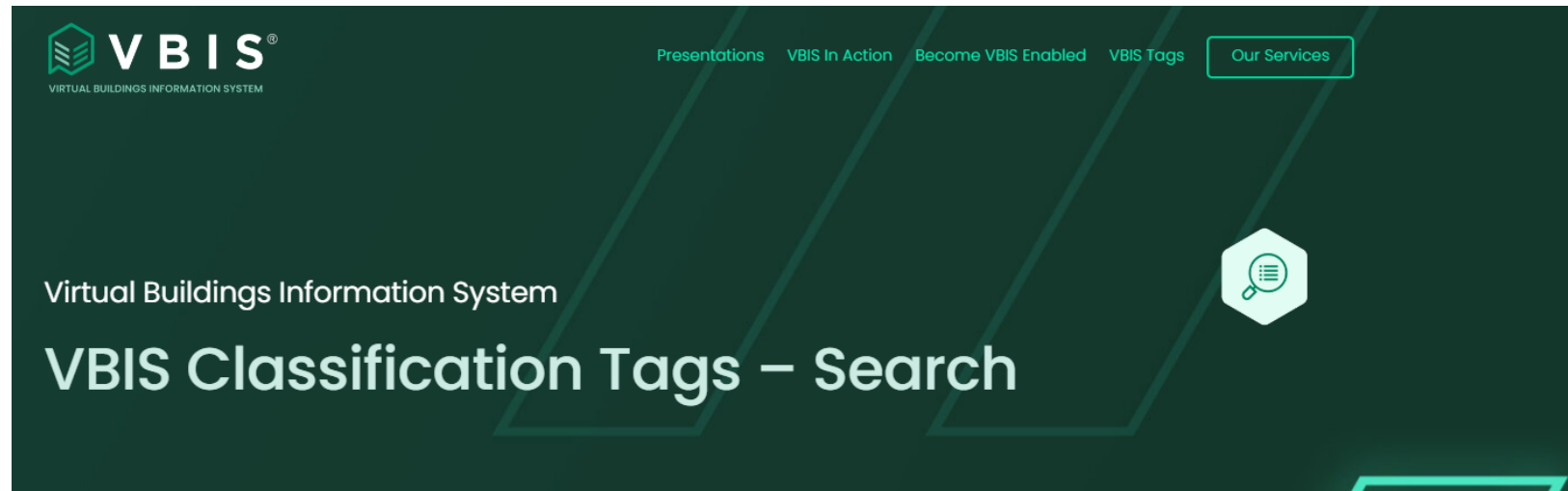
Unique alphabetic tag per type of asset.

ME-Pu-CIL-Si

'Mechanical Pump Centrifugal In Line Single head'

VBIS Asset Tags

- Download for Free from the VBIS website
- 11,500 + tags
- 36 Categories
- Latest update July 2025
- Regularly updated with user feedback



[DOWNLOAD VBIS TAGS](#)

Please read the full [Terms & Conditions](#) before downloading or using VBIS Tags.

Scroll down for **Practice Notes**.

VBIS Classification Tags Search Table

All	Acoustics - AC	Administration - AD	Audio Visual - AV	Aviation Systems & Products - ASP
Building Control Systems - BMC	Civil - CV	Communications - CO	Electrical Lighting - EL	Electrical Power - EP
Fire Detection - FD	Fire Resistance - FR	Fire Suppression - FS	Fuel Reticulation & Distribution - FRD	
Furniture, Fittings & Equipment - FFE	Hydraulics - HY	Information Technology - IT	Irrigation - IR	Kitchen Equipment - KE
Landscape - LS	Mechanical - ME	Medical Gases - MG	Medical & Laboratory Equipment - MLE	Refrigeration - RE
Safety Equipment - SA	Security - SE	Signage - SI	Spas and Pools - SP	Sports and Recreation - SR
Structure - ST	Traffic Engineering - TE	Tools & Test Equipment - TTE	Vehicles - VE	Vertical Transportation - VT
Waste - WA	Water Distribution & Network - WDN	Water Treatment & Recycling - WTR		
Search by keyword Search				

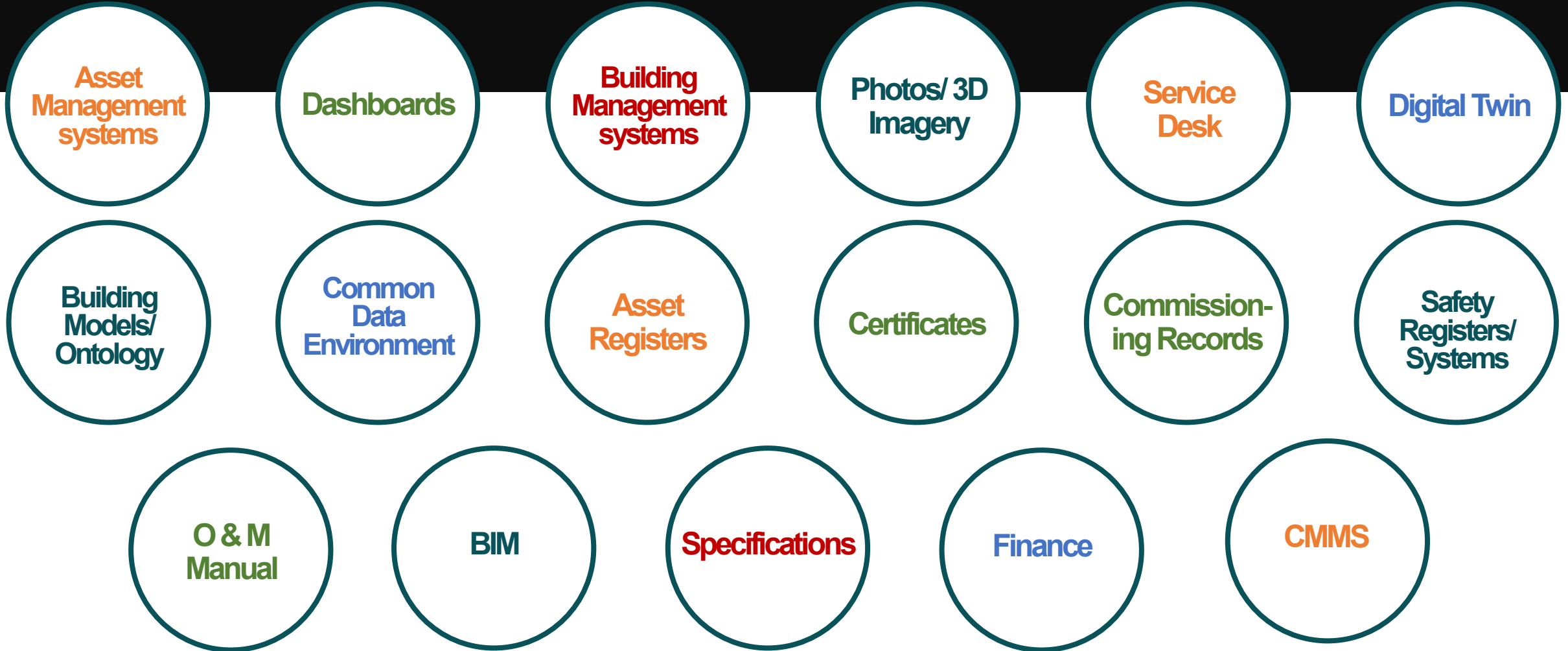


[HTTPS://VBIS.COM.AU/SEARCH-AND-DOWNLOAD](https://vbis.com.au/search-and-download)

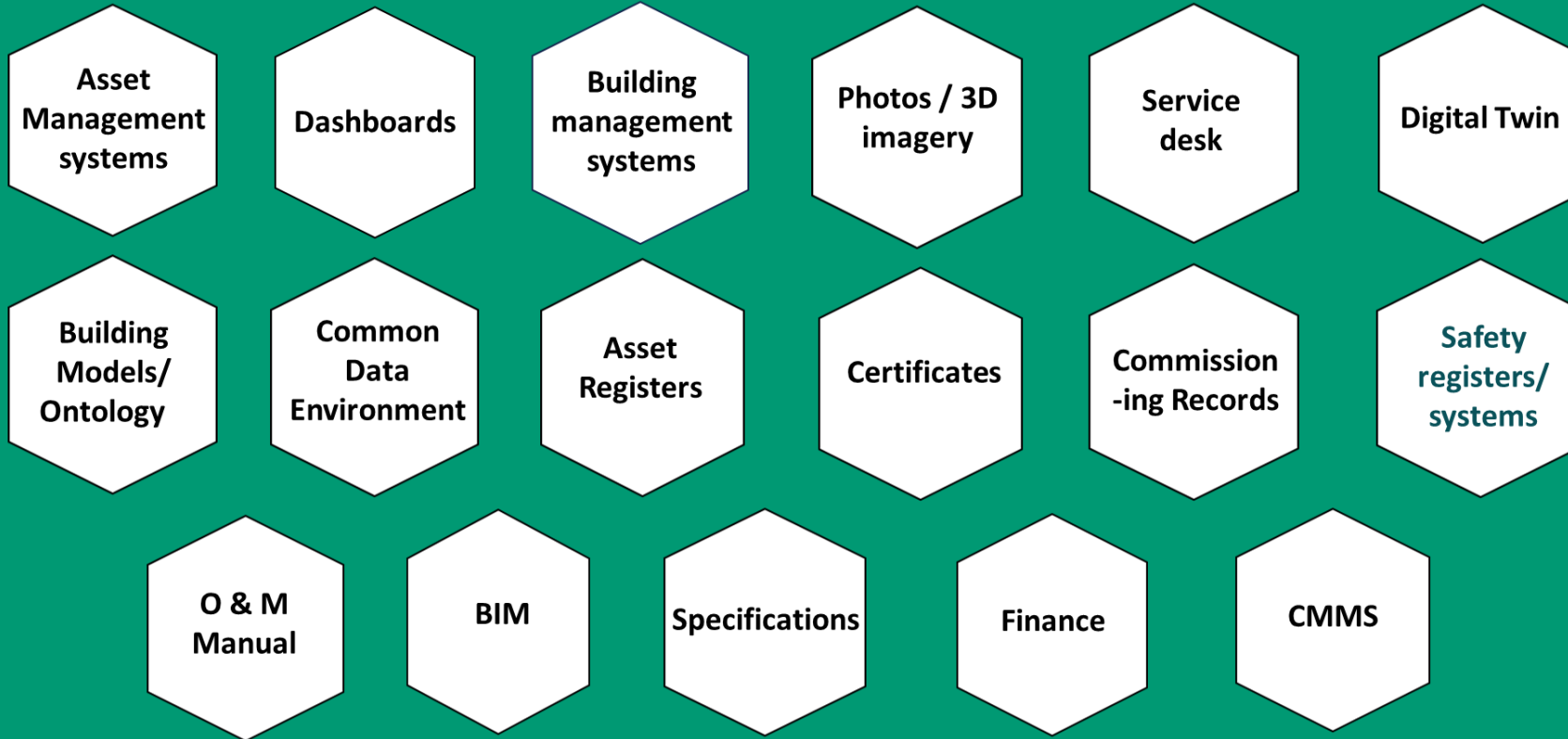


Product	Sub-Type	Sub-Sub-Type	BIM-MEP Aus ID Tag	VBIS Component Tag	Mapping Uniclass Code	Mapping Omniclass Code
Chiller			CHR	ME-Chr	-	23-33 21 00
	Air Cooled			ME-Chr-AC	Pr_60_60_13_04	-
		Centrifugal		ME-Chr-AC-Ce	-	23-33 21 13 13
		Centrifugal- Magnetic Bearing		ME-Chr-AC-CMB	-	-
		Screw		ME-Chr-AC-Sc	-	23-33 21 13 21
		Scroll		ME-Chr-AC-Sr	-	23-33 21 13 23
		Heat Pump		ME-Chr-AC-HP	-	23-33 17 13
		Reciprocating		ME-Chr-AC-Re	-	23-33 21 13 15
	Packaged Air Cooled			ME-Chr-PAC	Pr_60_60_13_04	-
		Centrifugal		ME-Chr-PAC-Ce	-	23-33 21 13 13 11
		Centrifugal- Magnetic Bearing		ME-Chr-PAC-CMB	-	-
		Screw		ME-Chr-PAC-Sc	-	23-33 21 13 21 11
		Scroll		ME-Chr-PAC-Sr	-	23-33 21 13 23 11
		Heat Pump		ME-Chr-PAC-HP	-	23-33 17 11 11
		Reciprocating		ME-Chr-PAC-Re	-	23-33 21 13 15 11
	Adiabatic			ME-Chr-Ad	Pr_60_60_13_02	-
		Centrifugal		ME-Chr-Ad-Ce	-	-
		Centrifugal- Magnetic Bearing		ME-Chr-Ad-CMB	-	-
		Screw		ME-Chr-Ad-Sc	-	-
		Scroll		ME-Chr-Ad-Sr	-	-
		Reciprocating		ME-Chr-Ad-Re	-	-
	Water Cooled			ME-Chr-WC	Pr_60_60_13_96	-
		Centrifugal		ME-Chr-WC-Ce	-	-
		Centrifugal- Magnetic Bearing		ME-Chr-WC-CMB	-	-
		Screw		ME-Chr-WC-Sc	-	-
		Scroll		ME-Chr-WC-Sr	-	-
		Heat Pump		ME-Chr-WC-HP	-	-
		Reciprocating		ME-Chr-WC-Re	-	-

Good Data Good Decisions



Empowering Data

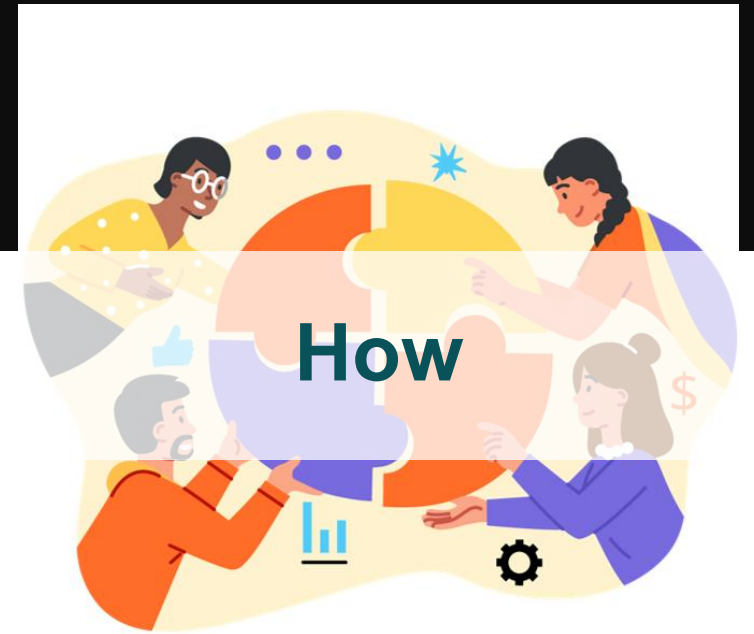
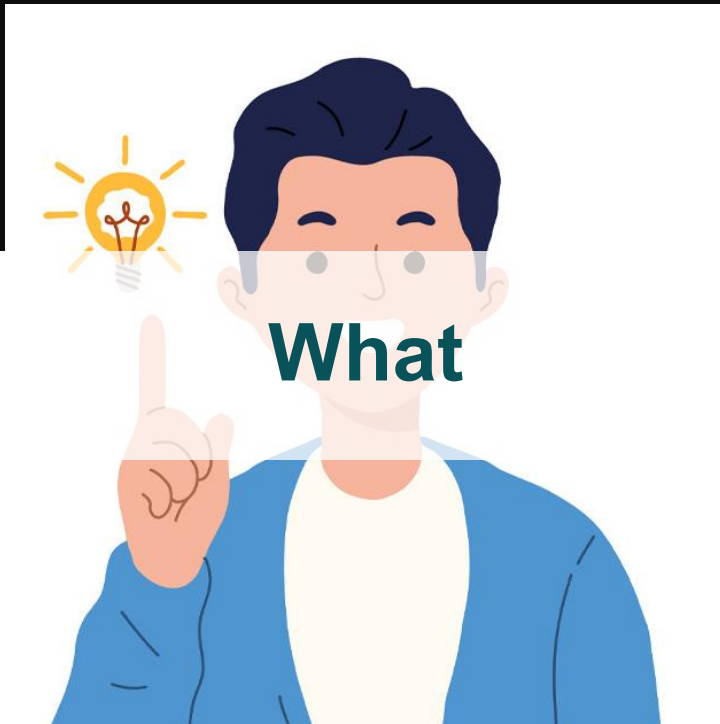


Classify. Tag. Link.



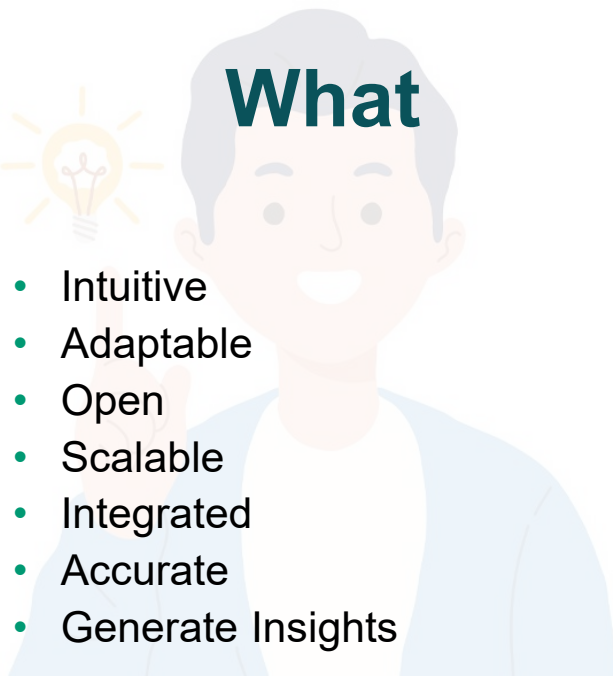
VBIS[®]

Introducing Data Ecosystem Empowered by VBIS



Introducing Data Ecosystem Empowered by VBIS

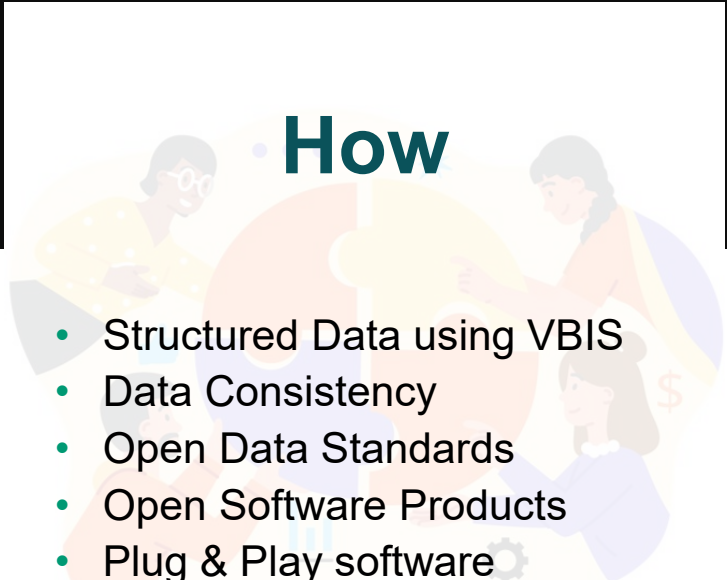
What

- 
- Intuitive
 - Adaptable
 - Open
 - Scalable
 - Integrated
 - Accurate
 - Generate Insights

Who

- 
- Asset Owners
 - Asset Managers
 - Facility Managers
 - Service Contractors
 - Design Consultants

How

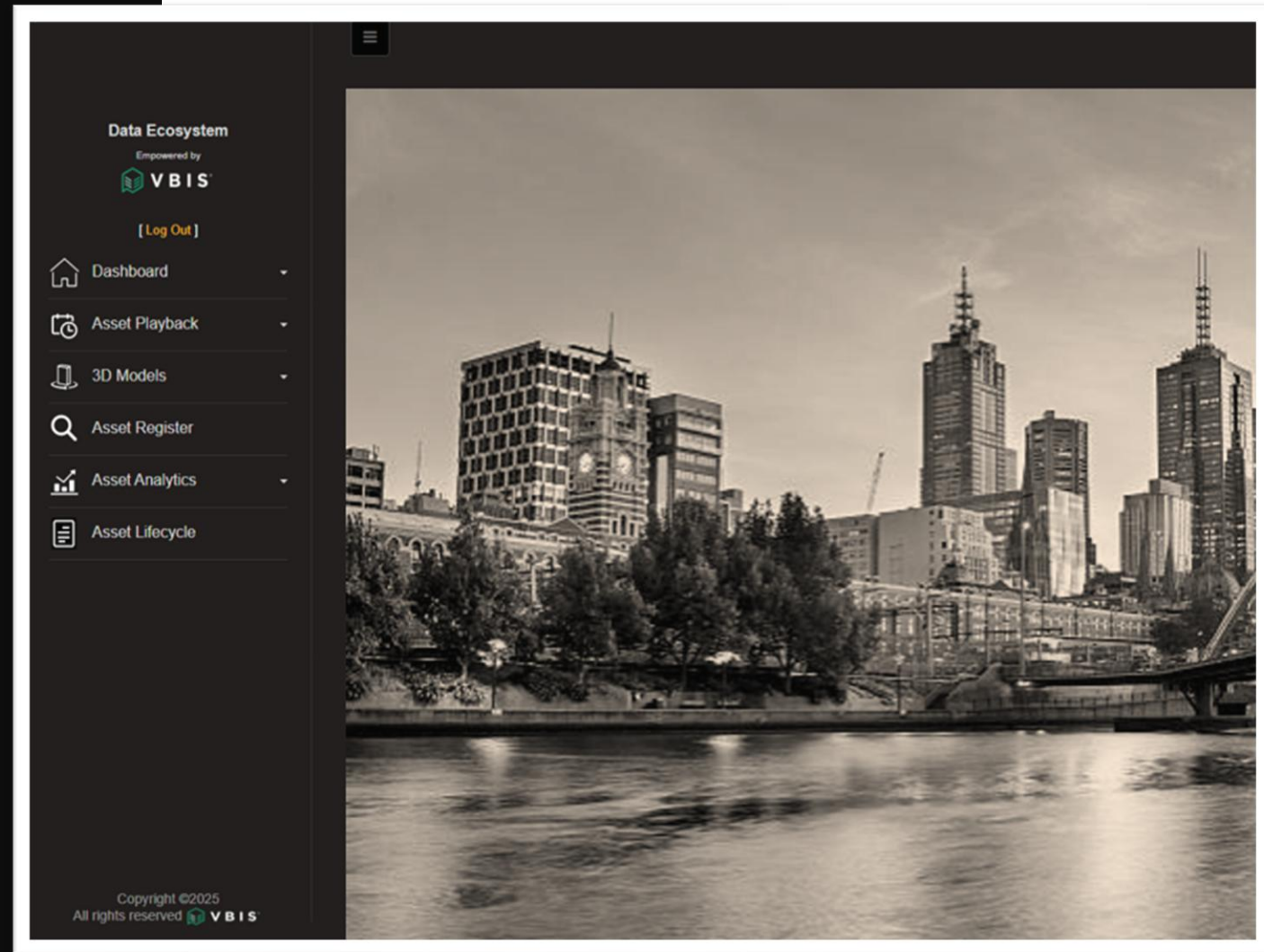
- 
- Structured Data using VBIS
 - Data Consistency
 - Open Data Standards
 - Open Software Products
 - Plug & Play software
 - Existing sensor/IOT data integration
 - Integration of non-sensor / IOT data
 - Data Agnostic
 - Platform Agnostic

Data Ecosystem

Empowered by VBIS

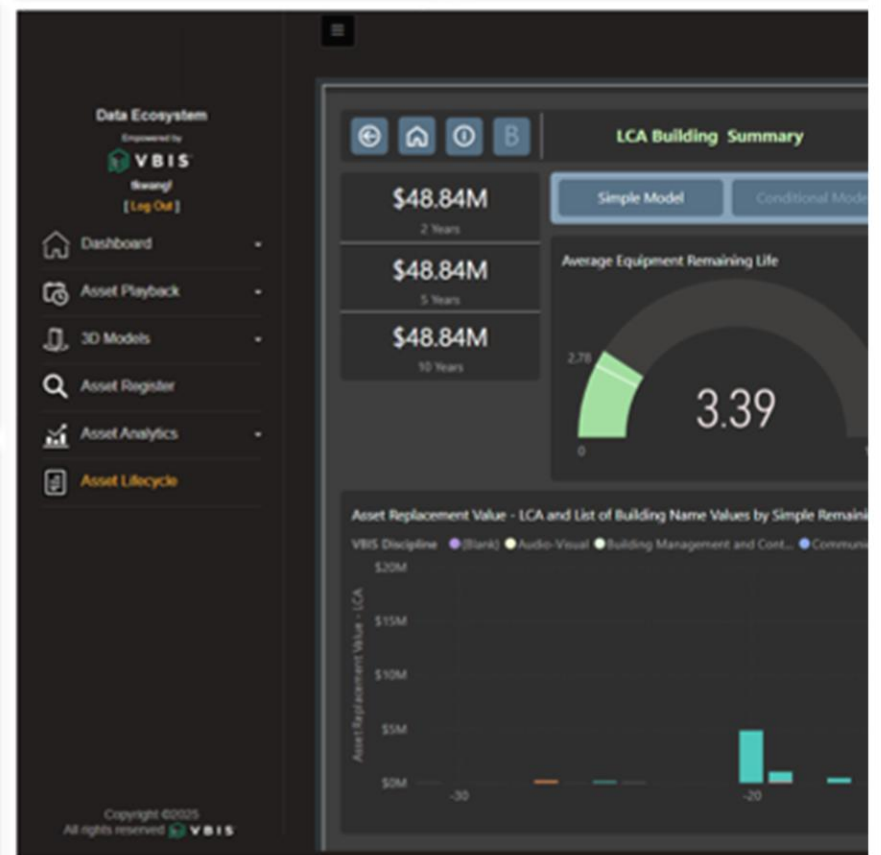
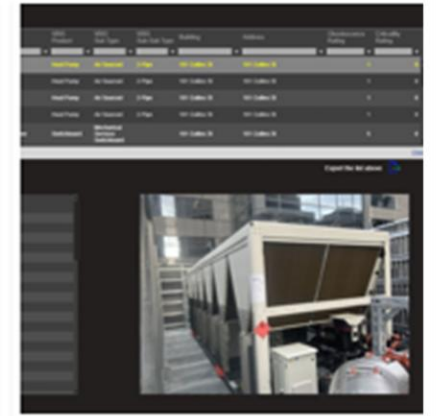
Purpose built data platform providing:

- Configurable building performance dashboards
- Asset registers – linked to asset condition and replacement costs
- Operational Data – Including asset playback and Building analytics
- 3D Models
- Asset Store – Portfolio lifecycle forecasting



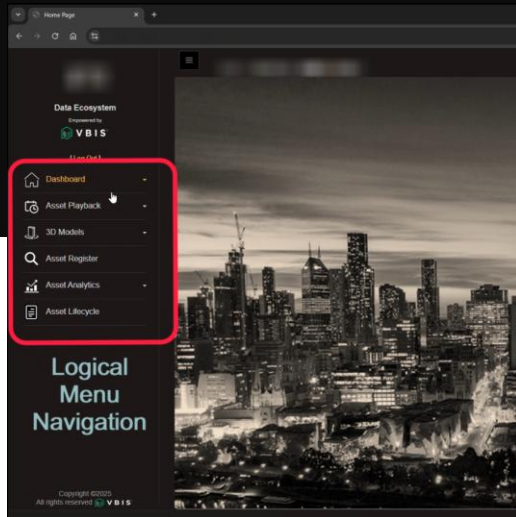
Accessible Actionable Insights

- Save time
- Connection of systems
- Data agnostic
- Real time information
- Better decisions
- Stakeholder Reporting

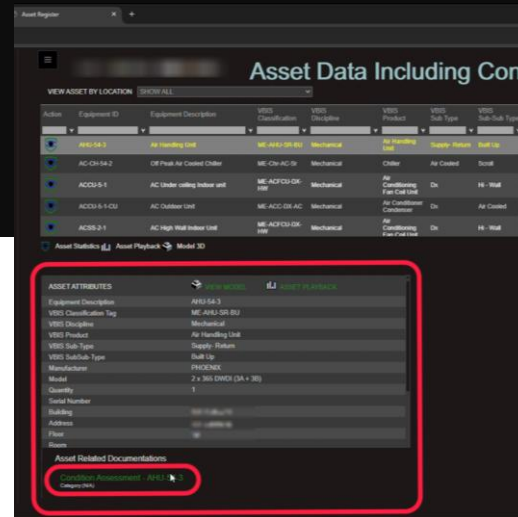


Flexible Smart Building Solution

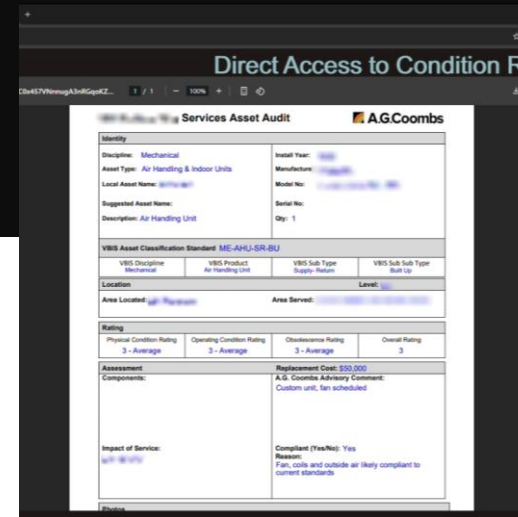
Stakeholder Engagement



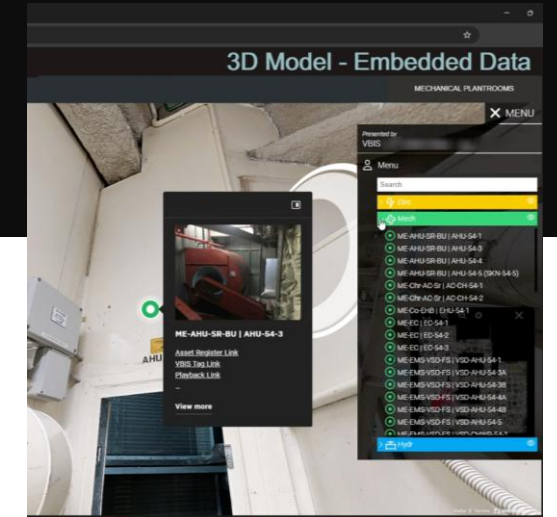
Logical Navigation



View Asset Information



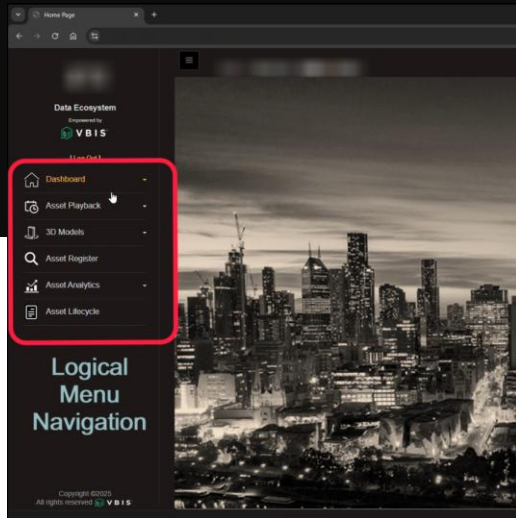
View Condition



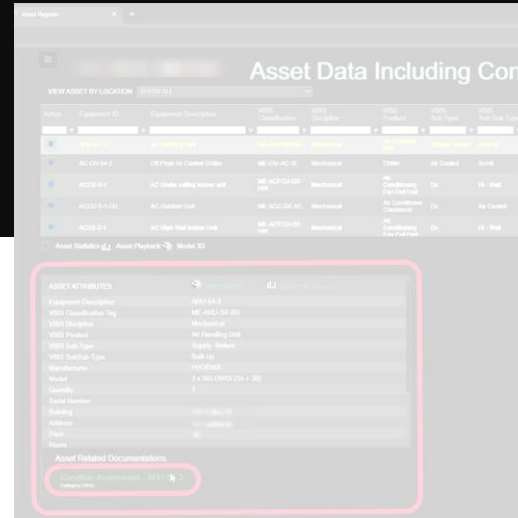
View Asset in Context

Flexible Smart Building Solution

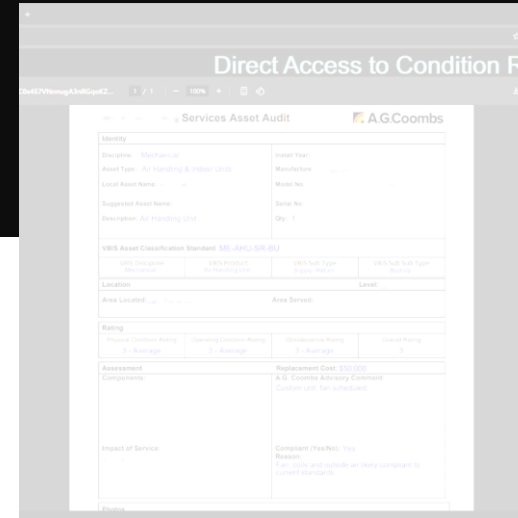
Stakeholder Engagement



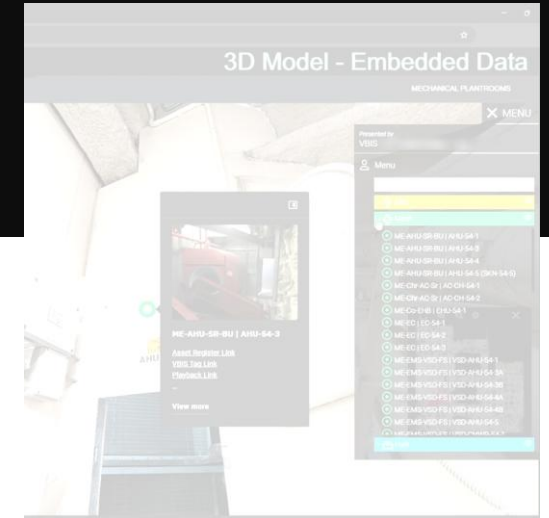
Logical Navigation



View Asset Information



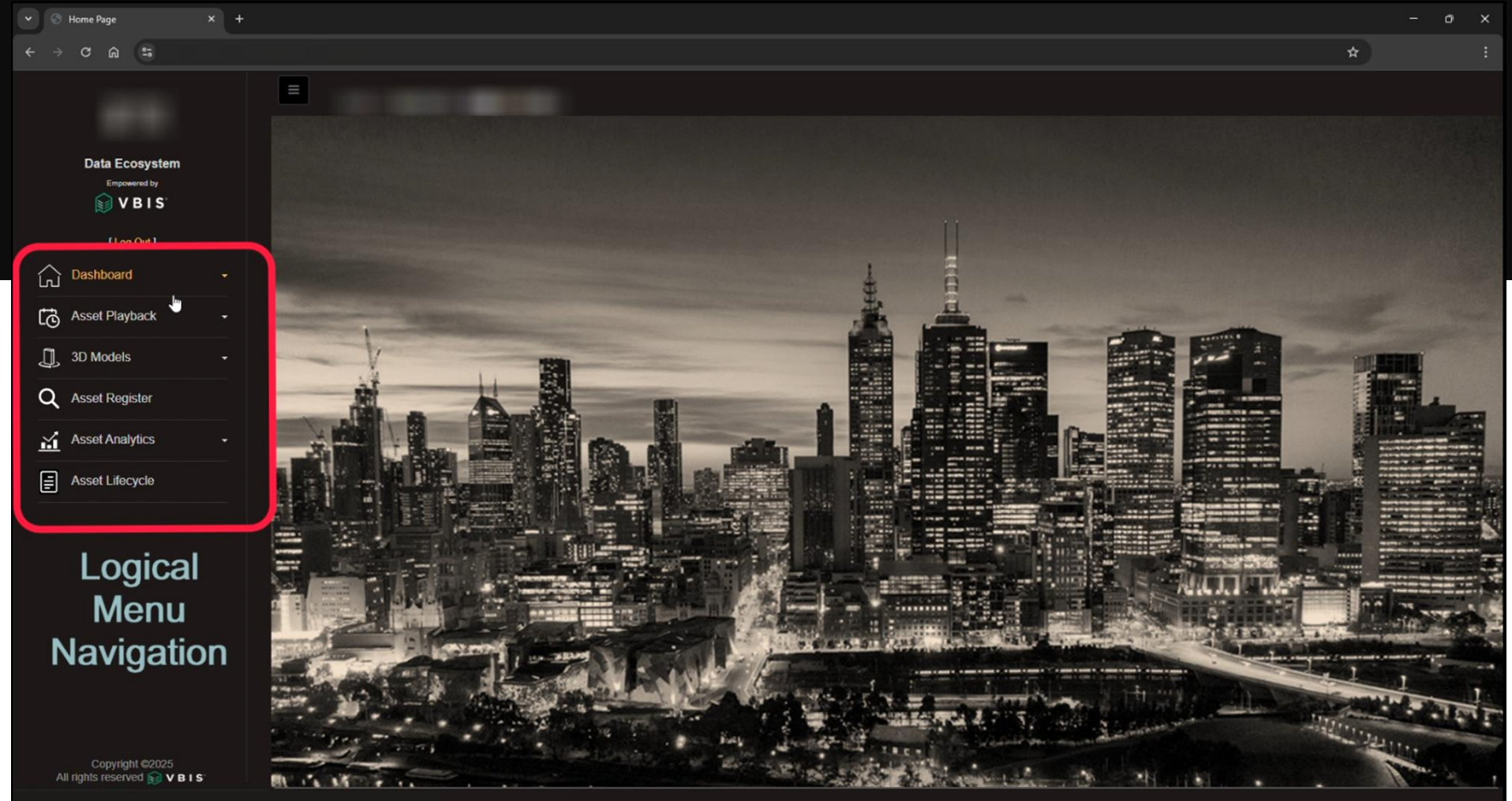
View Condition Information



View Asset in Context

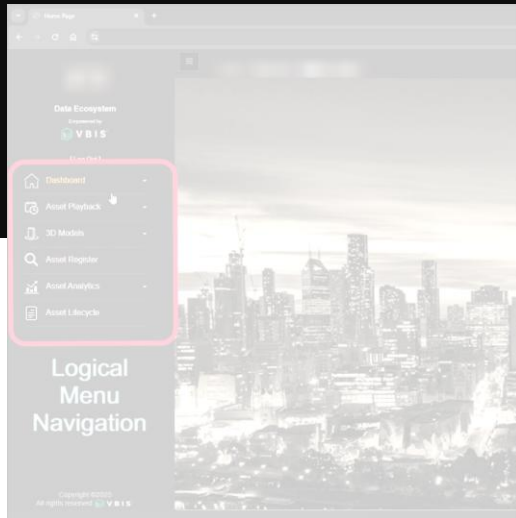
Flexible Smart Building Solution Stakeholder Engagement

Logical Navigation

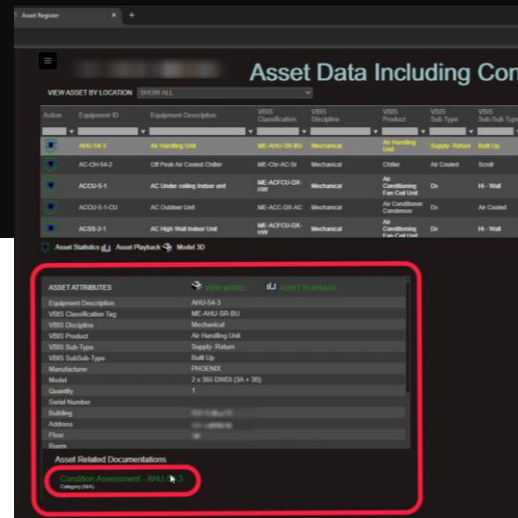


Flexible Smart Building Solution

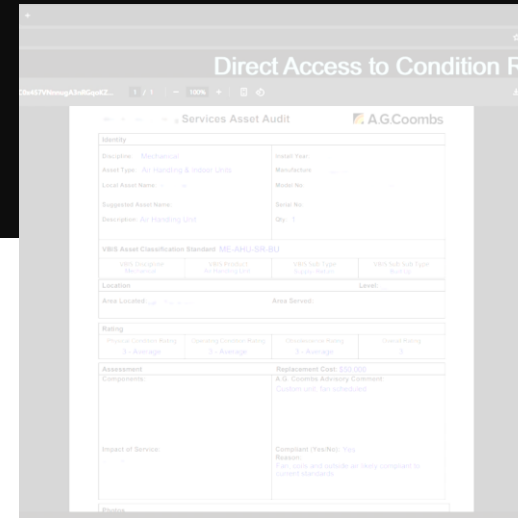
Stakeholder Engagement



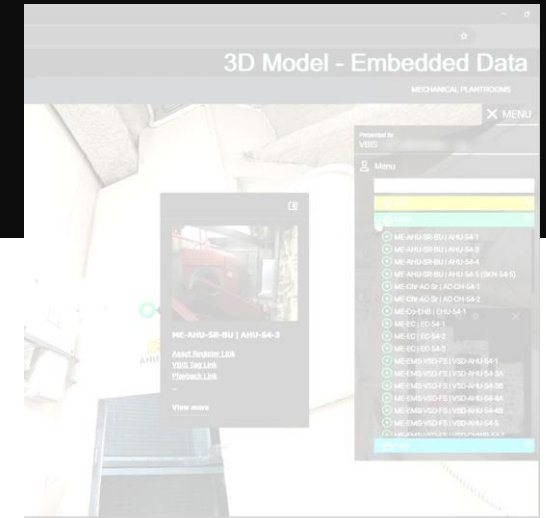
Logical Navigation



View Asset Information



View Condition



View Asset in Context

Flexible Smart Building Solution

Stakeholder Engagement

View Asset Information

VBIS

Log Out

Dashboard

Asset Playback

3D Models

Asset Register

Asset Analytics

Asset Lifecycle

Asset Data Including Condition & Replacement Cost

VIEW ASSET BY LOCATION

Action	Equipment ID	Equipment Description	VBIS Classification	VBIS Discipline	VBIS Product	VBIS Sub-Type	VBIS Sub-Sub-Type	Building	Address	Obsolescence Rating	Criticality Rating
	AHU-54-3	Air Handling Unit	ME-AHU-SR-BU	Mechanical	Air Handling Unit	Supply- Return	Built Up			3	0
	AC-CH-54-2	Off Peak Air Cooled Chiller	ME-CH-AC-Sr	Mechanical	Chiller	Air Cooled	Scroll			3	0
	ACCU-5-1	AC Under ceiling Indoor unit	ME-ACFCU-DX-HW	Mechanical	Air Conditioning Fan Coil Unit	Dx	H6 - Wall			4	0
	ACCU-5-1-CU	AC Outdoor Unit	ME-ACC-DX-AC	Mechanical	Air Conditioner Condenser	Dx	Air Cooled			1	0
	ACSS-2-1	AC High Wall Indoor Unit	ME-ACFCU-DX-HW	Mechanical	Air Conditioning Fan Coil Unit	Dx	H6 - Wall			5	0

Asset Statistics | Asset Playback | Model 3D

ASSET ATTRIBUTES

VIEW MODEL

ASSET PLAYBACK

Equipment Description	AHU-54-3
VBIS Classification Tag	ME-AHU-SR-BU
VBIS Discipline	Mechanical
VBIS Product	Air Handling Unit
VBIS Sub-Type	Supply- Return
VBIS SubSub-Type	Built Up
Manufacturer	PHOENIX
Model	2 x 365 DWOI (3A + 3B)
Quantity	1
Serial Number	
Building	
Address	
Floor	
Room	

Asset Related Documentations

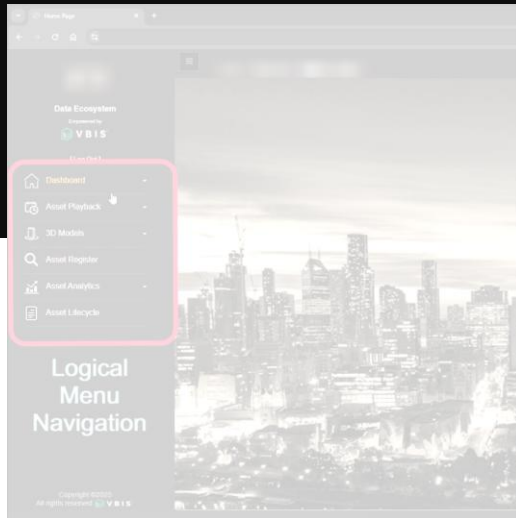
Condition Assessment - AHU-54-3

Category (N/A)

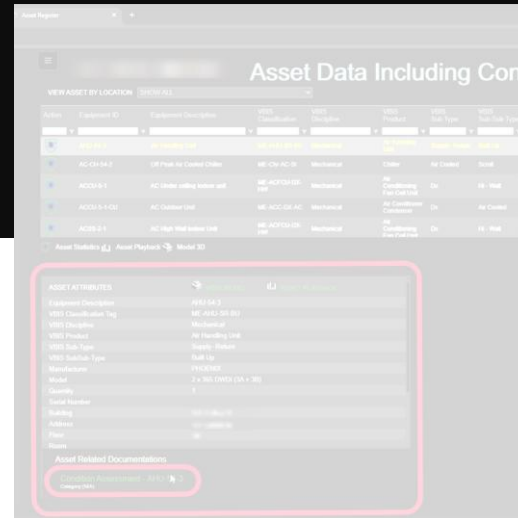
Export the list above

Flexible Smart Building Solution

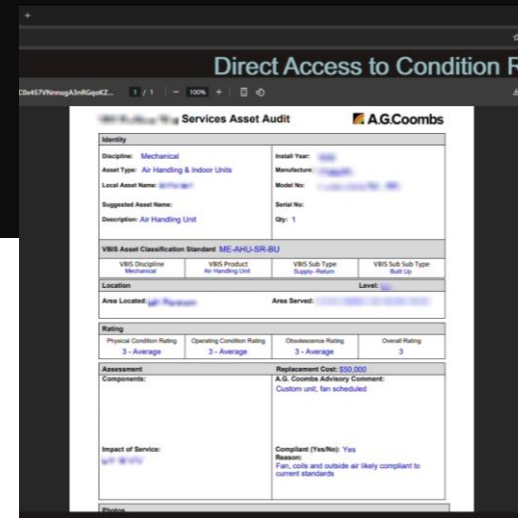
Stakeholder Engagement



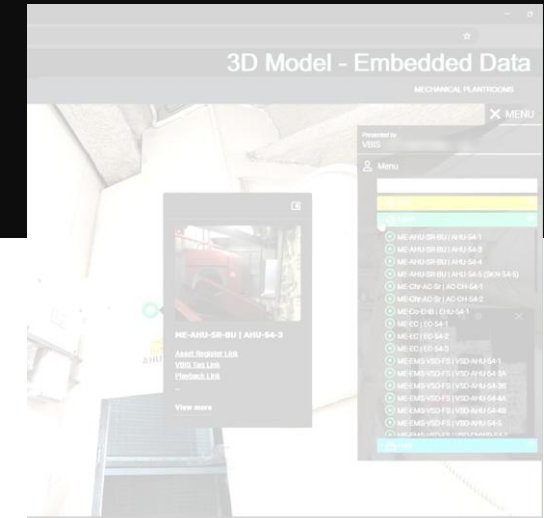
Logical Navigation



View Asset Information



View Condition



View Asset in Context

Flexible Smart Building Solution

Stakeholder Engagement

View Condition



Playback

Asset Register

VBIS Integration

Direct Access to Condition Report

1 / 1

100%

Services Asset Audit

A.G.Coombs

Identity

Discipline: Mechanical

Asset Type: Air Handling & Indoor Units

Local Asset Name: [redacted]

Suggested Asset Name:

Description: Air Handling Unit

Install Year: [redacted]

Manufacture: [redacted]

Model No: [redacted]

Serial No:

Qty: 1

VBIS Asset Classification Standard ME-AHU-SR-BU

VBIS Discipline Mechanical

VBIS Product Air Handling Unit

VBIS Sub Type Supply- Return

VBIS Sub Sub Type Built Up

Location

Level: [redacted]

Area Located: [redacted]

Area Served: [redacted]

Rating

Physical Condition Rating 3 - Average

Operating Condition Rating 3 - Average

Obsolescence Rating 3 - Average

Overall Rating 3

Assessment

Components:

Impact of Service: [redacted]

Replacement Cost: \$50,000

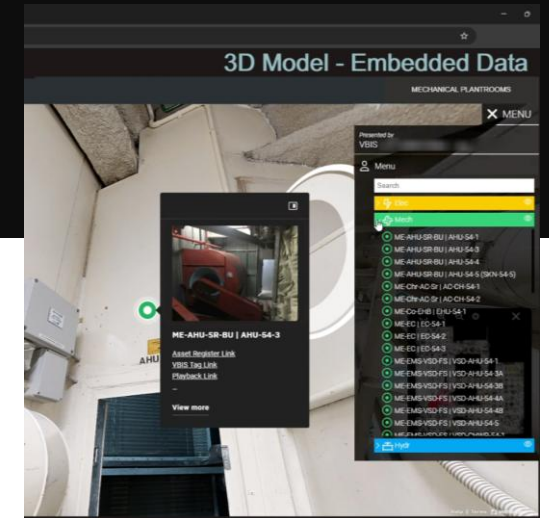
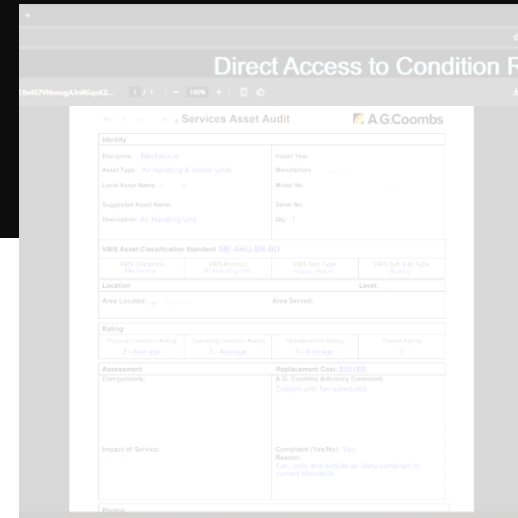
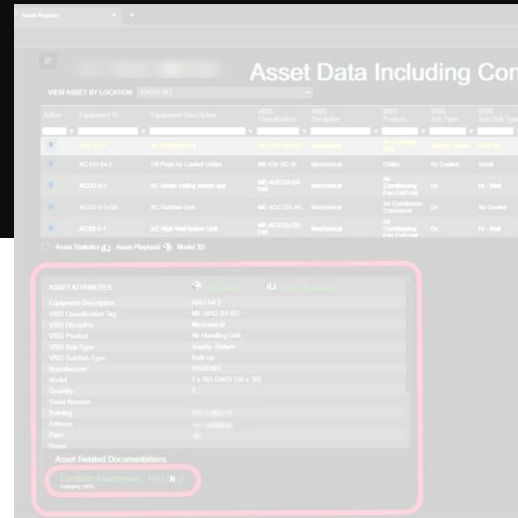
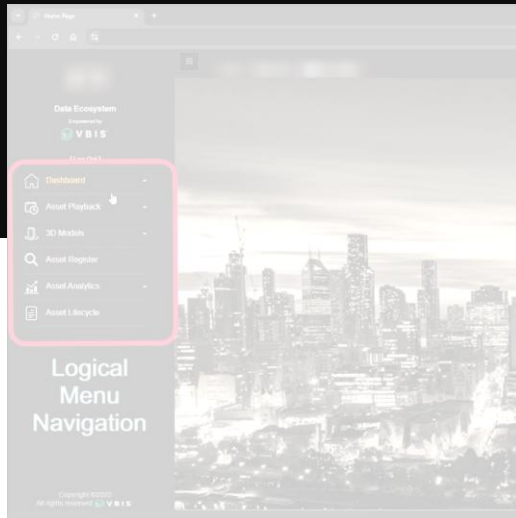
A.G. Coombs Advisory Comment: Custom unit, fan scheduled

Compliant (Yes/No): Yes

Reason: Fan, coils and outside air likely compliant to current standards

Photos

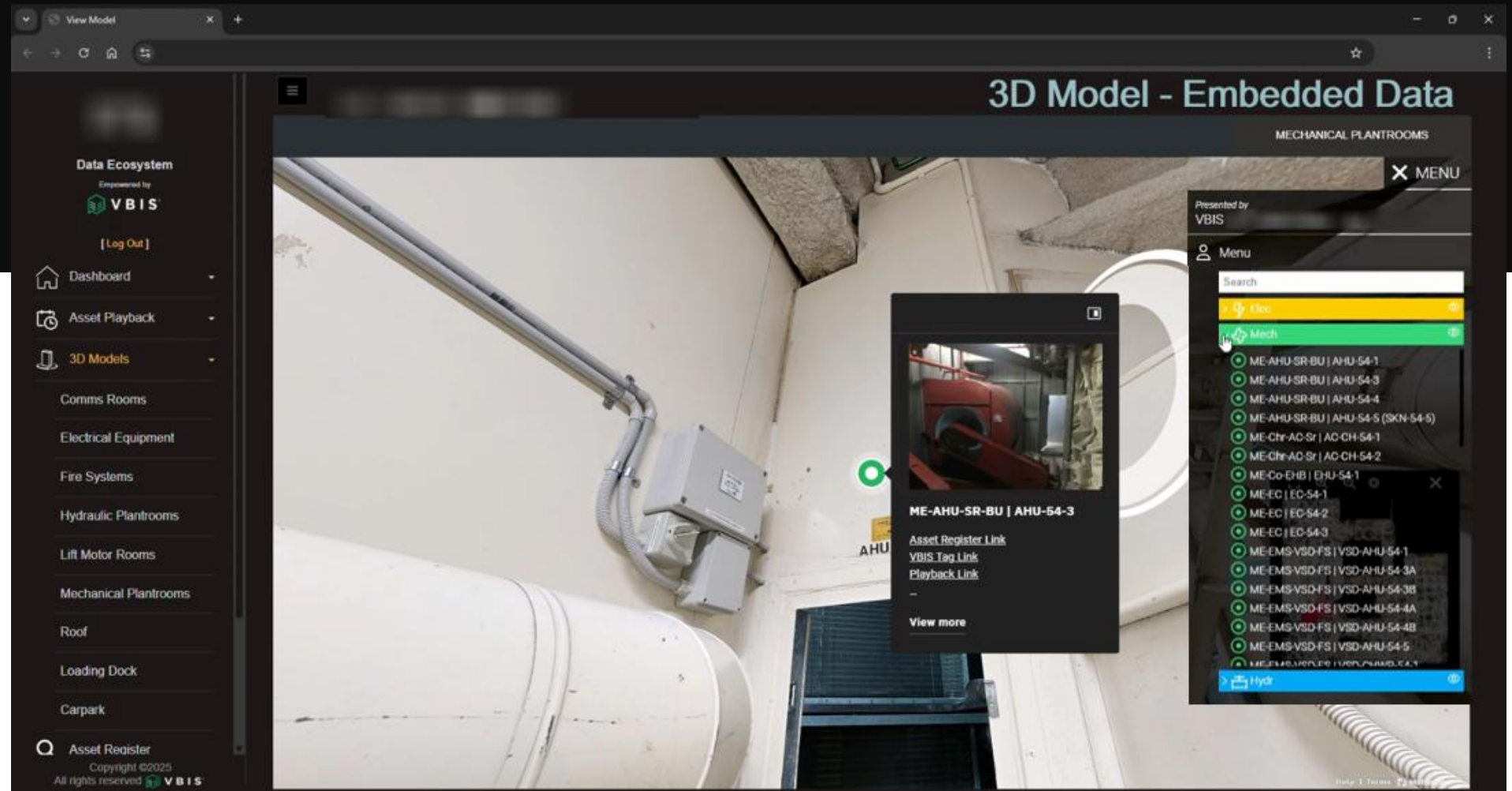
Flexible Smart Building Solution Stakeholder Engagement



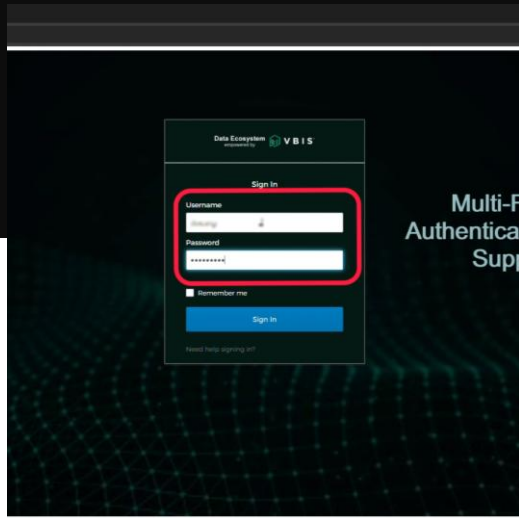
View Asset in Context

Flexible Smart Building Solution Stakeholder Engagement

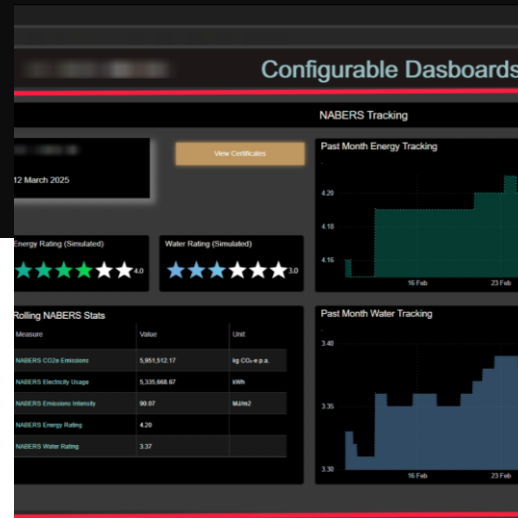
View Asset in
Context



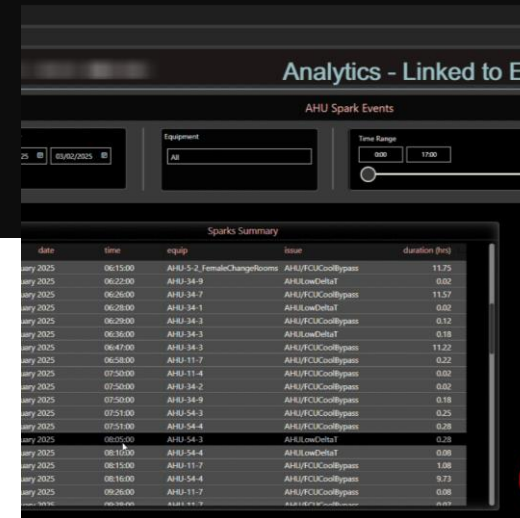
Flexible Smart Building Solution Facility Managers



Web based log in



Review Asset
Performance

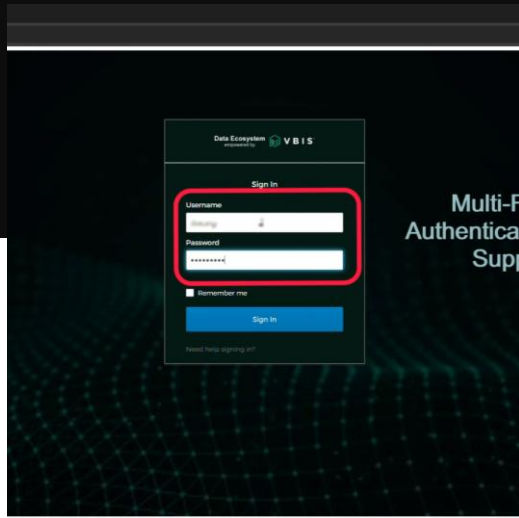


Review Analytics /
Alarm

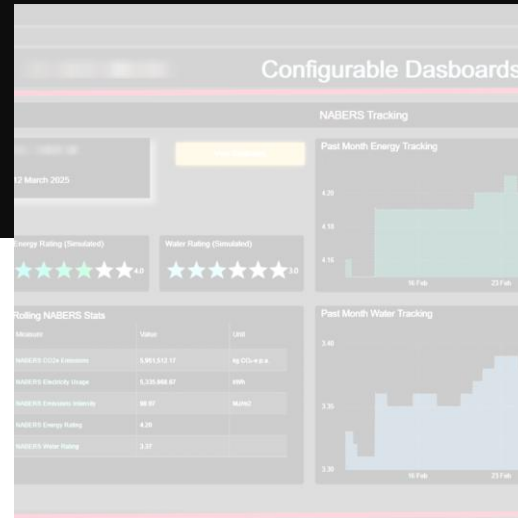


View System
Performance

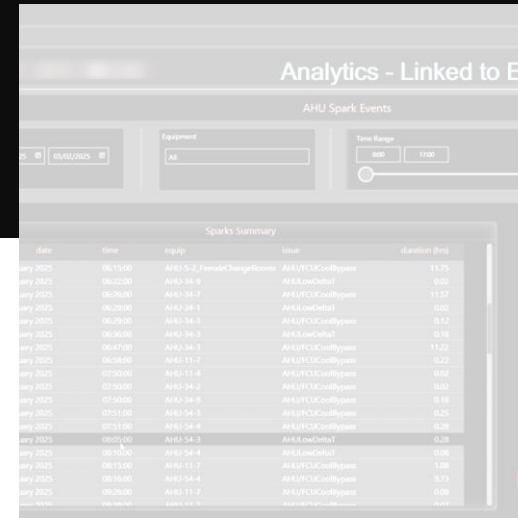
Flexible Smart Building Solution Facility Managers



Web based log in



Review Asset
Performance



Review Analytics /
Alarm



View System
Performance

Flexible Smart Building Solution Facility Managers

Web based log in



A screenshot of a web browser displaying the login page for the VBIS Data Ecosystem. The browser's address bar shows the URL "gateway.vbis.net.au/Login.aspx". The login form is centered on a dark background with a subtle grid pattern. The form includes a "Sign In" header, a "Username" field with a red border, a "Password" field with a red border, a "Remember me" checkbox, and a blue "Sign In" button. Below the button is a link that says "Need help signing in?". To the right of the login form, the text "Multi-Factor Authentication (MFA) Support" is displayed in a large, white, sans-serif font.

gateway.vbis.net.au/Login.aspx

Data Ecosystem
empowered by VBIS

Sign In

Username

Password

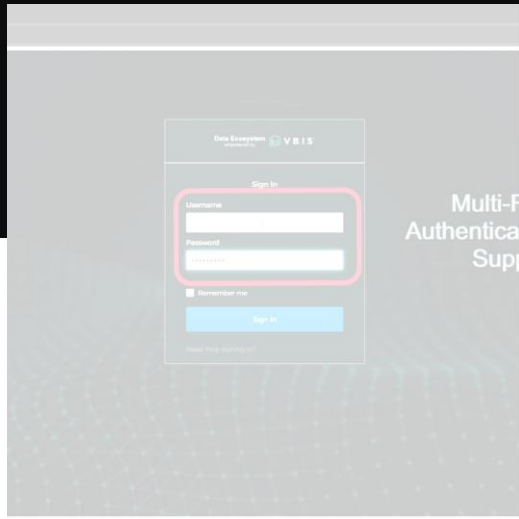
☐ Remember me

Sign In

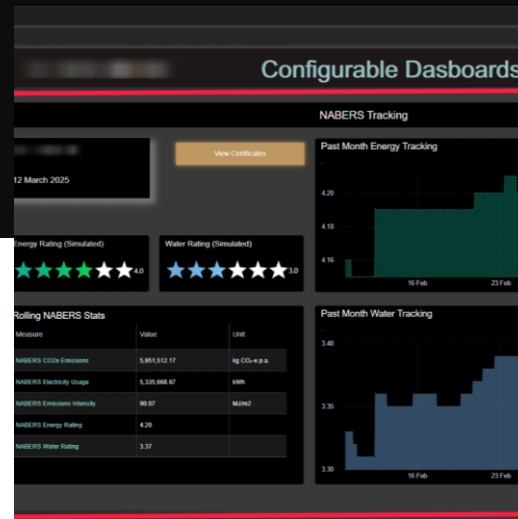
Need help signing in?

Multi-Factor
Authentication (MFA)
Support

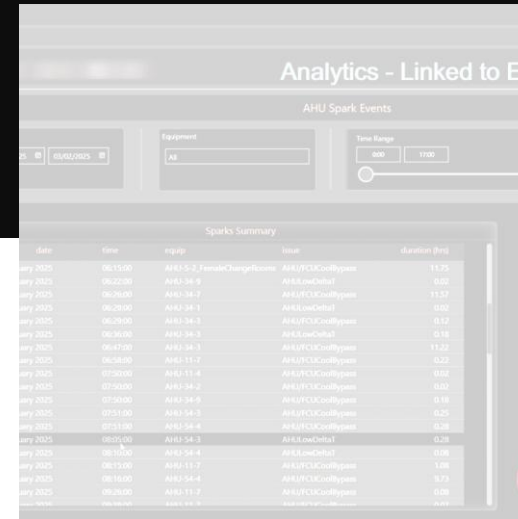
Flexible Smart Building Solution Facility Managers



Web based log in



Review Asset
Performance



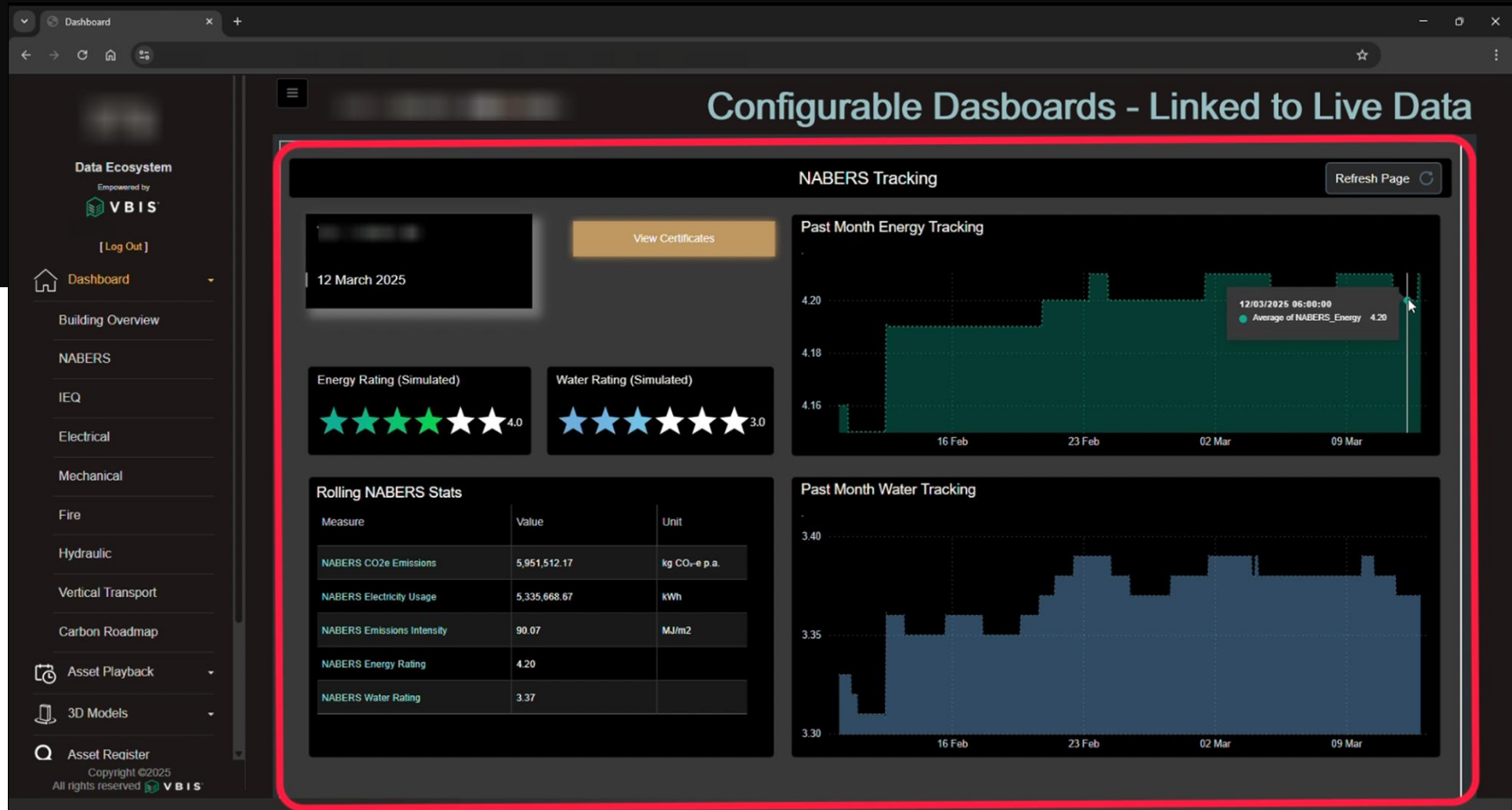
Review Analytics /
Alarm



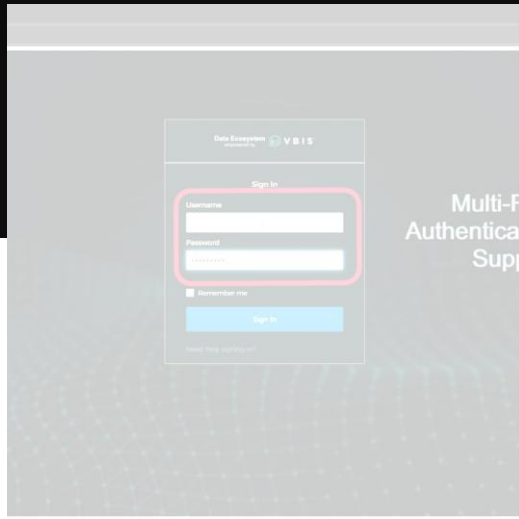
View System
Performance

Flexible Smart Building Solution Facility Managers

Review Asset
Performance



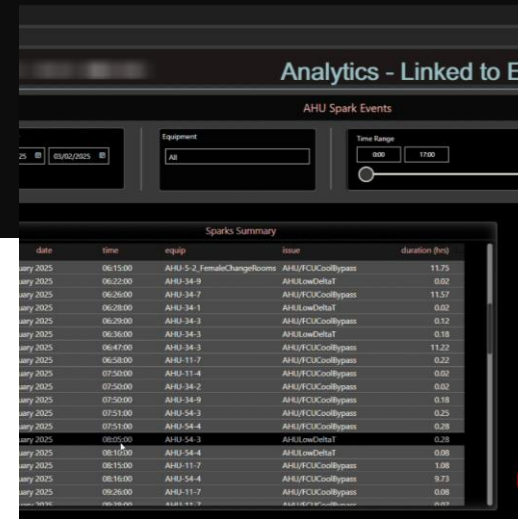
Flexible Smart Building Solution Facility Managers



Web based log in



Review Asset
Performance



Review Analytics /
Alarm



View System
Performance

Flexible Smart Building Solution Facility Managers

Review Analytics /
Alarm



Analytics - Linked to Equipment Playback

Data Ecosystem
Empowered by
VBIS
[Log Out]

- Dashboard
- Asset Playback
- 3D Models
- Asset Register
- Asset Analytics**

- AHU / SKN
- Fans
- FCU
- PAC
- WCU
- VAV - Low Rise
- VAV - Mid Rise
- VAV - High Rise

03/02/2025 03/02/2025

Equipment
All

Time Range
0:00 17:00

Playback
03/02/2025 00:00:00

Sparks Summary

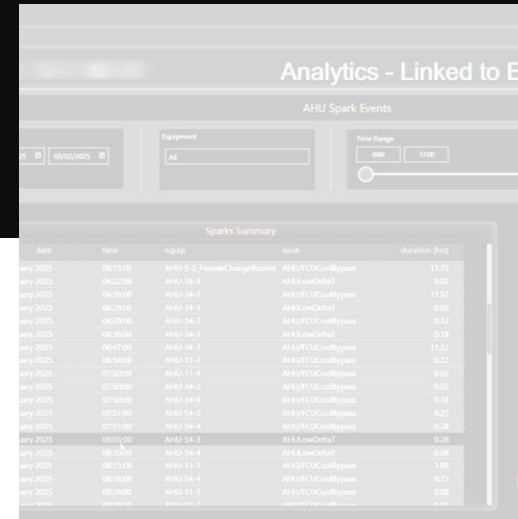
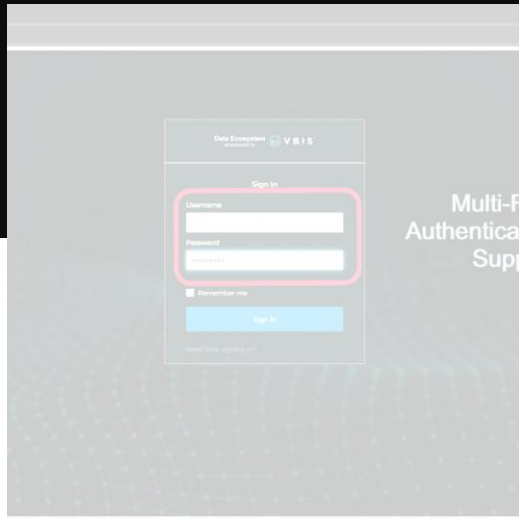
date	time	equip	issue	duration (hrs)
03 February 2025	06:15:00	AHU-5-2_FemaleChangeRooms	AHU/FCUCoolBypass	11.75
03 February 2025	06:22:00	AHU-34-9	AHULowDeltaT	0.02
03 February 2025	06:26:00	AHU-34-7	AHU/FCUCoolBypass	11.57
03 February 2025	06:28:00	AHU-34-1	AHULowDeltaT	0.02
03 February 2025	06:29:00	AHU-34-3	AHU/FCUCoolBypass	0.12
03 February 2025	06:36:00	AHU-34-3	AHULowDeltaT	0.18
03 February 2025	06:47:00	AHU-34-3	AHU/FCUCoolBypass	11.22
03 February 2025	06:58:00	AHU-11-7	AHU/FCUCoolBypass	0.22
03 February 2025	07:50:00	AHU-11-4	AHU/FCUCoolBypass	0.02
03 February 2025	07:50:00	AHU-34-2	AHU/FCUCoolBypass	0.02
03 February 2025	07:50:00	AHU-34-9	AHU/FCUCoolBypass	0.18
03 February 2025	07:51:00	AHU-54-3	AHU/FCUCoolBypass	0.25
03 February 2025	07:51:00	AHU-54-4	AHU/FCUCoolBypass	0.28
03 February 2025	08:05:00	AHU-54-3	AHULowDeltaT	0.28
03 February 2025	08:10:00	AHU-54-4	AHULowDeltaT	0.08
03 February 2025	08:15:00	AHU-11-7	AHU/FCUCoolBypass	1.08
03 February 2025	08:16:00	AHU-54-4	AHU/FCUCoolBypass	9.73
03 February 2025	09:26:00	AHU-11-7	AHU/FCUCoolBypass	0.08

AHULowDeltaT

Spark Details
There is less than 1degC DeltaT between the supply air temperature and return air temperature

Go To Equip

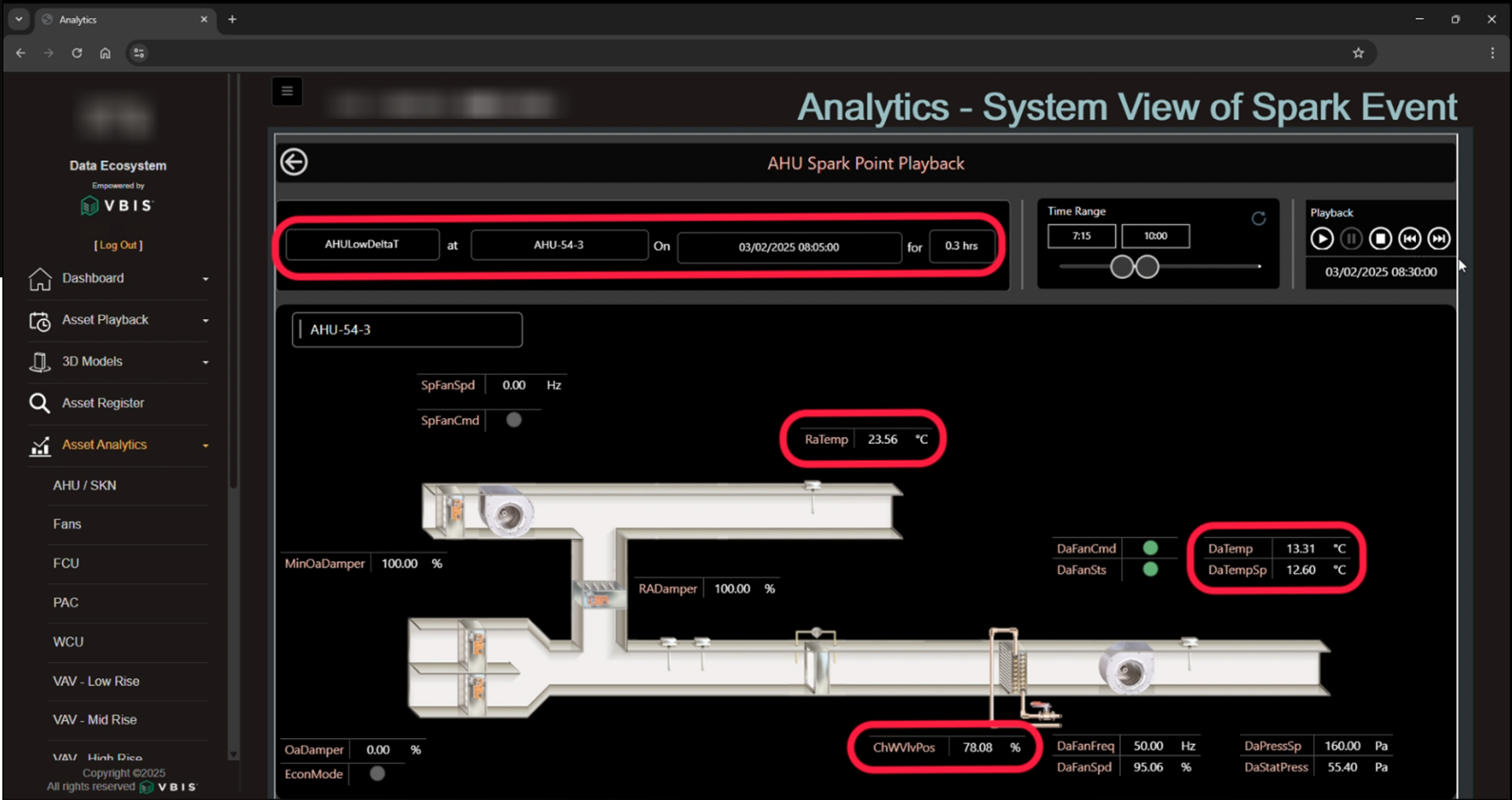
Flexible Smart Building Solution Facility Managers



View System Performance

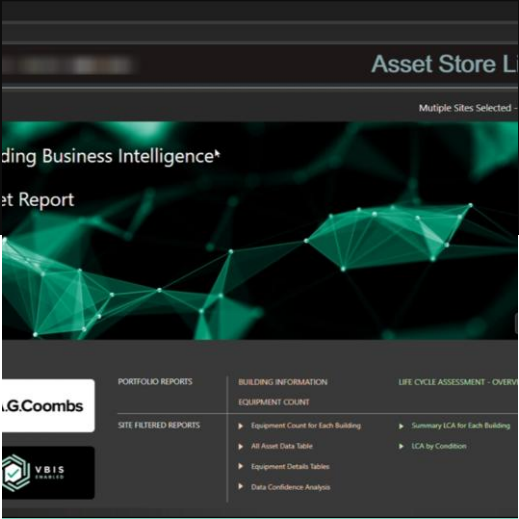
Flexible Smart Building Solution Facility Managers

View System
Performance



Flexible Smart Building Solution

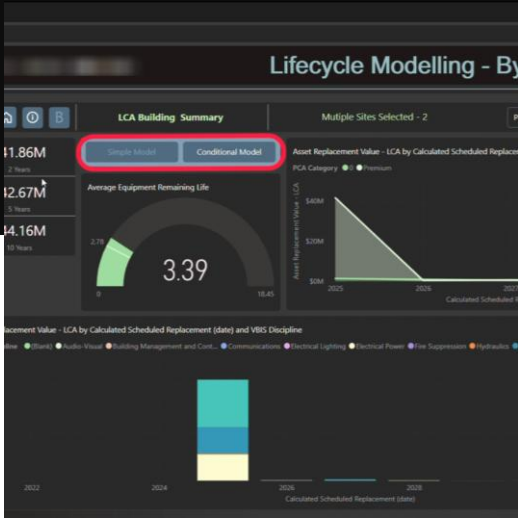
Lifecycle Planning



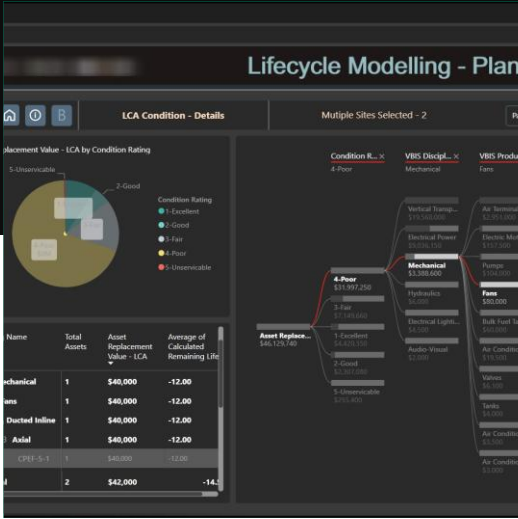
Asset Lifecycle Planning



Site / Portfolio Summary

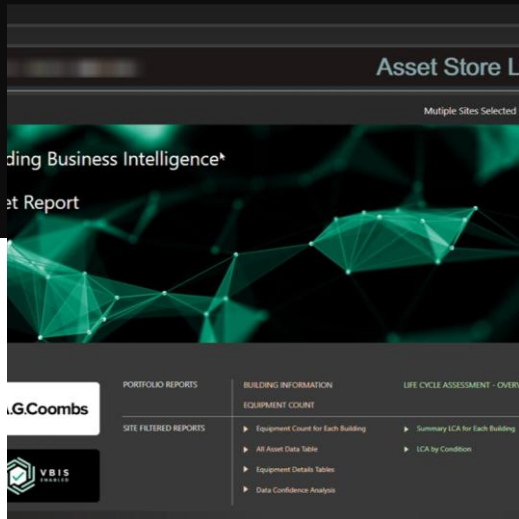


Straight Line vs Condition

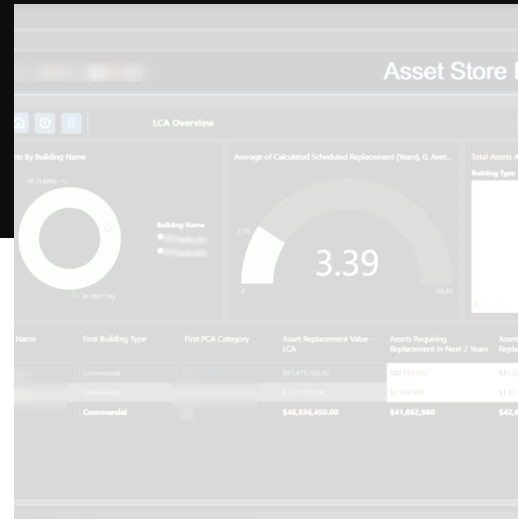


Assets views by Condition and Type

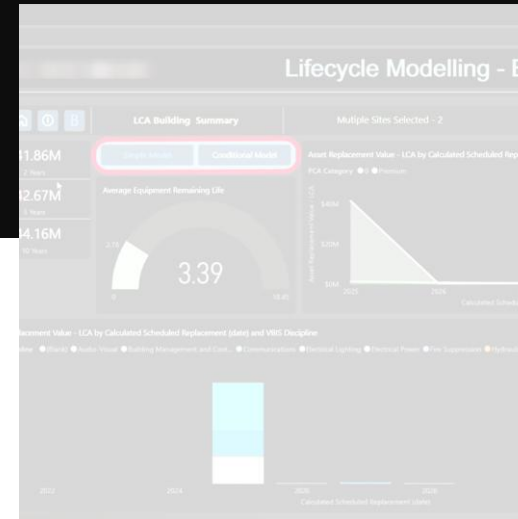
Flexible Smart Building Solution Lifecycle Planning



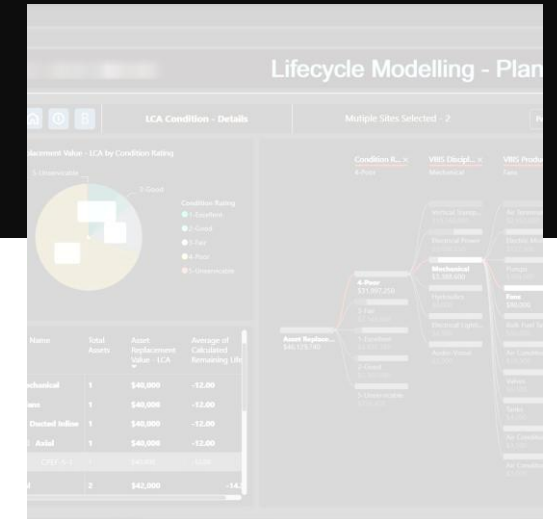
Asset Lifecycle
Planning



Site / Portfolio
Summary



Straight Line vs
Condition



Assets views by
Condition and Type

Flexible Smart Building Solution Lifecycle Planning

Asset Lifecycle Planning



The screenshot displays the 'Asset Store Lifecycle Modelling' web application. The interface is dark-themed with a sidebar on the left containing navigation links: Dashboard, Asset Playback, 3D Models, Asset Register, Asset Analytics, and Asset Lifecycle (highlighted). The main content area features a header with 'Asset Store Lifecycle Modelling' and 'Multiple Sites Selected - 2'. Below this is a large banner with the text 'Building Business Intelligence' and 'Asset Report'. A sidebar on the left of the main content area lists 'Data Ecosystem', 'Empowered by VBIS', and a '[Log Out]' button. The main content area is divided into sections: 'PORTFOLIO REPORTS' (containing 'A.G.Coombs' and 'SITE FILTERED REPORTS'), 'BUILDING INFORMATION' (containing 'EQUIPMENT COUNT'), and 'LIFE CYCLE ASSESSMENT - OVERVIEW' (containing 'Summary LCA for Each Building' and 'LCA by Condition'). The bottom of the page shows a footer with 'Copyright ©2025 All rights reserved VBIS' and a 'VBIS ENABLED' logo.

Asset Store Lifecycle Modelling

Multiple Sites Selected - 2

Filters Reset Filters

Building Business Intelligence

Asset Report

Terms of Reference Report Configuration

A.G.Coombs

VBIS ENABLED

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PORTFOLIO REPORTS

BUILDING INFORMATION

LIFE CYCLE ASSESSMENT - OVERVIEW

EQUIPMENT COUNT

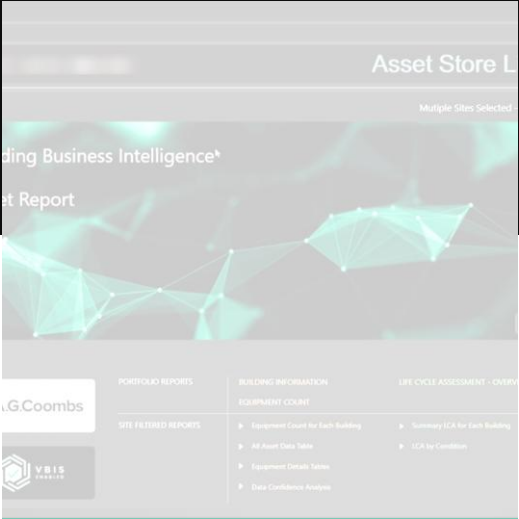
SITE FILTERED REPORTS

- Equipment Count for Each Building
- All Asset Data Table
- Equipment Details Tables
- Data Confidence Analysis

- Summary LCA for Each Building
- LCA by Condition

Flexible Smart Building Solution

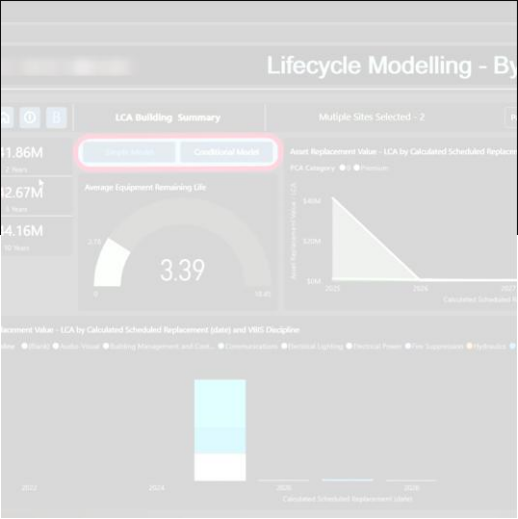
Lifecycle Planning



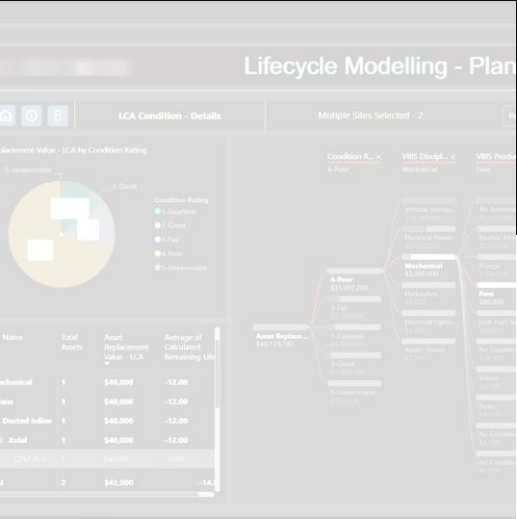
Asset Lifecycle Planning



Site / Portfolio Summary



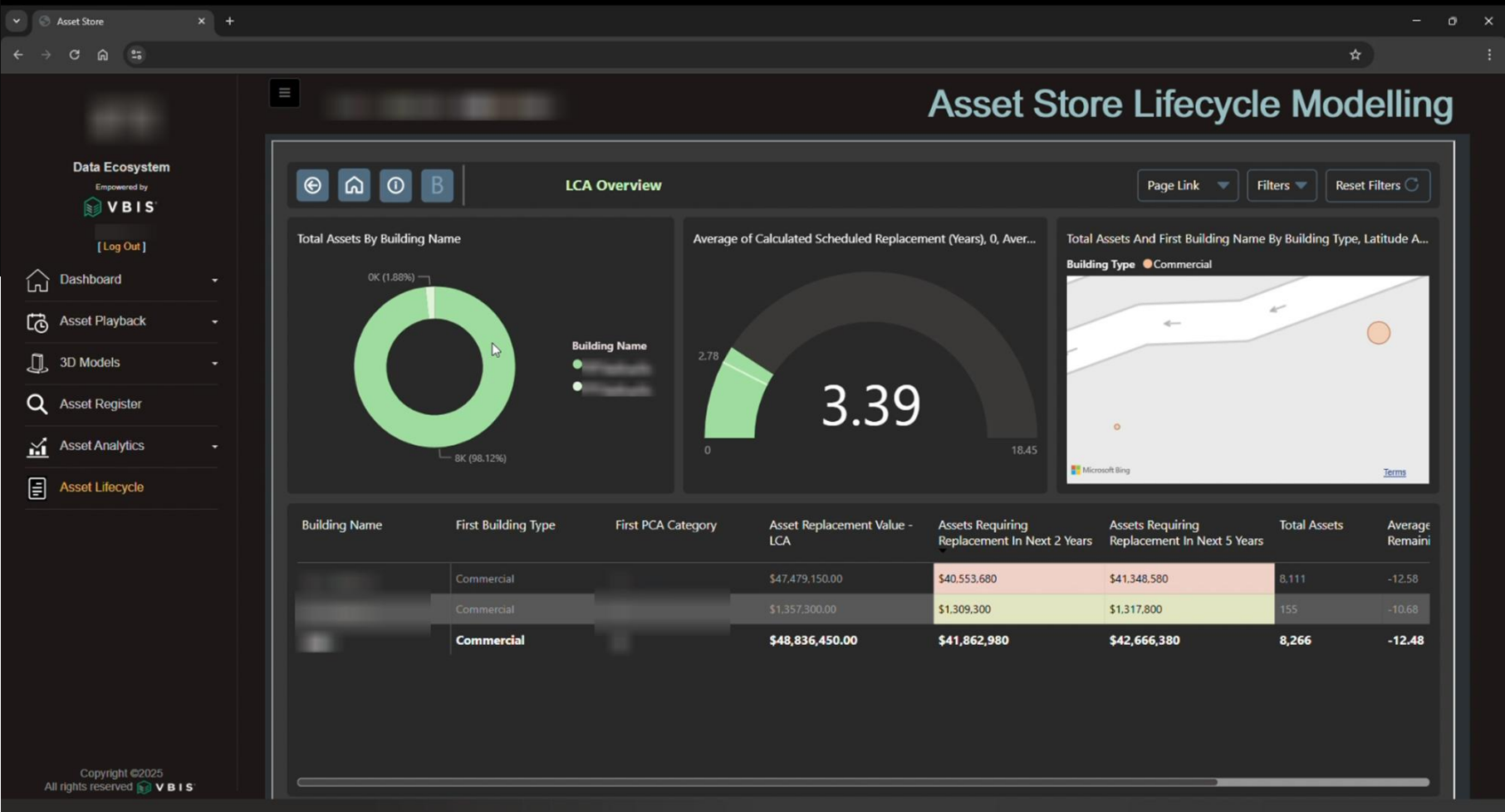
Straight Line vs Condition



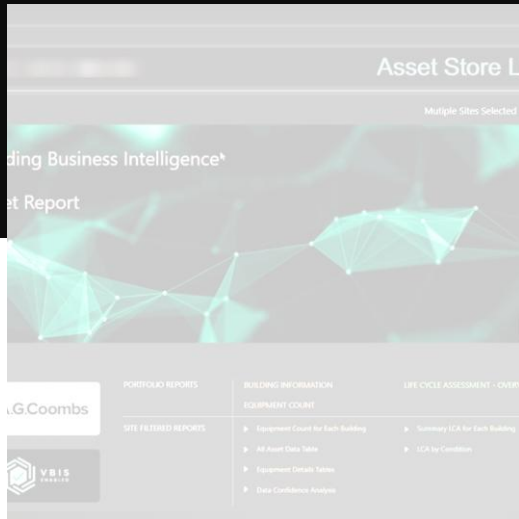
Assets views by Condition and Type

Flexible Smart Building Solution Lifecycle Planning

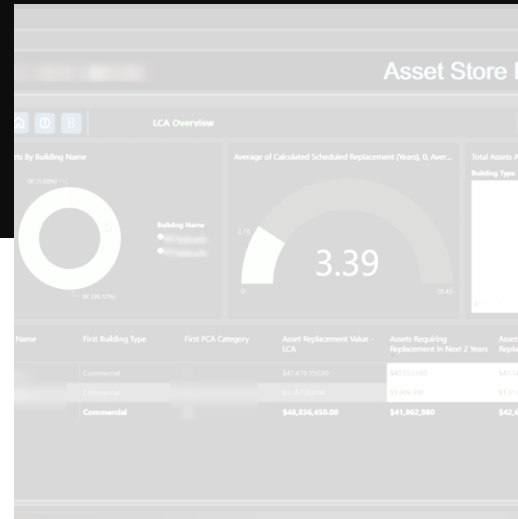
Site / Portfolio
Summary



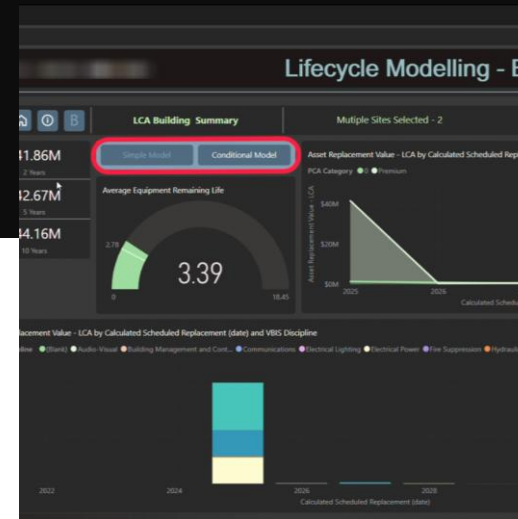
Flexible Smart Building Solution Lifecycle Planning



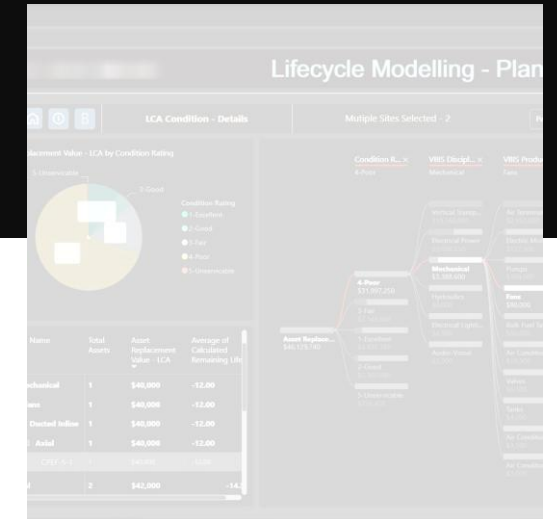
Asset Lifecycle Planning



Site / Portfolio Summary



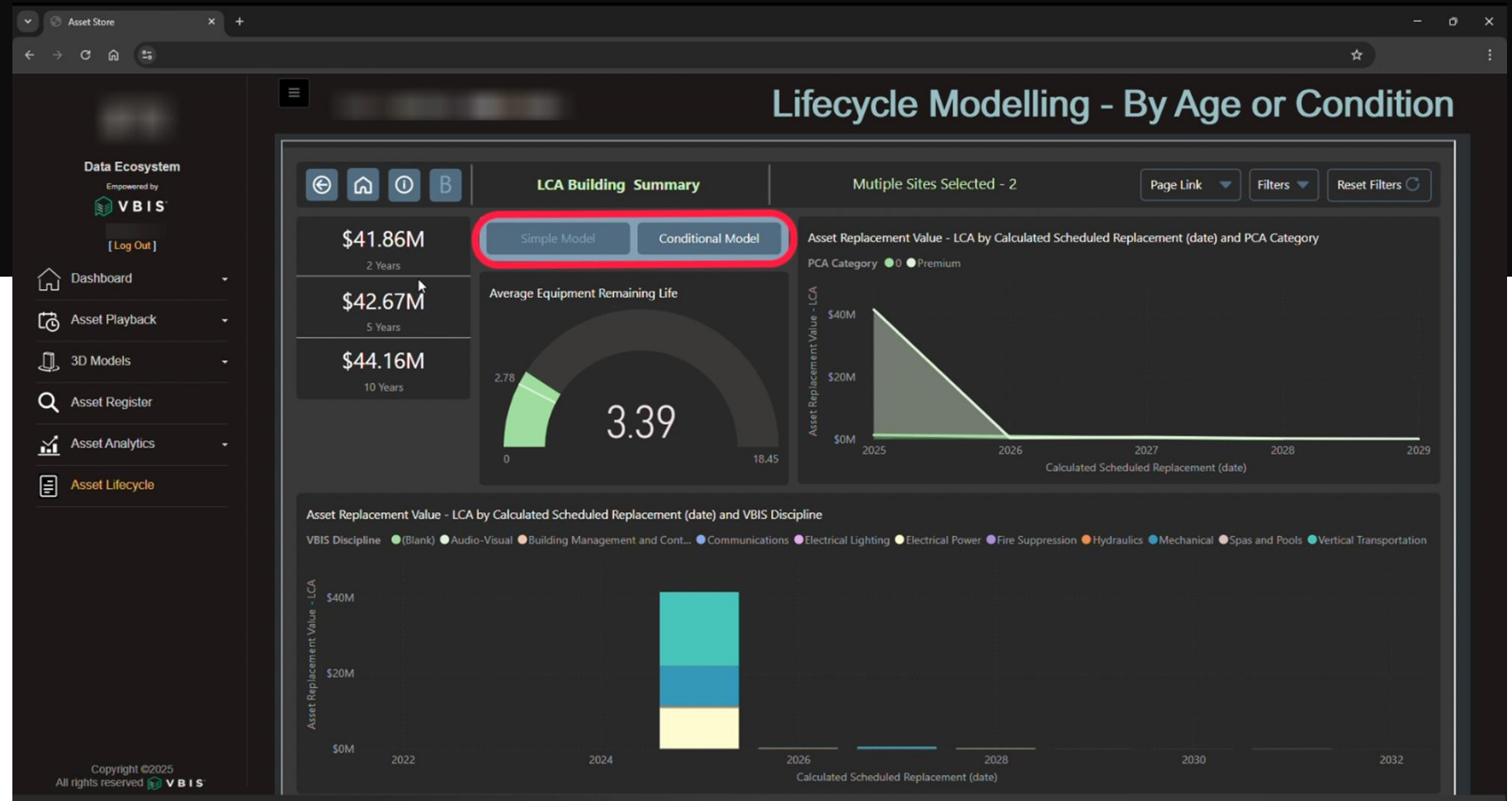
Straight Line vs Condition



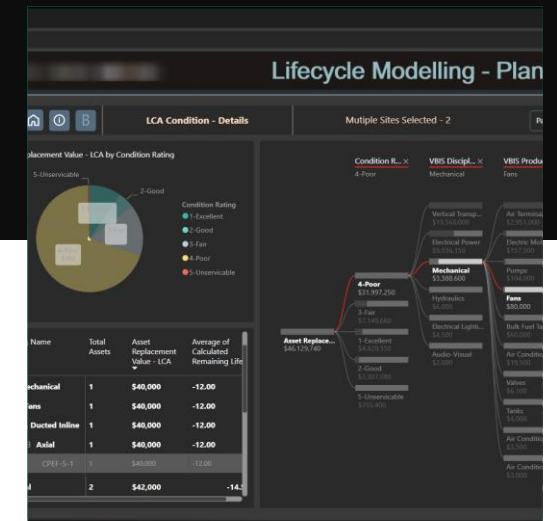
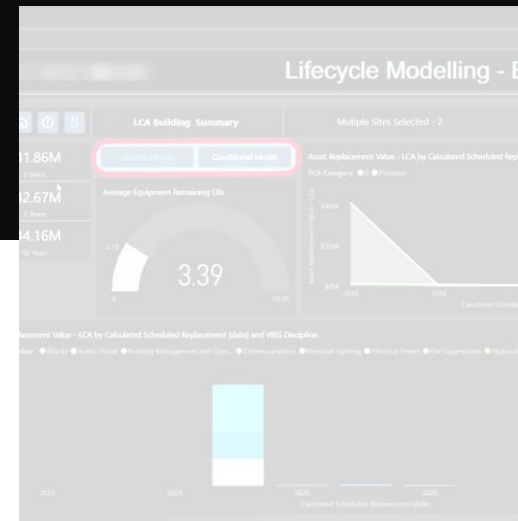
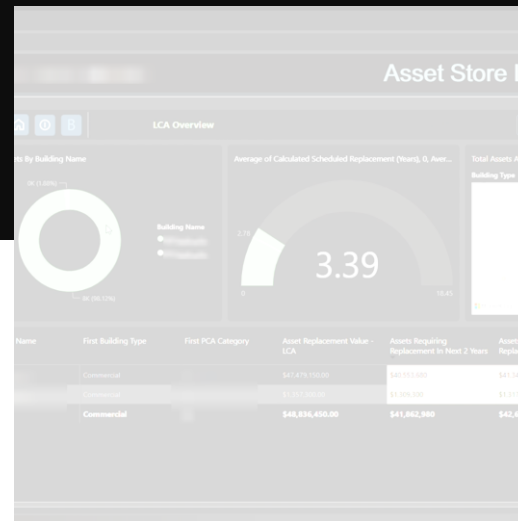
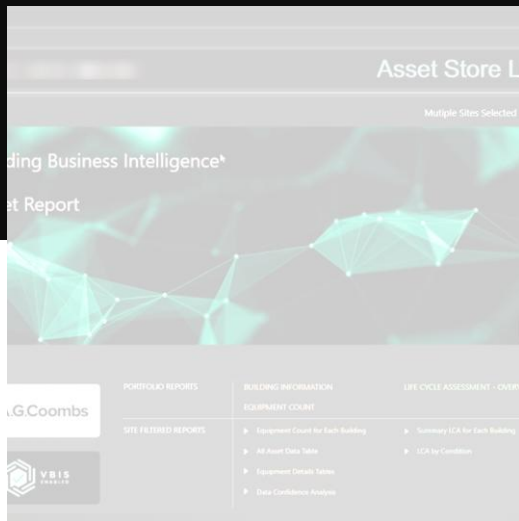
Assets views by Condition and Type

Flexible Smart Building Solution Lifecycle Planning

Straight Line vs
Condition



Flexible Smart Building Solution Lifecycle Planning



Assets views by Condition and Type

Flexible Smart Building Solution

Lifecycle Planning

Assets views by
Condition and Type

