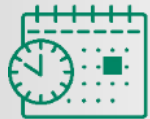


Filters and Climate Change

How air filtration can leverage ASRS to
promote indoor air quality interventions

Philipp Schluter
Camfil Australia

The Camfil Group



60+ Years

of Clean Air Solutions
(Camfil AB was founded in
Trosa, Sweden, 1963
by Gösta Larson)



HQ

In Stockholm,
Sweden



5700

Employees



Mark Simmons
CEO & President



13.6

Billion SEK net
sales



30

Manufacturing sites



6

R&D centres



35+

Countries with
sales offices



Fundamentals

Why filter air

Protect mechanical systems
Protect people and processes

Why not filter air

Immediate costs

Where we are today

Current practice
Common solutions

How we can do better

Better indoor air outcomes
Lower overall costs

Incentives for filtration / IAQ

- Standards Compliance
- Tradition
- Kudos
- Risk Mitigation
- Public Pressure

Australian Sustainability Reporting Standard

ASIC is responsible for administering, and where appropriate, enforcing, the sustainability reporting requirements under the Corporations Act.



ASIC
Australian Securities &
Investments Commission



About ASRS

Key Highlights of the ASRS

- **Mandatory Phase-in:** Large "Group 1" entities must begin reporting for financial years starting on or after **1 January 2025**, with smaller groups following in 2026 and 2027.
- **Four-Pillar Disclosure:** Reports must cover **Governance, Strategy, Risk Management, and Metrics and Targets** (including Scope 1, 2, and eventually Scope 3 emissions).
- **Legal Integration:** The "Sustainability Report" is now a statutory requirement under the *Corporations Act*, meaning it must be included in the annual report and is subject to phased-in audit and assurance requirements.

About ASRS

What is ASRS?

The **Australian Sustainability Reporting Standards (ASRS)**, issued by the Australian Accounting Standards Board (AASB), establish a framework for companies to disclose climate-related and sustainability-related financial risks and opportunities. Aligned closely with international standards (**IFRS S1** and **S2**), the framework features a mandatory climate-specific standard (**AASB S2**) and a currently voluntary general sustainability standard (**AASB S1**).

ASRS mandatory reporting Phase-in thresholds

The Australian Sustainability Reporting Standards (ASRS) classify entities into three groups based on their size or emissions profile. To fall into a group, an entity generally needs to meet **at least two of the three** size criteria.

ASRS Reporting Thresholds

Group	Financial Year Commences	Consolidated Revenue	Consolidated Gross Assets	Employees (FTE)	Other Criteria
Group 1	1 Jan 2025	\$500M+	\$1B+	500+	High-level NGER ¹ reporters
Group 2	1 July 2026	\$200M+	\$500M+	250+	All other NGER reporters; Asset owners \$5B+
Group 3	1 July 2027	\$50M+	\$25M+	100+	Large proprietary companies

1) NGER refers to the Australian National Greenhouse and Energy Reporting scheme

Four Pillars of disclosure

1. Governance

- Board Oversight
- How is climate responsibility delegated down to management
- Controls

2. Strategy

- Risks & Opportunities
- Scenario Analysis
- Transition Plans

3. Risk Management

- Identification
- Prioritization
- Integration

4. Metrics and Targets

- GHG Emissions
- Internal Carbon Prices
- Performance Targets

Integration of ASRS into ASIC reporting

Sustainability Report is the fourth mandatory component of the annual report.

Directors' Declaration
Liability

- **Group 1:** First reports due for years ending **31 December 2025** or **30 June 2026**.
- **Group 2:** First reports due for years ending **31 December 2027** or **30 June 2027**.
- **Group 3:** First reports due for years ending **31 December 2028** or **30 June 2028**.

Pillar 1: Governance

1. Verification of Board-Approved Strategies

- Audit Trail

2. Integration into Operational Controls

- Data Accuracy

3. Risk Management Accountability

- Mitigating Physical Risk

Governance Requirement

Informed Decision Making

Performance Oversight

Management Accountability

Evidence Provided by Modern Filtration

LCC (Life Cycle Cost) analysis showing energy savings vs. standard filters.

BMS data showing reduced electricity draw from HVAC fans.

KPIs for facility managers linked to energy-efficiency benchmarks.

Pillar 2: Strategy

1. Decarbonisation & Transition Planning

- Energy Efficiency as a Strategy
- Capital Allocation

2. Climate Resilience (Scenario Analysis)

- Mitigating Physical Risks
- Meeting Regulatory Trends

Strategic Element

Business Model Adaptation

Transition Plan Evidence

Resilience Planning

Financial Effects

Role of Energy-Efficient Filtration

Shifting from "maintenance-only" to “proactive optimization“ for energy / waste / IAQ

Tangible proof of reducing energy intensity to meet Net Zero milestones.

Protecting operations against physical climate risks (e.g., smoke, dust, pathogens).

Reducing energy costs and carbon taxes.

Pillar 3: Risk Management

1. Mitigation of Physical Risks (Resilience)

- Acute Risks (e.g., Bushfires/Dust Storms)
- Chronic Risks (e.g., Rising Temperatures)

2. Mitigation of Transition Risks (Policy, Costs)

- Energy Price Volatility
- Regulatory Compliance

3. Integration into the Risk Register

- Materiality Assessment
- Quantitative Monitoring

Risk Type	Climate Threat	Filtration Solution (Control)
Physical	Bushfire smoke/Airborne pathogens	High-efficiency (e.g., ePM1 > 50%) filtration
Transition	Volatile energy costs	Low-pressure-drop, energy-saving filter media.
Transition	Carbon taxes/Regulations	Verified reduction in Scope 2 emissions data.

Pillar 4: Metrics and targets

1. Reducing Scope 2 Emissions

- The Calculation
- The Metric

2. Cross-Industry Metric: Energy Intensity

- The Impact

3. Tracking Transition Targets

- Verification

ASRS Requirement

Gross Scope 2 GHG

Energy Consumption

Target Progress

Remuneration Link

Role of Efficient Air Filtration

Lowers electricity draw from HVAC systems.

Reduces the total load on fan motors and chillers.

Provides a tangible "reduction activity" for transition plans.

Can be used as a KPI for facility managers' climate bonuses.

Unit of Measure

tCO_{2-e}

MWh or GJ

% reduction from baseline

Quantitative Score

Additional: Waste

Whilst waste is a consideration of the ASRS, its inclusion depends on whether you are reporting under the mandatory climate standard or the voluntary general sustainability standard.

Mandatory Consideration: AASB S2 (Climate)

- Scope 3 Emissions
- Transition Plans

Voluntary Consideration

- Materiality
- Future Mandates

How filtration impacts waste:

- Air filters are disposable and contribute significantly to a building's landfill waste
- Modern high-quality filters outlast older designs by significant margins, **reducing landfill waste** 50% - 75%
- **EPD** (environmental product disclosure) statements provide quantified Scope 3 emissions
- **LCC** allows comparative waste reduction analysis of modern vs traditional filtration solutions.

Additional: Discussion

- Insurer Business Resiliency Credits (e.g. FM up to 10% of premium¹)
- General plan longevity / less wear on motors / less dust in duct = positive impact on scope 3 emissions due to longer plant life, fewer maintenance callouts
- IAQ tangibles:
 - Health and Productivity
 - Ratings and Standards
 - Participation and Brand
- What other benefits are there?

1) <https://www.insurancebusinessmag.com/nz/news/breaking-news/fm-doubles-resilience-credit-broadens-focus-to-operational-risk-555838.aspx>

CASE STUDY

- A quality modern 8-level A-grade office building
- The asset, is the first government long-leased office in Melbourne to be offered to the market in 30 years
- The property is being sold with price expectations of over \$170 million
- A filter upgrade was conducted to reduce energy and waste and to increase indoor air quality



CASE STUDY

TCO elements	Existing 3030 SFlo	HiFlo Solution
Energy Cost	111,004 AUD	33,078 AUD
Filter cost	23,275 AUD	51,450 AUD
Labor cost	8,000 AUD	6,000 AUD
Waste cost	2,450 AUD	1,470 AUD
ePM1 min efficiency	17%	62%
Energy Cost Index (ECI)	6529.64 AUD/%	533.51 AUD/%
CO ₂ Impact	302.74 Ton	90.21 Ton
Landfill Impact	25.07 m ³	17.17 m ³
LCC Time Period	5 yrs	5 yrs
Total Cost of Ownership (TCO)	144,729 AUD	91,998 AUD