

9 September 2022, Shanghai (virtual keynote)



# Sustainable FM: then, now and beyond



**Stephen Ballesty** (Australia)

*... connecting you with solutions for your Built Environment*

Copyright © In-Touch Advisory. All Rights Reserved.



## Stephen Ballesty

FRICS, FAIQS, IFMA Fellow, CFM, ICECA, CQS  
FMA Australia Life Member



*... connecting you with solutions for your Built Environment*



SYDNEY, Australia

W: [www.in-touchadvisory.com](http://www.in-touchadvisory.com)

E: [Stephen.Ballesty@in-touchadvisory.com](mailto:Stephen.Ballesty@in-touchadvisory.com)

Stephen's consulting firm **In-Touch Advisory** connects stakeholders with sustainable solutions for the Built Environment across the property–construction–facilities life cycle.

Stephen is the AIQS representative and a Standards Australia delegate for the ISO international FM standards initiative (ISO 41000 since 2012), ISO/TC-267's global liaison to ISO/TC-251 (ISO 55000 asset management since 2015).

Also he is currently a member of IFMA Standards Committee and the Regional Director – Australasia for IFMA's FM Consultant Council.

Stephen is a former member of the IFMA' Global Board of Directors and Past Chairman of the IFMA Research Committee, IFMA Foundation and FMA Australia.

Acknowledgement: Support of the ISO, Standards Australia, and the AIQS in making today's content possible.



Copyright © In-Touch Advisory. All Rights Reserved.

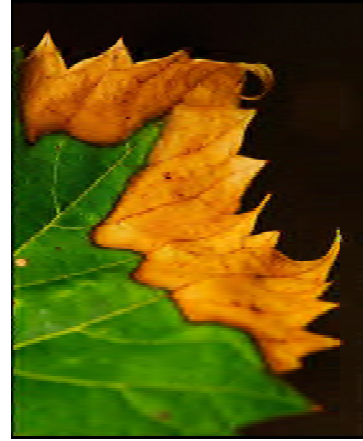
in-touchadvisory.com

Page 2



## Sustainable FM: then, now and beyond

- ❑ Sustainability challenges ... and FM context
- ❑ UN's Sustainable Development Goals (SDGs)
- ❑ Drivers of innovation and change
- ❑ What is Sustainable FM? the evolving profession
- ❑ ISO 41000 series standards, and what next?
- ❑ ISO 41000 series standards, and the SDGs
- ❑ FM's responses ... now and beyond



This document has been prepared for the IFMA China event on 9 September 2022. It should be noted that this document represents a summary of the issues addressed and does not constitute advice. The author makes no representation as to its accuracy or completeness and the information should not be relied upon as such. Although care has been exercised in its preparation, the author accepts no legal responsibility for any loss or damage suffered as a result of any inadvertent inaccuracy. This document reflects the author's current and personal views only. This document should not be relied upon without seeking independent, professional advice and obtaining the full version of the publications and sources referred to herein.

© Stephen Ballesty, In-Touch Advisory

[in-touchadvisory.com](http://in-touchadvisory.com)

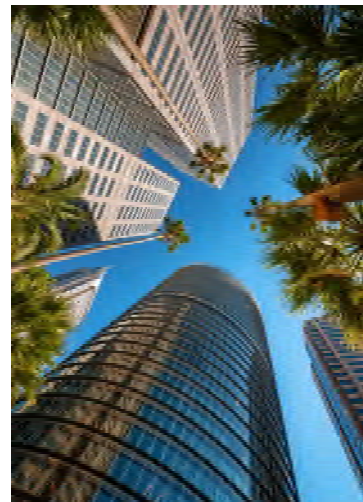


## Sustainable FM: then, now and beyond

**"Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs"**



**Gro Harlem Brundtland (1987)**

Norwegian Prime Minister (1981, 1986–89, and 1990–96)  
 World Health Organization's Director-General (1998-2003)  
 UN Special Envoy on Climate Change (2007-2010)  
 Chair / Author, the UN's Our Common Future,  
 also known as the Brundtland Report, published in October 1987



[in-touchadvisory.com](http://in-touchadvisory.com)




## Sustainability challenges ... complexity

alarmingly there are many, such as ...


- Climate change and carbon emissions;
- Increasing demand (urbanization, consumption and waste, etc.); and
- Constrained ecosystem and depleted resources (pressure on land, water, forests, non-renewables, etc.).



... of course it's complex! Also these issues are interrelated and have far-reaching social impacts.

Does FM contribute to our 'Quality of Life'?

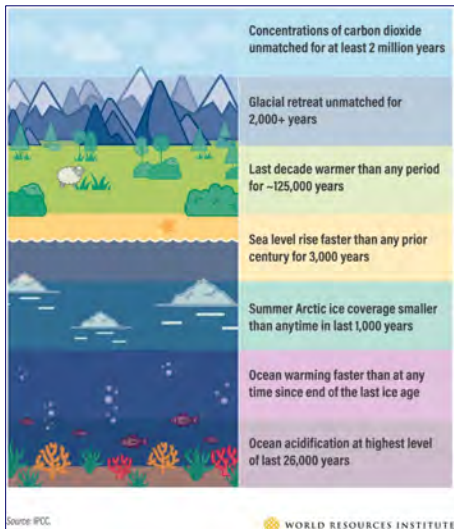


[in-touchadvisory.com](http://in-touchadvisory.com)



## Sustainability challenges ... climate change



Source: IPCC

WORLD RESOURCES INSTITUTE

- “The cumulative scientific evidence is unequivocal: **Climate change** is a threat to human well-being and planetary health. Any further delay in concerted anticipatory global action on adaptation and mitigation will miss a brief and **rapidly closing window of opportunity** to secure a liveable and sustainable future for all”.

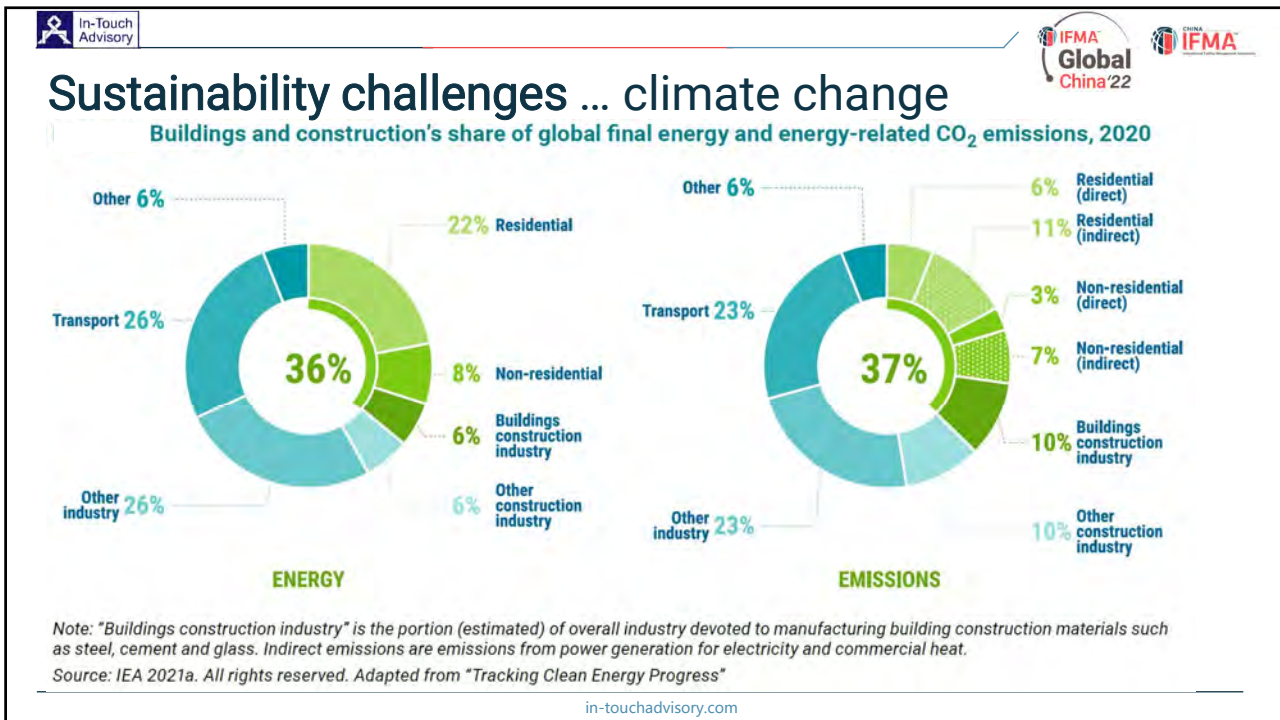
**UN Certainty Assessment: *very high confidence***

Source: [IPCC - WGII Report: Impacts, Adaptation and Vulnerability, 28 Feb 2022](#)

- Buildings and construction’s 2020 share global energy (**36%**) and carbon emissions (**37%**).

Source: [2021 UNEP Global Status Report for Buildings & Construction](#)

[in-touchadvisory.com](http://in-touchadvisory.com)



**Sustainable FM: defined**

*What is Sustainability?*

**Sustainability** is the "state of the global system, including environmental, social and economic aspects, in which the needs of the present are met without compromising the ability of future generations to meet their own needs"

Source: ISO Guide 82: 2019 Guidelines for addressing sustainability in standards (2<sup>nd</sup> edition, 2019-11)

in-touchadvisory.com



**Standards Matter** in the pursuit of ...

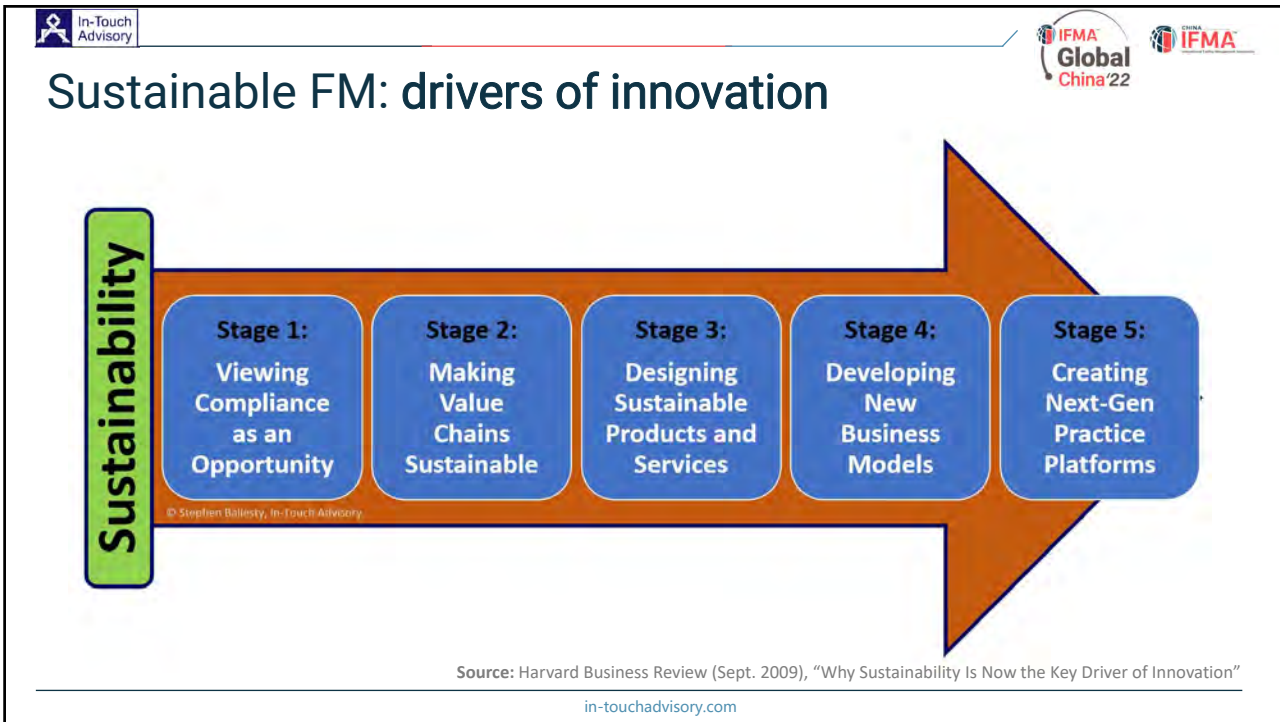
- a common language
- consistent reporting
- greater transparency
- data capture, costing, analysis and forecasts
- ability to performance benchmarking
- increased confidence through reduced risk

... of global transparency, comparability and collaboration on sustainable solutions.



**ISO** contributing to the **SDGs** (2-minute video)  
<https://youtu.be/uM6DBqVVctU>

SO NO ONE IS LEFT BEHIND





## Sustainable FM: some drivers of change

- ❑ **ESG** is a generic term used in *capital markets* and commonly used by investors to evaluate the behaviour of companies in terms of *non-financial performance* indicators which include ethical, sustainable and corporate issues.
- ❑ Sustainability Accounting Standards Board (**SASB**) has developed a set of 77 industry-specific sustainability *accounting standards* in 2018, including Engineering & Construction and Real Estate.



Source: [SASB Standards](#)

[in-touchadvisory.com](http://in-touchadvisory.com)



## Sustainable FM: some drivers of change

- ❑ United Nations (UN) 2030 Agenda has at its heart the *17 Sustainable Development Goals (SDGs)*, 169 targets and 247 indicators. This agenda is a plan of action laying out a path to end extreme poverty, fight inequality and injustice, and protect our planet.
- ❑ **SDGs** provide an integrated and indivisible balance of the three dimensions of sustainable development: the *economic, social and environmental*.



Source: [17 Sustainable Development Goals \(un.org\)](http://17 Sustainable Development Goals (un.org))

[in-touchadvisory.com](http://in-touchadvisory.com)

**Sustainable FM: some drivers of change**

- ISO 41000 series standards for FM.
- FM is an "organizational function which integrates *people, place and process* within the *Built Environment* with the purpose of improving the *quality of life* of people and the *productivity* of the core business".

Source: ISO 41011: 2017  
in-touchadvisory.com

**Sustainable FM: some drivers of change**

2005 term coined      2000 UN MDGs resolution      2012 ISO/TC 267 convened

2018 SASB standards      2015 UN SDGs resolution      2017 ISO 41011 published

in-touchadvisory.com



## Sustainable FM: transformation

UNITED NATIONS

TRANSFORMING OUR WORLD:

THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

**Figure 3.1**  
Six SDG Transformations

Source: Sachs et al. (2019)

\* Source: Six Transformations to Achieve the Sustainable Development Goals (SDGs) working paper, 2019

in-touchadvisory.com

## Sustainable FM: transformation

UNITED NATIONS

TRANSFORMING OUR WORLD:

THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

Required Transformations*	FM**
1) Education, Gender, and Inequality	☆☆
2) Health, Wellbeing and Demography	☆
3) Energy Decarbonization and Sustainable Industry	☆☆☆
4) Sustainable Food, Land, Water, and Oceans	☆
5) Sustainable Cities and Communities	☆☆☆
6) Digital Revolution for Sustainable Development	☆☆

\*\*Note: Ballesty approximations of FM contribution by stars for illustration only.

\* Source: Six Transformations to Achieve the Sustainable Development Goals (SDGs) working paper, 2019

in-touchadvisory.com






## Sustainable FM: defined

*What is FM?*


**FM** is an "organizational function which integrates people, place and process within the *Built Environment* with the purpose of improving the **quality of life** of people and the productivity of the core business"





Source: ISO 41011: 2017

---

in-touchadvisory.com




## Sustainable FM: defined

*What is FM?*


**FM** is an "organizational function which integrates people, place and process within the *Built Environment* with the purpose of improving the **quality of life** of people and the **productivity** of the core business"





Source: ISO 41011: 2017

---

in-touchadvisory.com

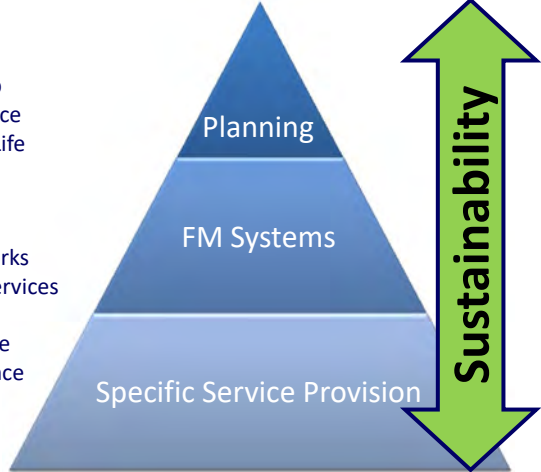


## Sustainable FM: in context

**Parameters:**

- Context
- Leadership
- Performance
- Whole of Life
  
- Space
- Contracts
- Capital Works
- Building Services
  
- Compliance
- Maintenance
- Cleaning
- Security




**Strategic \***  
level at which an *organization* defines its *objectives* and *policies*, and plans and assesses how to achieve its goals.



**Tactical \***  
level at which an *organization* plans and manages the specific mechanisms and resources for operational delivery of *products*.

**Operational \***  
level at which *activities* are performed in a routine way in support of the *organizations* functions.

\* Source: ISO 41001: 2018

in-touchadvisory.com



## Sustainable FM: in context

*Characteristics required to achieve Sustainable FM?*

Managers	v's	Leaders
Responds to change; <b>reactive</b>		Shapes change; <b>proactive</b>
Works <b>in</b> the organization		Works <b>on</b> the organization
Cautious about Risk; <b>fate</b>		Careful about Risk; <b>destiny</b>
<b>Controls</b> actions & events		<b>Facilitates</b> actions & events
Supports <b>core business</b>		Supports <b>transformation</b>
Does the <b>things right</b>		Does the <b>right things</b>
<b>Problem Solvers</b>		<b>Solution Seekers</b>
Takers	v's	Makers

in-touchadvisory.com

**In-Touch Advisory** **IFMA Global China'22** **IFMA**

## Sustainable FM: an evolving profession

then



Resources

now



Systems

beyond



Solutions

in-touchadvisory.com

**In-Touch Advisory** **IFMA Global China'22** **IFMA**


## Sustainable FM: an evolving profession

then


now

beyond

**Operational FM**



**Integrated FM**



**Sustainable FM**

© Stephen Ballesty, In-Touch Advisory

in-touchadvisory.com

## Sustainable FM: consistent communication

- ❑ **ICMS Coalition** formed in 2015.
- ❑ ICMS scope covers buildings and civil engineering assets.
- ❑ **ICMS#1 (2017)** capital cost focus.
- ❑ **ICMS#2 (2019)** plus life cycle costs.
- ❑ **ICMS#3 (2021)** plus carbon emissions.

Free: <https://icms-coalition.org/>

in-touchadvisory.com

## Sustainable FM: consistent communication

- ❑ **ICMS#1 (2017)** versus **ICMS#2 (2019)** footprint
- ❑ ICMS#2 (2019) defined **C.R.O.M.E.** as the new framework:
  - Construction
  - Renewal
  - Operational
  - Maintenance
  - End of Life

Source: ICMS#3 (2021), per AIQS LCC Analysis (2022)

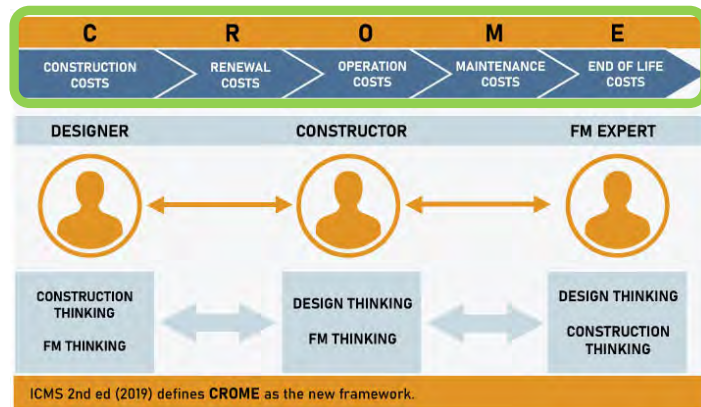
in-touchadvisory.com



## Sustainable FM: consistent communication

- ❑ ICMS#2 (2019) defined the **C.R.O.M.E.** framework.
- ❑ ICMS#3 (2021) framework extended to carbon emissions reporting.

- A basis for consistent cost and carbon reporting provides us an invaluable **communications tool**.



Source: ICMS#3 (2021), per AIQS LCC Analysis (2022)

in-touchadvisory.com



## Sustainable FM: LCC analysis (2022)

- ❑ **Life Cycle Cost (LCC)** analysis aims to achieve best value rather than lowest cost solutions for our **Built Environment**.
- ❑ LCC analysis is a valuable comparative and management tool for FM influencing the design, specification, construction, operations, and **sustainability performance**.



Source: AIQS information paper: Life Cycle Cost Analysis, 1<sup>st</sup> edition (Ballesty, Feb. 2022)



in-touchadvisory.com


28





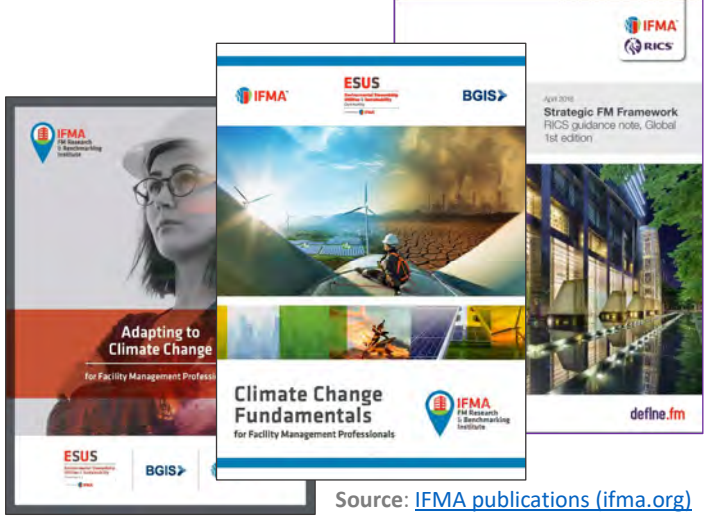

## Sustainable FM: how to? (with IFMA)

- ❑ IFMA provides access to:
  - Numerous publications,
  - Communities, and
  - Events
- ❑ ESUS (Environmental Stewardship, Utilities & Sustainability) community since 2016.
- ❑ IFMA credentials, including the Sustainability Facility Professional (SFP) since 2011.









Source: [IFMA publications \(ifma.org\)](https://www.ifma.org)  
[ESUS community \(ifma.org\)](https://www.ifma.org/esus)

in-touchadvisory.com

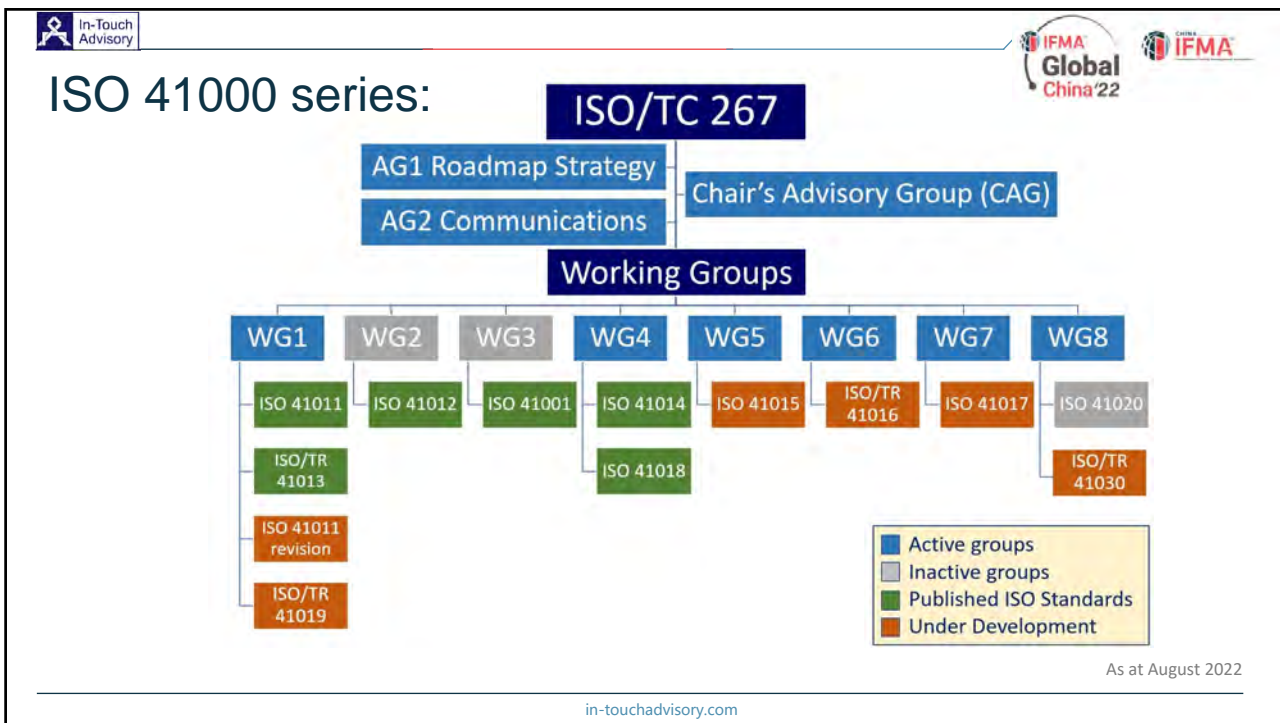


**ISO/TC 267**  
Facility management

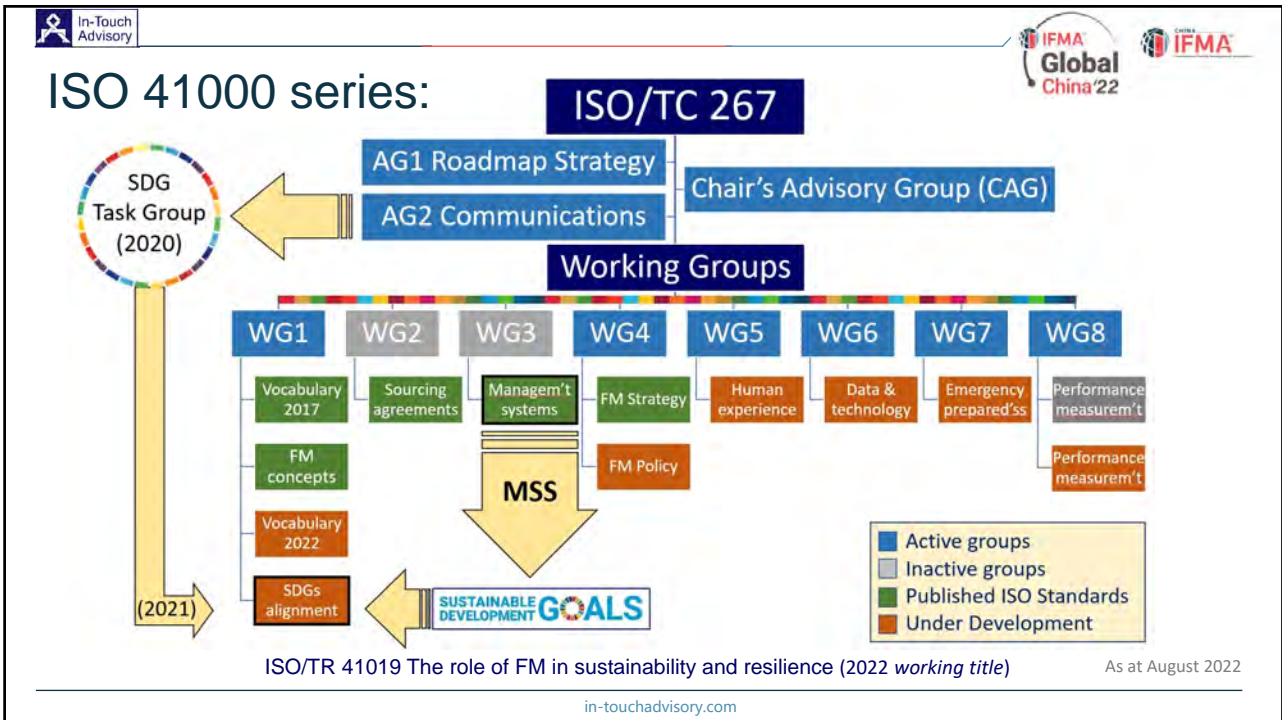
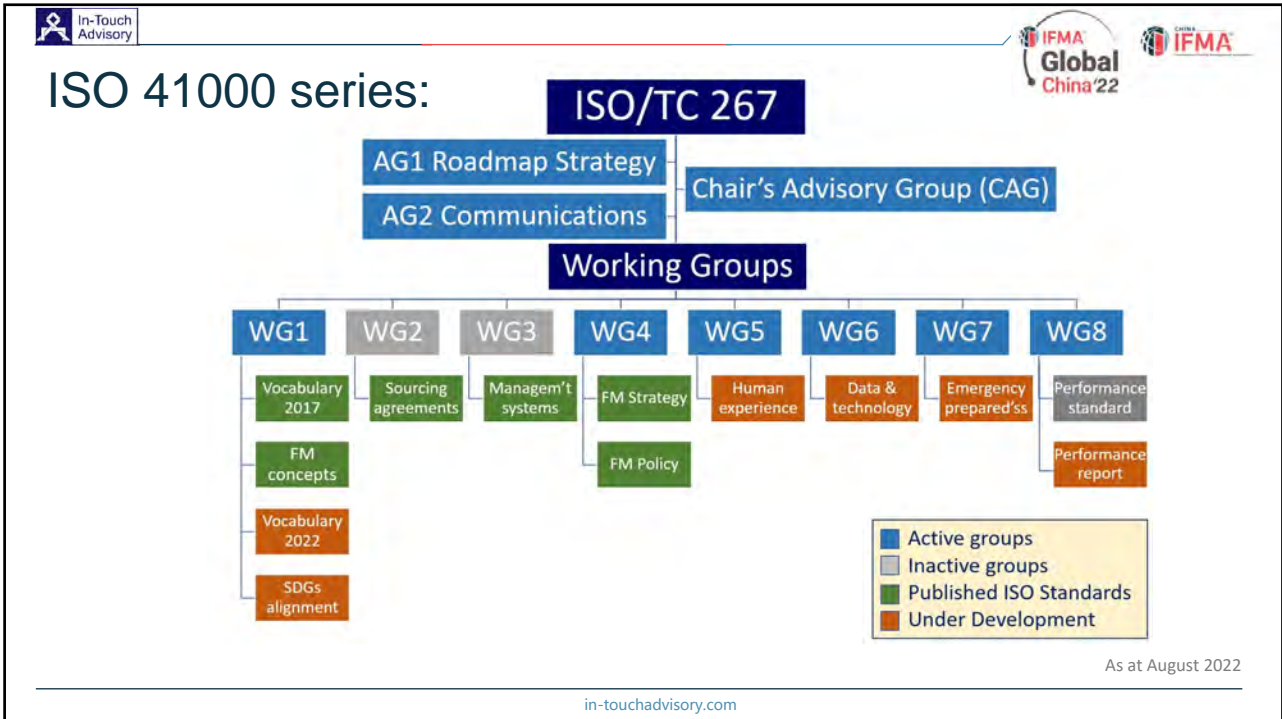






in-touchadvisory.com









## ISO 41000 series: **Outputs**

PUBLISHED ISO STANDARDS	UNDER DEVELOPMENT (titles may be subject to revision)
<b>ISO 41001: 2018</b> FM Management systems - Requirements with guidance for use	<b>ISO 41011</b> FM vocabulary (2 <sup>nd</sup> edition, revision)
<b>ISO 41011: 2017</b> FM vocabulary	<b>ISO 41015</b> FM influencing organizational behaviours for improved facility outcomes and user experience
<b>ISO 41012: 2017</b> FM Guidance on strategic sourcing and the development of agreements	<b>ISO/TR 41016</b> Digital, data and technology - Scope, key concepts and benefits
<b>ISO/TR 41013: 2017</b> FM Scope, key concepts and benefits	<b>ISO 41017</b> Guidance on emergency preparedness and management of an epidemic
<b>ISO 41014: 2020</b> Development of FM strategy	<b>ISO/TR 41019</b> The role of FM in sustainability and resilience
<b>ISO 41018: 2022</b> Development of FM policy	<b>ISO 41020</b> PWI (Preliminary Work Item stage) <i>reserved for performance management standard</i>
	<b>ISO/TR 41030</b> Existing performance management in FM organizations

Source: [ISO/TC 267 - Facility Management](#) As at August 2022  
[in-touchadvisory.com](http://in-touchadvisory.com)

## ISO 41000 series: **Outputs**

PUBLISHED ISO STANDARDS	UNDER DEVELOPMENT (titles may be subject to revision)
<b>ISO 41001: 2018</b> FM Management systems - Requirements with guidance for use	<b>ISO 41011</b> FM vocabulary (2 <sup>nd</sup> edition, revision)
<b>ISO 41011: 2017</b> FM vocabulary	<b>ISO 41015</b> FM influencing organizational behaviours for improved facility outcomes and user experience
<b>ISO 41012: 2017</b> FM Guidance on strategic sourcing and the development of agreements	<b>ISO/TR 41016</b> Digital, data and technology - Scope, key concepts and benefits
<b>ISO/TR 41013: 2017</b> FM Scope, key concepts and benefits	<b>ISO 41017</b> Guidance on emergency preparedness and management of an epidemic
<b>ISO 41014: 2020</b> Development of FM strategy	<b>ISO/TR 41019</b> The role of FM in sustainability and resilience
<b>ISO 41018: 2022</b> Development of FM policy	<b>ISO 41020</b> PWI (Preliminary Work Item stage) <i>reserved for performance management standard</i>
	<b>ISO/TR 41030</b> Existing performance management in FM organizations

Source: [ISO/TC 267 - Facility Management](#) As at August 2022  
[in-touchadvisory.com](http://in-touchadvisory.com)

## Sustainable FM: ISO 41000 series

### Management Systems Standard (MSS)

1. Scope
2. Normative References
3. Terms & Definitions
4. Context of the Organization
5. Leadership
6. Planning
7. Support
8. Operation
9. Performance Evaluation
10. Improvement

Using the **Plan-Do-Check-Act (PDCA)** approach.

Source: Adapted from ISO 41001: 2018 in-touchadvisory.com

## Sustainability & Stewardship (ISO/TR 41019)

**ISO impact at a glance:** number of ISO standards that are directly applicable to each SDG.

30,816

individual ISO standards alignments with single SDGs

SDG	Number of Standards
1	357
2	553
3	3133
4	562
5	196
6	606
7	926
8	2558
9	13268
10	559
11	2500
12	2800
13	1206
14	316
15	1095
16	179
17	2

ISO 41000 series FM standards

SUSTAINABLE DEVELOPMENT GOALS 14/17 SDGs

This committee contributes with 10 standards to the following

3
4
5
6
7
8
9
10
11
12
13
14
15
16

Source: [ISO/TC 267 - Facility Management](#)


Coming soon:

ISO/TR 41019

The role of FM in sustainability and resilience

Source: [ISO - Sustainable Development Goals](#) Information correct as at 4/08/2022 in-touchadvisory.com



## ISO 41000 series & the SDGs




Source: <https://sdgs.un.org/goals> & [ISO/TC 267 - Facility Management](#)



□ **During 2020:**

our SDG Task Group created an ISO 41000 & SDGs alignment matrix comparing seven standards ISO 41001, 41011, 41012, 41013, 41014, 41015 (draft) and 41016 (draft), with the 17 SDGs ... 53 of 119 potential alignment intersections across 14 SDGs.




in-touchadvisory.com




## ISO 41000 series & the SDGs



Source: <https://sdgs.un.org/goals> & [ISO/TC 267 - Facility Management](#)

□ **During 2020:**

our SDG Task Group created an ISO 41000 & SDGs alignment matrix comparing seven standards ISO 41001, 41011, 41012, 41013, 41014, 41015 (draft) and 41016 (draft), with the 17 SDGs ... 119 potential alignment intersections.



in-touchadvisory.com

## ISO 41000 series & the SDGs

Source: <https://sdgs.un.org/goals> & [ISO/TC 267 - Facility Management](#)

□ **During 2020:**

our SDG Task Group created an ISO 41000 & SDGs alignment matrix comparing seven standards ISO 41001, 41011, 41012, 41013, 41014, 41015 (draft) and 41016 (draft), with the 17 SDGs ... 119 potential alignment intersections.

in-touchadvisory.com

## ISO 41000 series & the SDGs

Source: <https://sdgs.un.org/goals> & [ISO/TC 267 - Facility Management](#)

□ **During 2020:**

the SDG Task Group identified eight (8) SDG alignments alone for **ISO 41001: 2018 Management Systems Standard (MSS)**.

in-touchadvisory.com






## ISO 41000 series & the SDGs



Source: <https://sdgs.un.org/goals> & [ISO/TC 267 - Facility Management](#)


**ISO/TR 41019** The role of FM in sustainability and resilience


□ **During 2020:**  
the SDG Task Group had identified 53 alignments across 14 SDGs using the **full ISO 41000 series** at that time.

**Since 2021** the scope of the ISO 41000 series has **increased** with seven (7) **new or revised** publications underway.




in-touchadvisory.com






## ISO/TR 41019...what to expect?

- **Deliverable:** an ISO Technical Report (TR) supporting FM standards and the SDGs.
- **Status:** research and drafting is underway, planned publication late 2023.
- **Scope:** FM's role in sustainability, resilience, adaptability, etc.
  - Introduction, terms and definitions.
  - Concepts, context, challenges, climate change, and the SDGs.
  - Role of ISO standards in supporting the SDGs.
  - FM and SDGs for sustainability, resilience and adaptability.
  - FM defined per ISO 41011, and SDGs alignment and impacts.
  - Role of current and planned ISO 41000 series standards.
  - Towards Sustainable FM and transforming our world.
  - Annexures – alignment matrices, tools, related standards and bibliography.
- **Style:** concise and practical guidance for FM professionals.



in-touchadvisory.com



## Sustainable FM: our responses ... and beyond

Transformation to support sustainable outcomes will **NOT** be easy ... requiring ...

- ❑ **Long-term quality thinking:** adopting standards / guides, consistent reporting and going 'beyond compliance'.
- ❑ **Demand management:** improve life cycle planning, and optimize utilization, consumption, recycling, and waste streams, etc.
- ❑ **Stewardship of our ecosystem:** embracing respect for resources and regard for all life on Earth and the future.

... embracing carbon emissions, circular economy, SDGs, standards, etc.

FM must lead and **ACT now** and for our future



in-touchadvisory.com



## Sustainable FM: our responses ... and beyond

Sustainable FM performance requires consensus, collaboration and innovation ...

- ❑ **Commitment to the SDGs:** Government and corporate leadership support for investment in widespread transformative structural change.
- ❑ **Recognition of quality of life:** The needs of current and future generations.
- ❑ **Re-definition of success:** New FM metrics of sustainability, resilience and adaptability with focus on liveability and affordability outcomes.

... of course these are interrelated and have far-reaching social impacts.

FM must lead and **ACT now** and for our future



in-touchadvisory.com






## ISO 41000 series: 10-years so far



- ISO/TC267 website  
<https://committee.iso.org/home/tc267>
- TC267 on LinkedIn, and follow #ISO41000  
<https://www.linkedin.com/company/iso-tc-267>
- ISO 41000 series FM standards status  
<https://www.iso.org/committee/652901.html#meetings>
- Management System Standards (MSS's)  
[ISO 55001 & ISO 41001 together to improve Performance and Quality of Life](#)
- ISO standards store (ISO 41001 link)  
<https://www.iso.org/standard/68021.html>
- UN's 17 Sustainable Development Goals  
<https://sdgs.un.org/goals>
- Additional questions  
[ISO41000@in-touchadvisory.com](mailto:ISO41000@in-touchadvisory.com)

[in-touchadvisory.com](http://in-touchadvisory.com)

## Sustainable FM: then, now and beyond

... let's bridge the gap to a sustainable now and a quality beyond!








Reflections and questions please to: [Stephen.Ballesty@in-touchadvisory.com](mailto:Stephen.Ballesty@in-touchadvisory.com)

