

## **SHORT NOTE ON SUSTAINABILITY STANDARDS**

This Short Note has been generated by members of the Sustainability Special Interest Group (SSIG) Committee as a result of an action arising from an internal Committee meeting.

As the profile of sustainability increases, more standards and guidance are also being published as a result and the number of these continues to grow. Global standards are now available, which represent the most widely recognised and adopted guidance on sustainability and which are also applicable across a wide range of industries. This Short Note is intended to be a part of the resources available to members through the IChemE webpage.

Whilst the definition of sustainability can be open to different interpretation, it is widely accepted that the scope of sustainability can broadly be split into the areas of “planet”, “people”, and “prosperity” (or equivalent to social, environmental and economic principles). With that in mind, Table 1 below shows a summary of sustainability standards and guidance documents, starting with overarching/globally recognised standards and other specific ones pertaining to each of the areas mentioned above –it should be noted that some of the standards can relate to more than one area.

Whilst some of the standards listed below may be more generic and even overlap with fields such as Social Corporate Responsibility, others will cover industry specific design standards and best practices, such as the IFC ones, which will be expected to be more relevant to chemical engineers working on technical areas in a wide range of different industries.

The table below is intended to be a “live” document, to be populated with the input of members of the SSIG Committee in order to include as many relevant standards as possible.. However, given the difficulty in creating an all-encompassing document, the information in this document is intended as a starting point on which individuals can build according to their own requirements rather than a comprehensive list.

This provides a framework on which to base the development of a work programme. An example of a previous design document (which is very extensive) is that developed by Richard Miller for the Chemistry Innovation KTN.

Also, an overview of a potential “journey” to support the development and design of new products and services is also attached, and highlights examples of when such global standards can be used to help develop sustainability within an organisation. Other factors will also be required together with the adoption of standards in order to achieve a more sustainable

industry, product, value chain, etc. An important one is the implementation of digital technology, as this will provide true emissions profiles and eliminate the variability that is often built into estimates. Digitisation will also provide the necessary link between profitability goals and sustainability performance. However, this is outside the scope of this document.

It is the intention that the majority of the standards / guidelines listed are generally publicly available, and therefore can be accessed by all organisations, rather large or small.

<b>SUMMARY OF SUSTAINABILITY STANDARDS</b>	
<b>Global standards</b>	
UN Sustainable Development Goals (UN SDGs)	
Integrated Sustainability Reporting GRI, CDP, CDSB, IIRC, SASB – these five recently announced an agreement to work together, and also welcome development of consultation from IFRS to increase relevance to the financial sector	
UN International Trade Centre (ITC)	
UN Global Compact	
ISEAL	
ISO 26000	
Task Force on Climate Related Financial Disclosures (TCFD) –sets out climate related disclosure recommendations structured around Governance, Risk Management, Strategy and Metrics and Targets.	
<b>Sustainability - People</b>	
Social/Ethics	International Finance Corporation standards (IFC)
Occupational Safety	Health and Safety Executive (HSE) standards
<b>Sustainability - Planet</b>	
Environment – Industrial activities	International Finance Corporation standards (IFC)
	Best Available Techniques BAT/Bref Notes
Environment – Management Systems	ISO 14001 –Environmental Management Systems
<b>Sustainability - Prosperity</b>	
Management	International Finance Corporation standards (IFC)
Quality	ISO 9001
Financial	HMRC (Environmental Reporting Guidelines)

Table 1 –Summary of Sustainability Standards

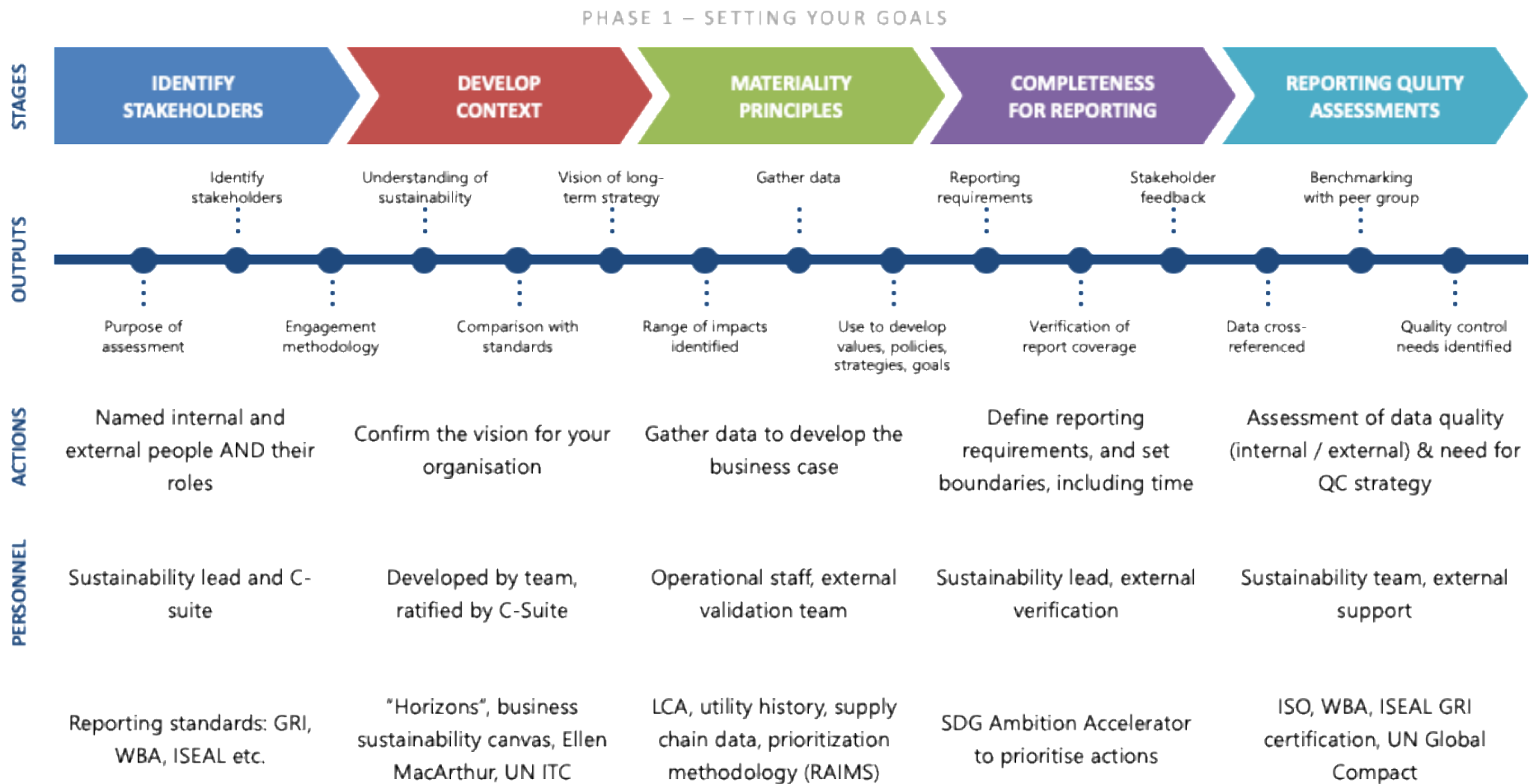


Figure 1 – Sustainability standards in the goal setting phase

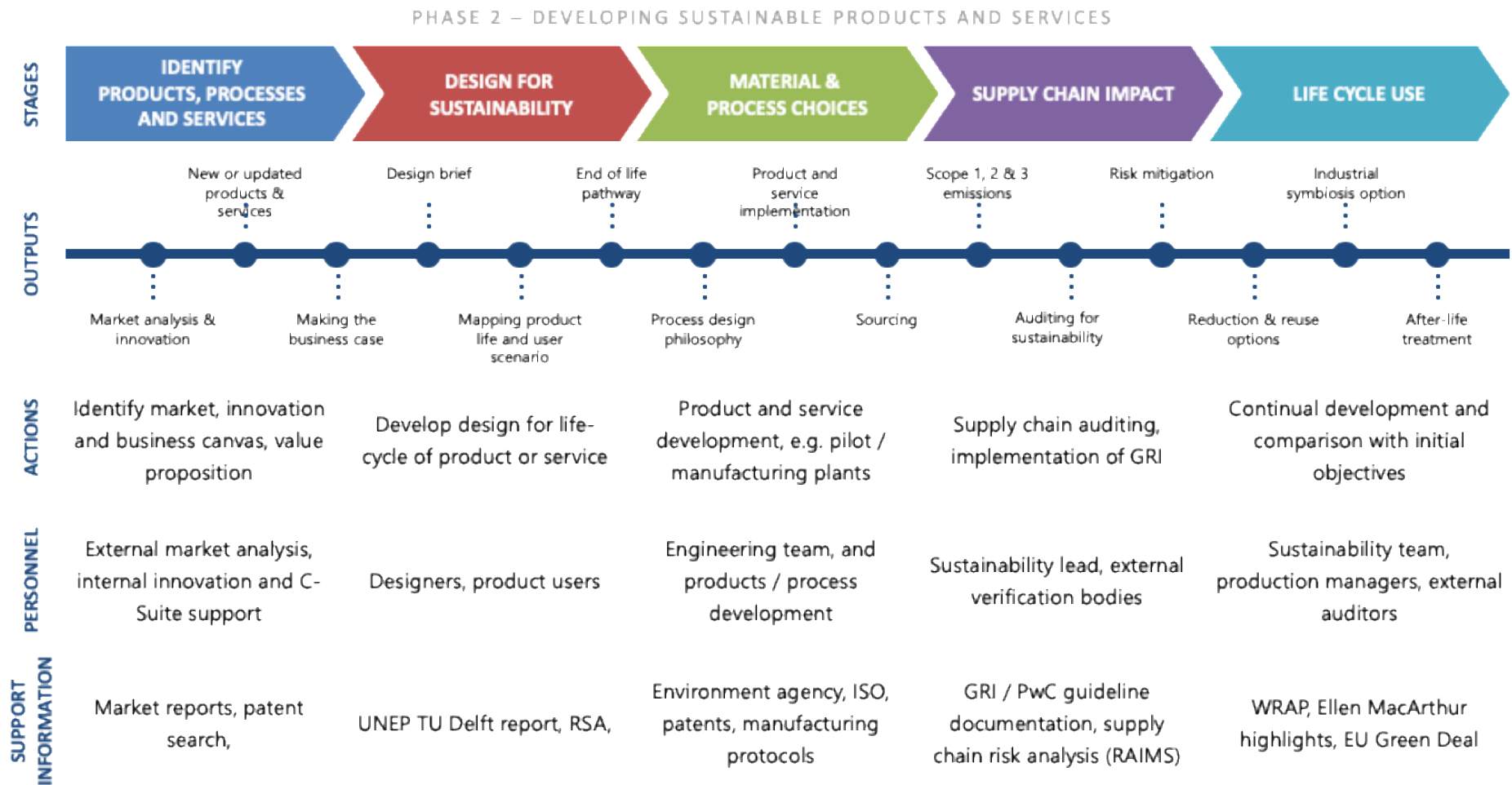


Figure 2 – Sustainability standards in the design and development of products and services phase