This SuRF-UK bulletin describes the outputs of Phase 3 of the project which include:

- Sustainable Management Practice Guidance
- Sustainability Assessment: Supporting information for project framing and undertaking qualitative Tier 1 assessments
- Case Studies

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Framework & guidance SuRF-UK Framework and Annex 1 – Indicator Set

SuRF-UK Indicator Report

Executing sustainable remediation

Sustainable Management Practices

Project Framing and Planning a Sustainability Assessment

Tier 1 – Qualitative Assessment SuRF-UK Briefcase Tier 2 – Semi Quantitative Assessment Links to guidance Tier 3 – Quantitative Assessment Links to guidance

Supporting materials

Illustrative Case Studies, reports, information sources e.g. SuRF-UK case studies, Journal paper, SuRF-UK webinar

Figure 1: Phase 3 SuRF-UK Output 'Roadmap' (guidance outputs shaded)

1. SuRF-UK and its outputs

The UK Sustainable Remediation Forum (SuRF-UK) was established in 2007 to support the application of sustainability principles for remediation in the UK. It is a collaborative, multi-stakeholder initiative co-ordinated by CL:AIRE with a Steering Group that incorporates members from regulatory bodies, industry, consultancy and academia. In 2010, SuRF-UK initially focussed effort on developing the first formal framework for assessing the sustainability of remediation strategies that was fully supported by UK government and national regulatory bodies (CL:AIRE, 2010). A second phase of work focussed on disseminating the framework widely through conferences, webinars and a peer-reviewed paper (Bardos *et al.*, 2011) and on refining the sustainability indicator sets used within the framework through a series of stakeholder workshops (CL:AIRE, 2011).

The SuRF-UK framework has received an enthusiastic welcome and is used mainly by larger consultancies and problem holders.

To encourage wider use a third phase of work started at the end of 2012 and finished in early 2014. That work is described here.

2. SuRF-UK Phase 3 products in outline

Phase 3 work has been compiling additional case studies (which can be viewed at www.claire.co.uk/surfuk and providing practical guidance on carrying out relatively simple "entry level", qualitative sustainable remediation practice. This guidance is in two parts.

- The development of Sustainable Management Practices (SMPs) aligned to the SuRF-UK sustainability indicator categories, so that the same sustainability principles can underpin all aspects of land contamination management and can be applied across the full range of activities, including those that would not normally have a formal sustainability assessment
- Assessor's aid to preparing for sustainability assessment (called "framing" by SuRF-UK) and carrying out ("executing)" a qualitative Tier 1 sustainability assessment.

The full range of guidance and information available from SuRF-UK is shown in Figure 1, and can be accessed directly on-line at www.claire.co.uk/surfuk/.

The reason for the Phase 3 focus on entry level guidance on SMPs, framing and Tier 1 assessment is the paucity of published information to meet these needs, compared with relatively widely available guidance offered for the more complex (semi-)quantitative approaches (e.g. Multi-Criteria Analysis, Cost-Benefit Analysis). The Phase 3 products aim to fill this gap in guidance and may be used by practitioners / assessors as a refresher, as a training tool or even to help guide stakeholders through the sustainability appraisal process.

3. Sustainable Management Practices

SuRF-UK defines Sustainable Management Practices (SMPs) as "relatively simple, common sense actions that can be implemented at any stage in a land contamination management project to improve its environmental, social and/or economic performance". SMPs can be used to improve the benefits (e.g. resource efficiency, cost) or reduce the negative impacts (e.g. spillages, complaints) of a project, leading to project 'sustainability gains', without requiring a formal sustainability assessment (e.g. following a framework such as the SuRF-UK framework) at the site-specific level. SMPs may also be used where sustainability gains are sought at a programme of work level using generic criteria or standards that can apply to a range of project types.

The use of best (or good) practice by the contaminated land sector has been encouraged in the UK for a few decades. This is supported by a robust range of standards, codes of practice and technical guidance published by authoritative bodies from which the SMPs are derived. SMPs are not necessarily "new things to do" in addition to standard practice. They do however offer a way of changing behaviours or actions to reduce the cost, use of natural resources and/or the negative impact on community or the environment.

What is new is that the actions are mapped against the SuRF-UK indicator categories to place even simple and low cost actions in a sustainability context. It is SuRF-UK's contention that SMPs provide practical and generally inexpensive actions that can yield demonstrable 'sustainability gains' for a project. They should be selected where there is a clear benefit in doing so on a project-by-

project basis. An example of an SMP mapped against sustainability indicators is shown in Figure 2.

A set of headline activities covers generic management activities and also those associated with the main stages identified in the UK framework guidance for the management of land contamination (CLR 11) (Defra & Environment Agency, 2004), as set out below.

Generic

- Procurement
- Land use planning

CLR 11

- Risk assessment (primarily site investigation)
- Options appraisal
- Implementation of remediation design
- Implementation of remediation construction and operation
- Implementation of remediation verification/ long-term monitoring and closure

The SMPs are provided in an Excel spreadsheet file, downloadable from www.claire.co.uk/surfuk. This format means that the SMPs can be readily modified or updated. If modified or updated it is important that the source of information from which a new SMP is derived is cited. A report is also available that describes the development of SMPs and instructions for use of the SMP spreadsheet.

The benefits to a practitioner and client in adopting sustainable approaches to all activities associated with the management of land contamination include:

- Demonstrate compliance with legal or corporate sustainability policies
- Save capital and/or operational costs
- Achieve a reduction in emissions to air, water and land
- Achieve efficient use of energy and natural resources
- Minimise production and disposal of waste, and optimise recycling and re-use
- Achieve or exceed corporate targets

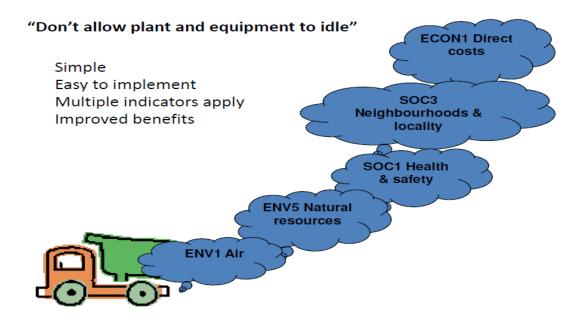


Figure 2: Example of an SMP mapped against SuRF-UK indicators

- Support local businesses and contribute to local employment
- Be a "good neighbour"
- Operate transparently
- Minimise plant mobilisations
- Optimise data collection

4. Preparing for a sustainability assessment: Project framing and planning

Framing includes two groups of activities: the *preparation* for sustainability assessment followed by the *definition* of the sustainability assessment approach, as shown in Figure 3. The framing process is needed for all tiers of a sustainability assessment process whether qualitative, semi-quantitative or quantitative.

There are four broad steps in preparation for a sustainability assessment: (1) describing the decision requirement, (2) describing the project, (3) describing constraints and (4) considering reporting and dialogue. These preparation activities provide the broad frame in which the sustainability assessment must be defined.

The process of definition considers five issues: (1) objectives, (2) boundaries, (3) scope – indicators, (4) methodology, and (5) dealing with uncertainty.

The framing guidance is provided in a slide set, formatted in PDF to allow extensive use of bookmarks and hyperlinking, with an added "logbook" in Word format to assist note taking by sustainability assessment teams (if required). The hyperlinked slides take the user backwards and forwards between an overview set of slides at different levels of detail according to need. The aim of these slides is to help project managers and sustainability assessors to frame their approach for a sustainability assessment, in several contexts:

- Use the framing slides as an interactive learning aid
- Use the framing slides as a step by step process or aide memoire to develop the sustainability assessment approach
- Use the framing slides to support discussions at meetings
- Use the logbook as a pro forma for recording assumptions and findings.

The main instructions for use of both the Project Framing Slides and the Tier 1 Briefcase are provided in Table 1.

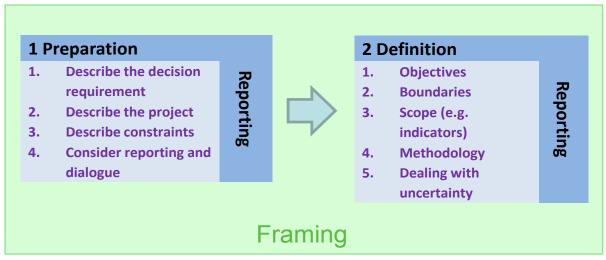


Figure 3: Sustainability assessment framing

Table 1: Instructions for use of the Project Framing Slides and the Tier 1 Briefcase

Viewing the PDF

- The briefcase opens in Adobe Acrobat Reader
- Open with bookmarks to Facilitate reading and navigation
- Use Ctrl-L to view the PDF in full screen mode (akin to an MS Powerpoint presentation)
- In full screen mode a mouse click advances the display to the next slide (as in a Powerpoint show)
- Alt left arrow (Alt ←) is useful as a "back button" in both of these modes
- Some segments consist of a single slide; some a series of slides.
 Where a segment is a series of slides this is shown by this symbol
 → above the SuRF-UK logo to show that there is a other slide following on in the same topic
- Using the logbook and external download links requires an active internet connection.

Using the links and navigating

- Active links can be used to navigate the slides, e.g.
 - Menu = overall contents for the slide deck
 - Contents = contents for each section of the slide deck
 - Assessment flowchart
 - Info and links = supplementary text and downloadable documents in the framing and planning slide deck
 - Logbook = opens pages of a pro forma for note taking
- The "hand tool" turns into a pointing finger over an active link either in the body of a slide (such as entries in a contents page), or in the boxes on the left hand side.
- The bookmarks can also be used for rapidly switching between sections of features.

Figure 4 sets out the main components of the slide deck. The main features of the logbook are set out in a sample page shown in Figure 5.

The framing slide set is also supported by an MS Excel spreadsheet which can be used to collect summary information for each step of the framing procedure, which is also available to download from www.claire.co.uk/surfuk.

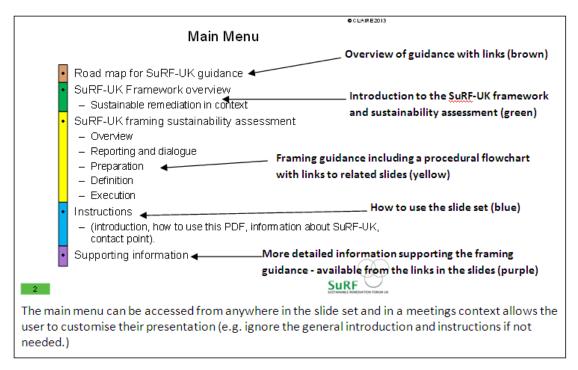


Figure 4: Components of the Framing Slide Set

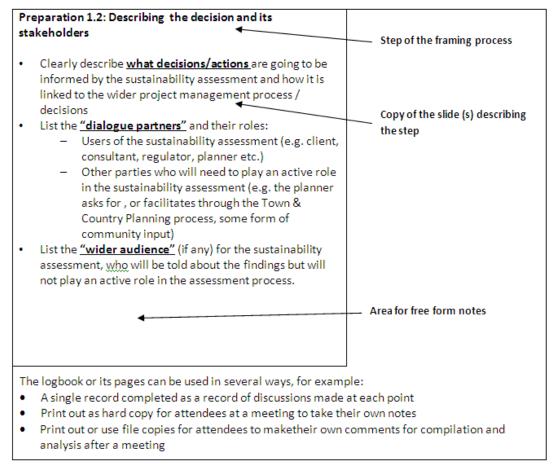


Figure 5: Logbook features (available in MS Word)



Figure 6: A tiered approach to sustainability assessment

5. Tier 1: SuRF-UK Briefcase, Guidance and Meeting Support for Tier 1 Sustainability Assessments

Tier 1 is usually the "entry level" sustainability assessment (as shown in Figure 6). It is based on simple tables using qualitative categories, such as "good" or "neutral" or "better", or simple rankings. If it provides satisfactory decision support more detailed work in Tier 2 and 3 may not be needed. Broadly speaking the assessment is qualitative, although readily available quantitative information can also be exploited.

While Tier 1 is seen as lower effort, it still requires that sufficient framing and planning for the assessment has been carried out in advance. The slide deck provides a procedure (see Figure 7) and checklists to ensure that the framing is adequate for the sustainability assessment required.

The framing process may also be separated in time from assessment meetings. Hence the framing and Tier 1 assessment supporting information are provided as separate files.

The functioning of the slide set is the same as for the Framing Slides, set out in Table 1; and its logbook also works in the same way as Figure 5. The components of the slide set are shown in Figure 8. The MS Excel slide set downloadable from www.claire.co.uk/surfuk also includes tables to record the Tier 1 sustainability assessment process.

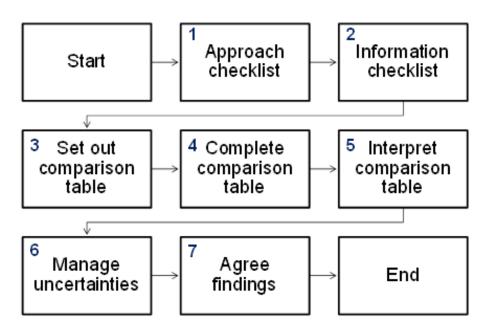


Figure 7: The Tier 1 sustainability assessment process

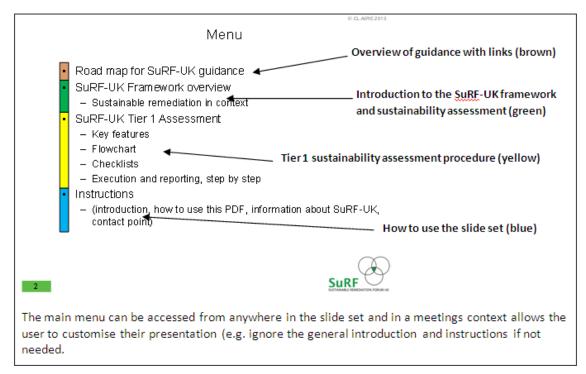


Figure 8: Components of the Briefcase Slide Set

6. Acknowledgements

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7. References

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Please contact the following for more information about: SuRF-UK - Nicola Harries at CL:AIRE: nicola.harries@claire.co.uk; Sustainability Management Practices - Brian Bone at Bone Environmental Consultant Ltd: brian.bdbone@gmail.com; Sustainability Project Framing and Planning and Tier 1 SuRF-UK Brief case - Paul Bardos at r3 environmental technology ltd: paul@r3environmental.co.uk