

SuRF-UK Phase 3: Sustainable Management Practices and Assessor's Tier 1 "Briefcase"

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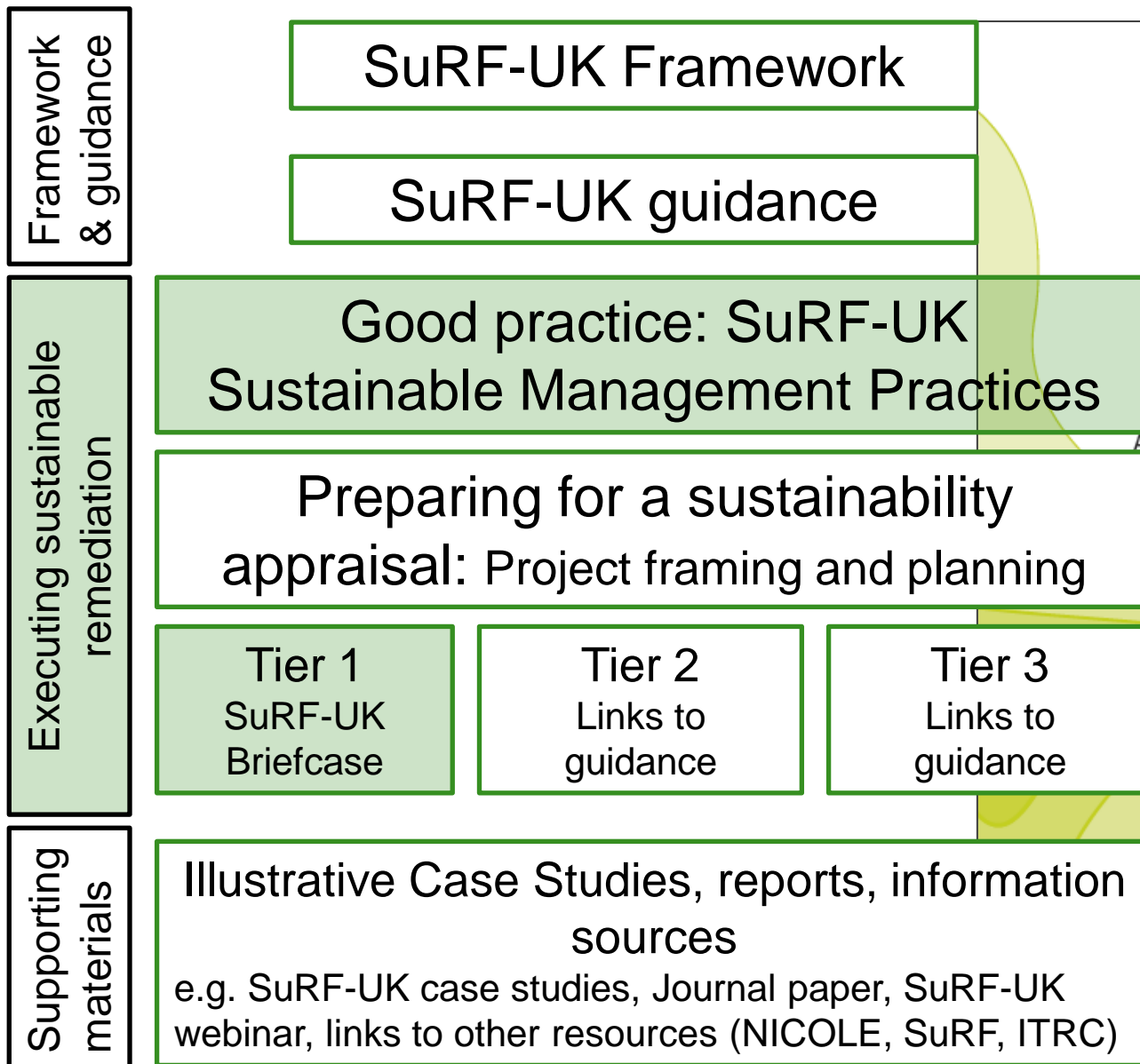
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SuRF-UK Output 'Roadmap'



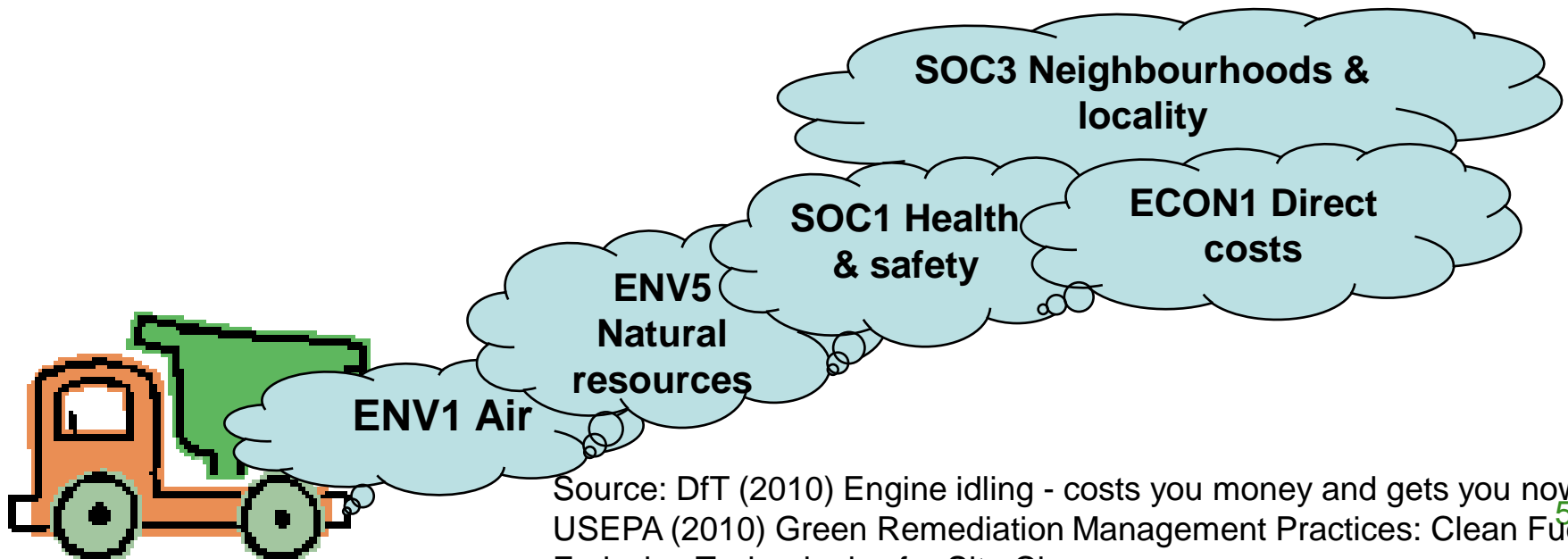
Sustainable Management Practices (SMPs)

- **Definition:**
 - ... relatively simple, common sense actions that can be implemented at any stage in a land contamination management project
 - ... to improve the benefits or reduce the negative impacts of a project, leading to project 'sustainability gains'
 - ... and that require minimal assessment

[Equivalent to ITRC (2011) tier 1, Shell tier 0]

Mapping SMPs

- Derived from existing “best” or “good” practice guidance
- Potential relevance identified for a range of land contamination management activities
- Mapped against the SuRF-UK indicator set



Source: DfT (2010) Engine idling - costs you money and gets you nowhere!
USEPA (2010) Green Remediation Management Practices: Clean Fuel & Emission Technologies for Site Cleanup

Some example SMPs

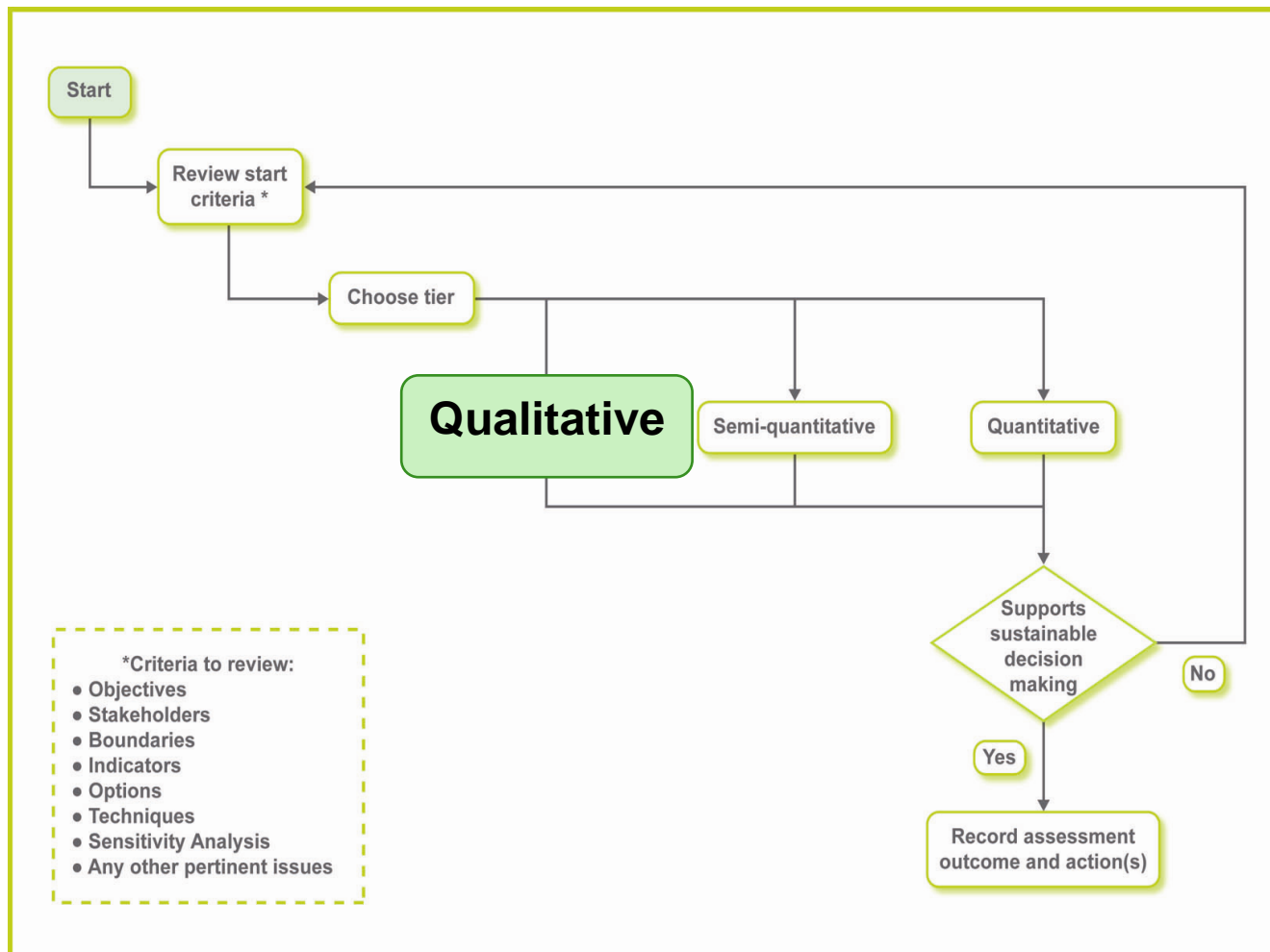
- Adopt a sustainable procurement policy
 - Activity: procurement (client) Indicators: All
 - Source: e.g. WRAP (2003) Sustainable Procurement – Making it Happen
- Consider use of direct-push technologies
 - Activity: site investigation Indicators: ENV5, ENV3, SOC3, ECON1
 - Source: e.g. USEPA (2009) Green Remediation Best Management Practices: Site Investigation
- Consider use of treated soil for re-use on-site
 - Activity: remediation Indicators: ENV5, ENV1, SOC3, ECON1
 - Source: e.g. CL:AIRE (2011) The Definition of Waste: Development Industry Code of Practice

Summary & Conclusions - SMPs

- SMPs should start with the client (as early as procurement)
- SMPs should be simple and easy to implement; taken from existing good practice guidance, and encourage “win-win” actions
- No formal (balanced) assessment is required (Tier 1 and beyond – see Briefcase and other guidance, although SMPs can be carried forward to higher level of assessment at site or programme level)

Sustainability assessment

The process of gaining an understanding of possible outcomes across all three elements of sustainability (i.e., environmental, social, and economic) of soil and groundwater remediation activities.



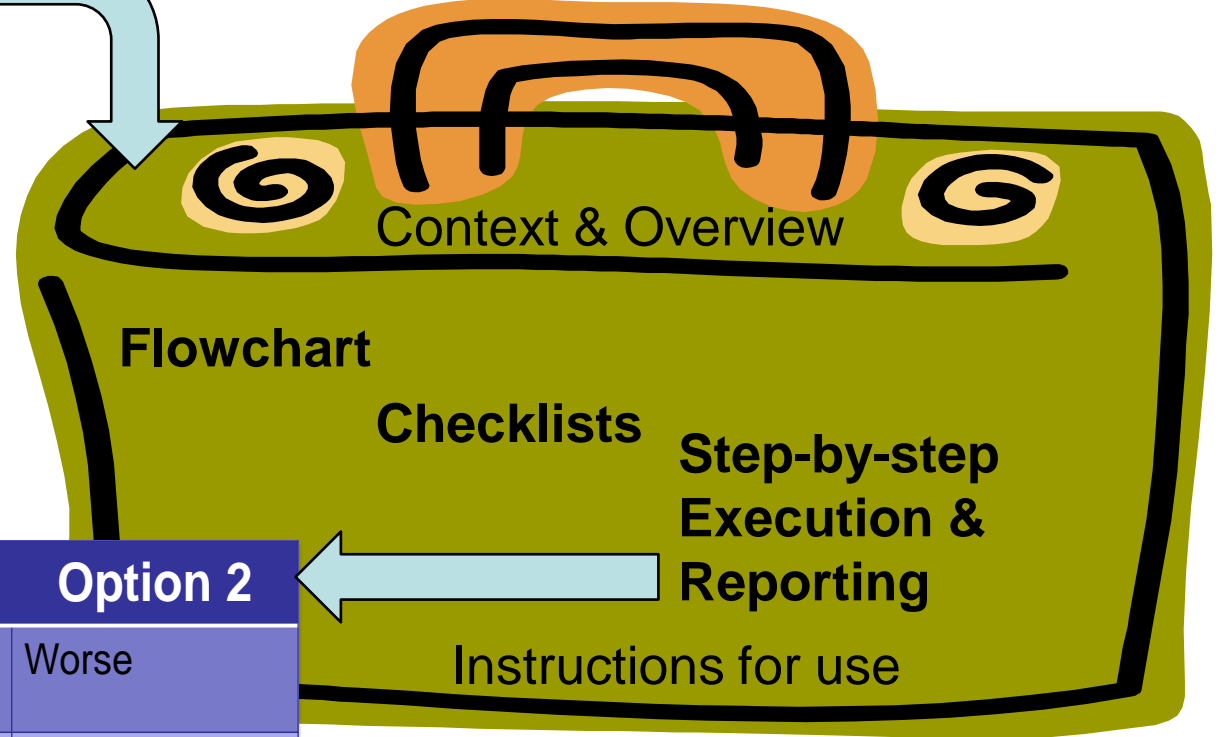
Tier 1 Assessment

- Tier 1 is often the “entry level” sustainability assessment,
 - If it provides satisfactory decision support more detailed work in Tier 2 and 3 may not be needed.
- Broadly speaking the assessment is qualitative,
 - Readily available quantitative information can also be used.
- It is based on simple tables using qualitative categories, such as “good” or “neutral” or “better”
 - Using rankings, scores, weightings are more properly part of a Tier 2 assessment.
- 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.

Tier 1 Briefcase

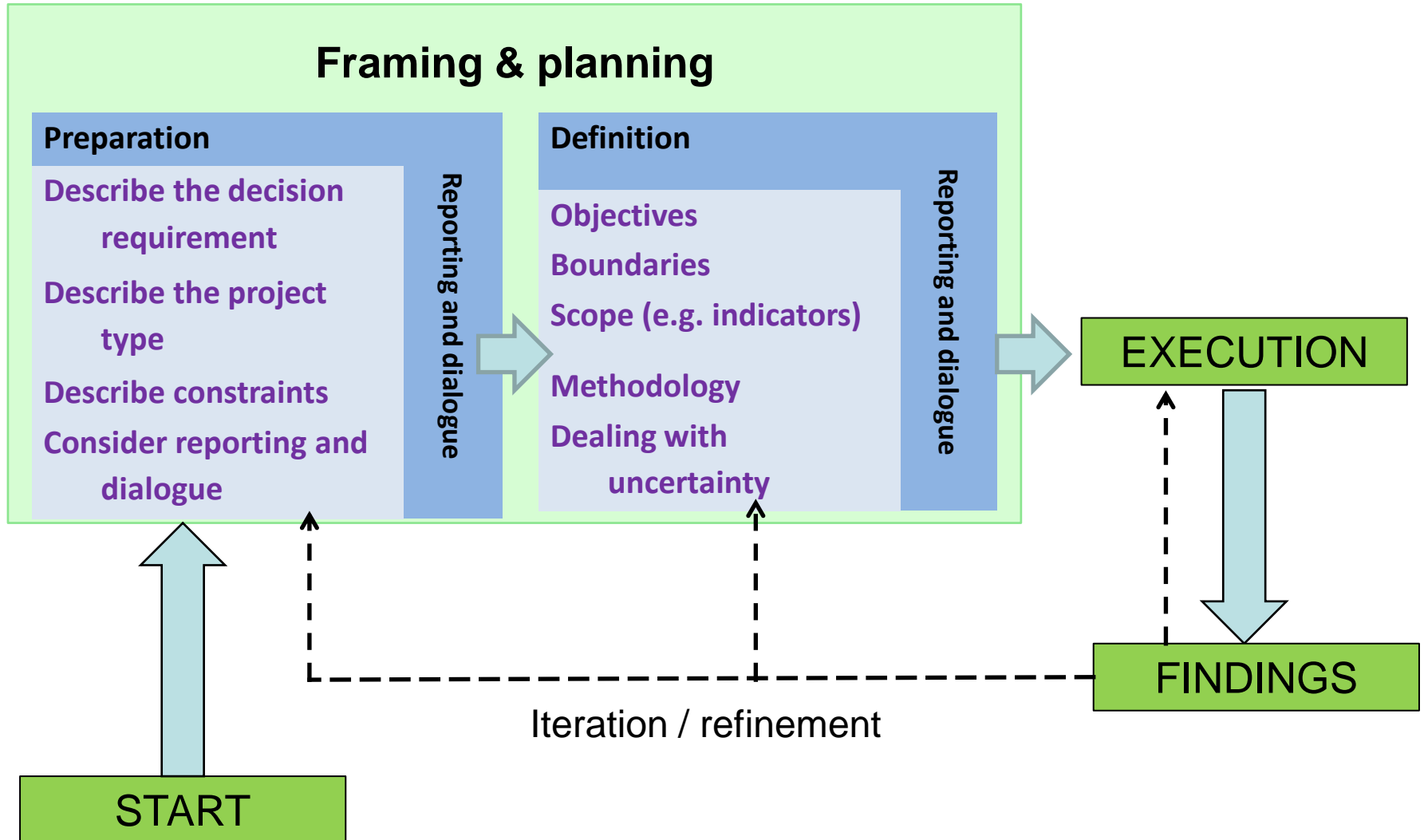
(To be used in the execution of a Tier 1 sustainable remediation assessment with the relevant stakeholder group)

Project framing & planning

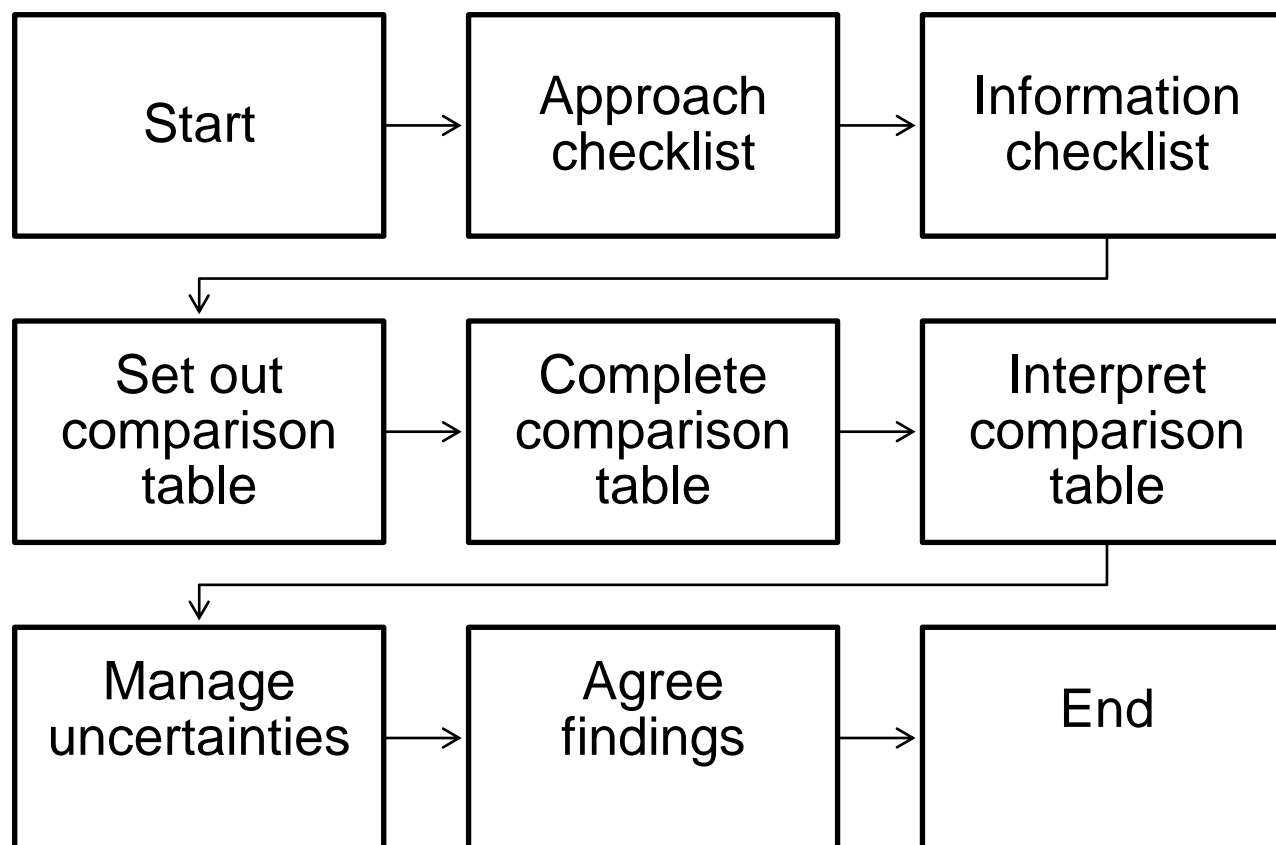


	Option 1	Option 2
Environment	Better	Worse
Society	Equal	Equal
Economics	Worse	Better

Framing and Planning



Tier 1 Briefcase step-by-step process



- Interactive learning tool / step-by-step manual
- Support decisions during assessment meetings
- Recording assumptions, justifications & findings

Checklists

Approach	Information
A1: Objectives – decision to be made?	I1: Options – remediation options being considered?
A2: Engagement – who, when, how?	I2: Constraints – negotiable & non-negotiable?
A3: Boundaries – spatial, temporal, life-cycle?	I3: Benchmarks – (optional) compare indicators against norms?
A4: Scope – which criteria & rationale for selection?	I4: Thresholds – which selected, qualitative or quantitative?
A5: Method – options being assessed, how compared?	I5: Uncertainties – are uncertainties in input data identified?
A6: Uncertainties – how identified & managed?	

Comparison tables – different criteria

	Option 1	Option 2
Environment	Better	Worse
Society	Equal	Equal
Economics	Worse	Better



Example using sustainability elements as criteria → options summarised across one table

Environment	Option 1	Option 2
Emissions to Air	Trivial	Trivial
Soil and ground conditions	Significant impacts	Trivial impacts
Groundwater & surface water	Trivial impacts	Significant impacts
Ecology	None	None
Natural resources & waste	Significant	Trivial



Example using headline categories as criteria → at least three tables will be needed

Example using individual indicators as criteria → multiple tables will be needed



SOC 1 Human Health & Safety	Option 1	Option 2
Long term risk management performance	Meets targets	Exceeds targets
Short term risks from accidents	Does not meet targets	Meets targets
Health impacts of remediation process emissions	Exceeds targets	Meets targets

Summary & Conclusions – Tier 1 Briefcase

- Briefcase provides a step-by-step framework to carry out a Tier 1 sustainable remediation assessment, with links to further information
- Provides **checklists** to ensure planned activities are complete and **templates** to record actions, justifications & decisions
- Enables the user to take a non-specialist group through the assessment process

Thank you.

Any questions?

