



Factor10 Circular metrics

**Landscape analysis
April 16, 2018**



With you today



PwC, as a founding member, worked alongside with the WBCSD team on the Landscape analysis



Jan-Willem van den Beukel

Global Circular Economy Lead
for Sustainability at PwC



Jean-Baptiste Petit

Manager,
PwC Sustainability

Between February and April, 9 PwC team members based in Paris and Amsterdam took part in the landscape analysis

Agenda



Intro



Rationale



Research Approach



Insights



Recommendations



Next steps

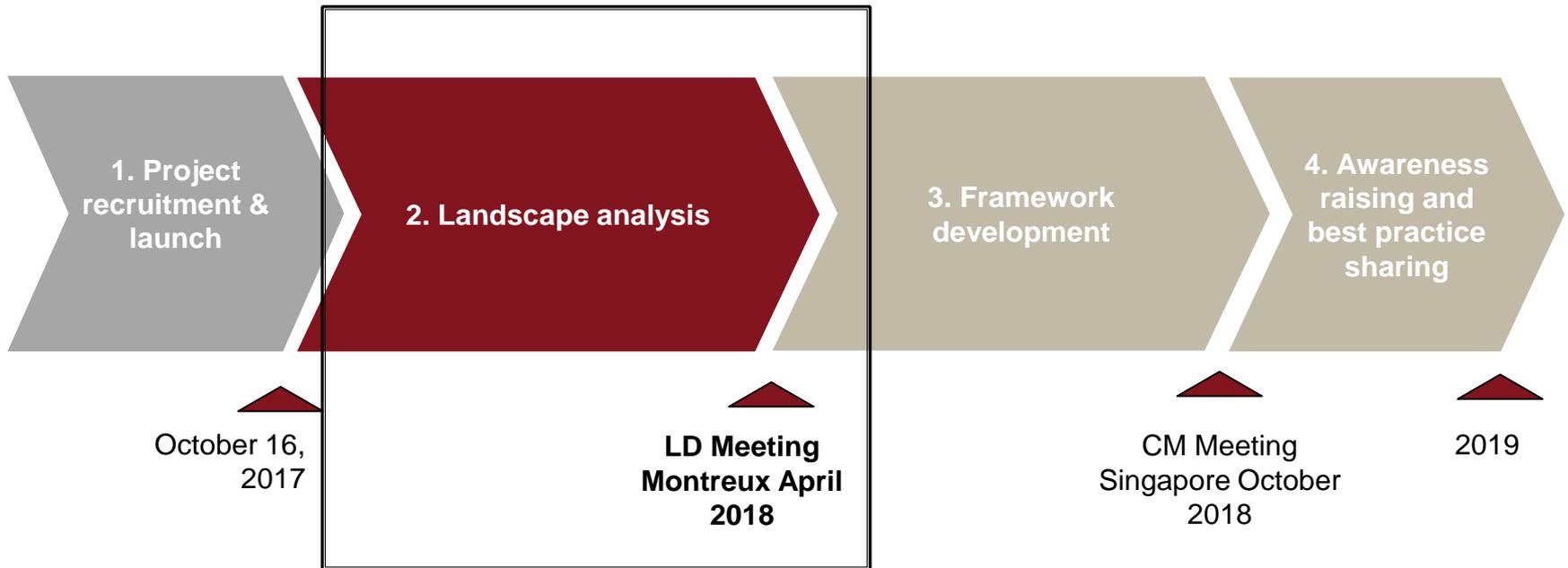


Q&A

Reminder of the project plan



Measuring progress in the Circular Economy Project plan



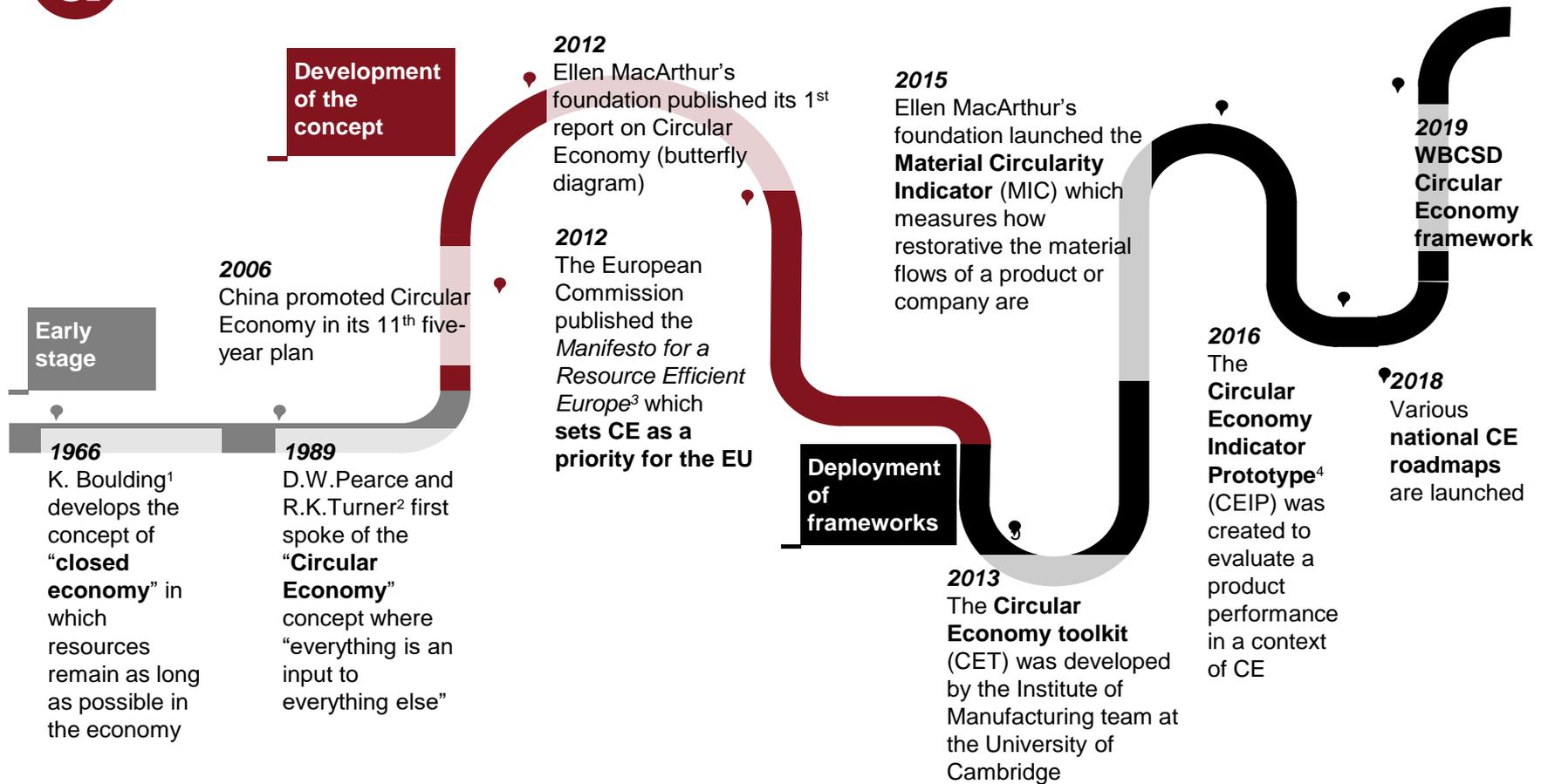
Objective: Develop a consensus-based framework for measuring circularity and contribute business-driven input into public sector KPI frameworks.

Objectives of the first Phase: Landscape analysis



- The first phase of the workstream focused on developing a **landscape analysis** of existing metrics and KPIs.
- This analysis will provide information to project members on:
 - **best practices**
 - the **metrics** businesses, organizations, and governments are working on
 - the **methodologies** used, for whom, and why
 - the **business value** of why companies are measuring circularity
 - **recommendations for a common framework**

The concept of Circular Economy has been evolving over the last decades and further developments are to come while the market becomes more mature

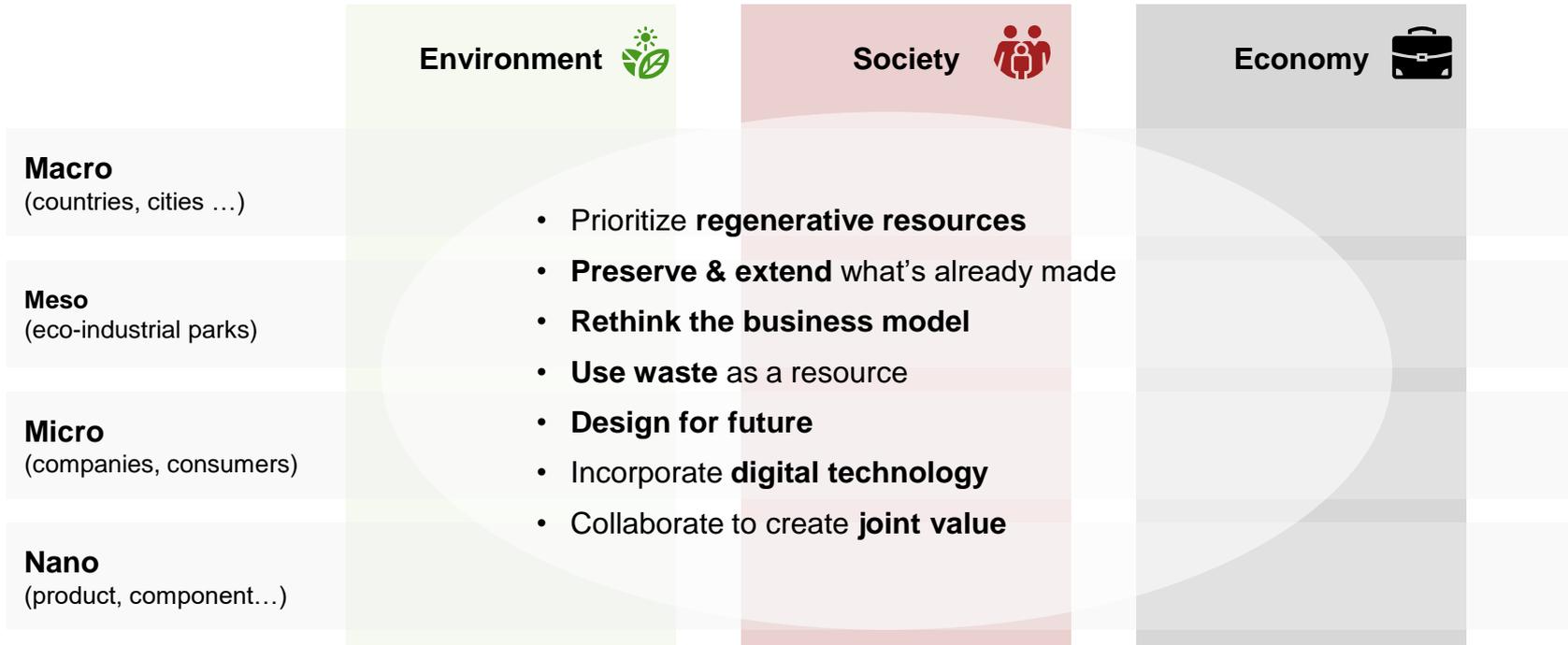


Source: 1- The Economics of the Coming Spaceship Earth; K. Boulding 2- Economics of Natural Resources and the Environment; D.W.Pearce & R.K.Turner 3- published by the European Resource Efficiency Platform, part of the European Commission 4- Design of indicators for measuring product performance in the circular economy; P. Griffiths & S. Cayzer, PwC Strategy& analysis

Today it is still difficult to agree on a unique definition that covers all dimensions and stakes



- **Multiple definitions of Circular Economy have been made** by all kinds of stakeholders (governments, companies, researchers...)
- As Circular Economy commonly covers **3 dimensions** and can be **available in 4 levels** of analysis, tens of topics are related to this concept:

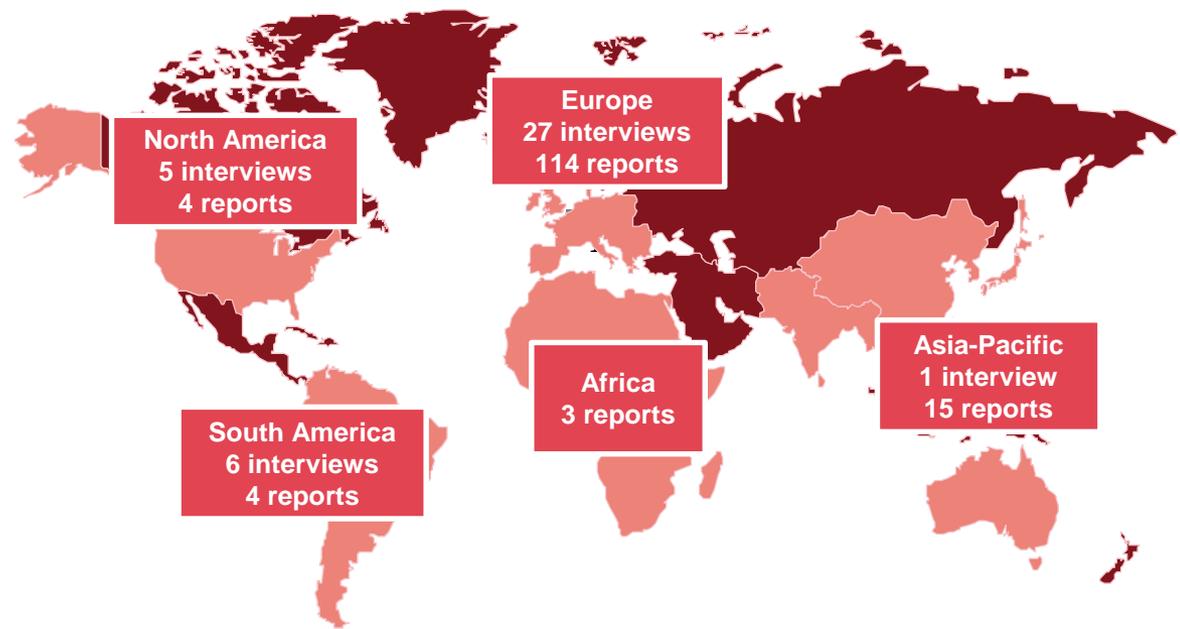


Source: *The Circularity Gap Report* from The Circle Economy, *How to assess product performance in the circular economy* from M.Saidani, B.Yannou, Y.Leroy & F.Cluzel, PwC Strategy& analysis

Our Landscape Analysis covered a comprehensive scope of nearly 180 companies, 690 indicators and 25 sources from literature



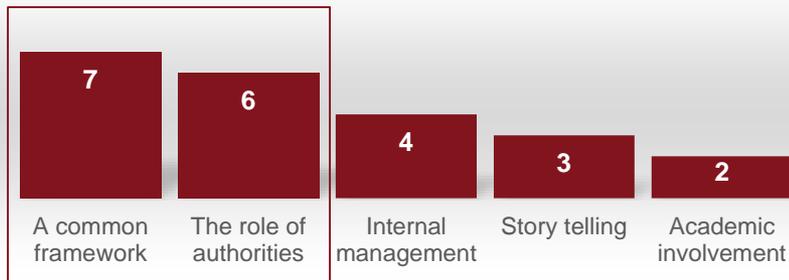
- Covering **15** sectors
- **39** interviews with companies
- **8** interviews with other stakeholders (NGO, governments, academics)
- **140** annual reports
- **25** other sources



Key insights (2/2): A common CE framework is seen as a priority, but storytelling will be needed to implement it



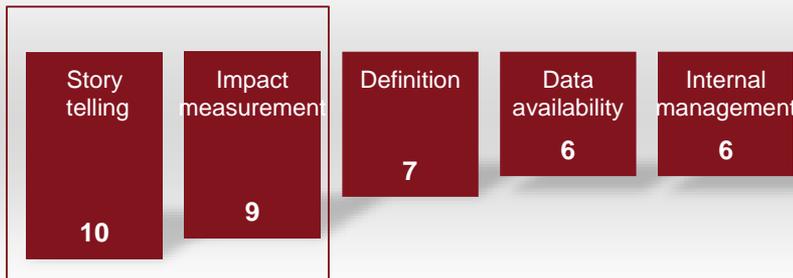
Key enablers identified (#quotes)



*“Having a **common framework** specifying what to include (social, environmental, economic indicators) is clearly an enabler”*

Retail & Consumer goods company

Key challenges identified (#quotes)



*“The framework should clearly define what CE is and what is not and better **define the hierarchy** in CE strategies”*

Automotive manufacturer

*“Make sure that it looks like something everyone can contribute to and **needs to be inspiring enough so it can make people move forwards**”*

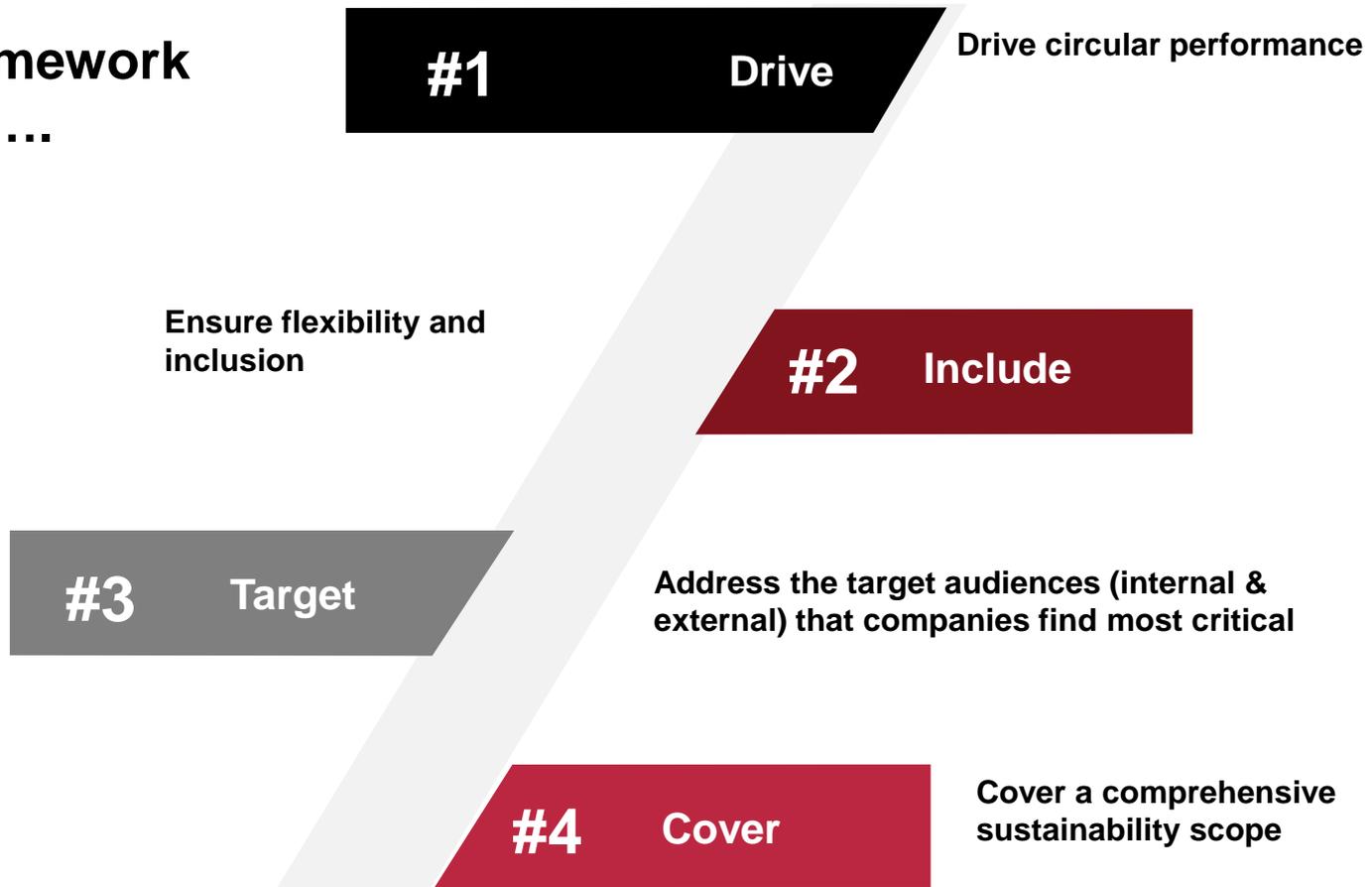
Chemicals producer

Source: WBCSD-PwC interviews with 39 companies worldwide

Recommendations (1/2)



The framework should....



Recommendations (2/2)



Build on existing frameworks/standards and innovate on circular-specific metrics

#5

Leverage

#6

Phase

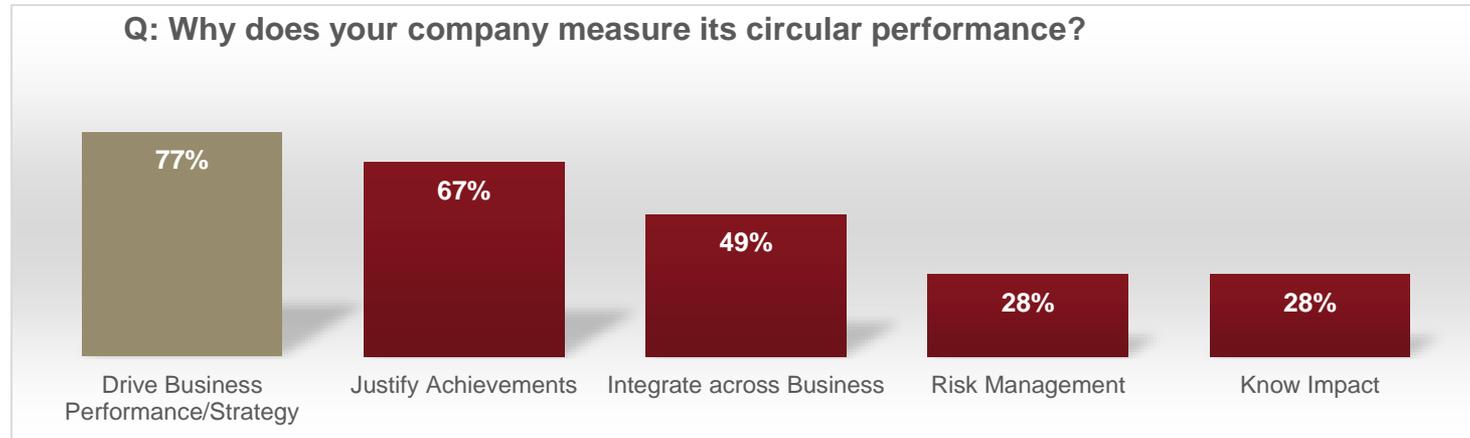
Adopt a phased approach

Drive cultural change and provide guidance

#7

Change

1. Drive circular performance

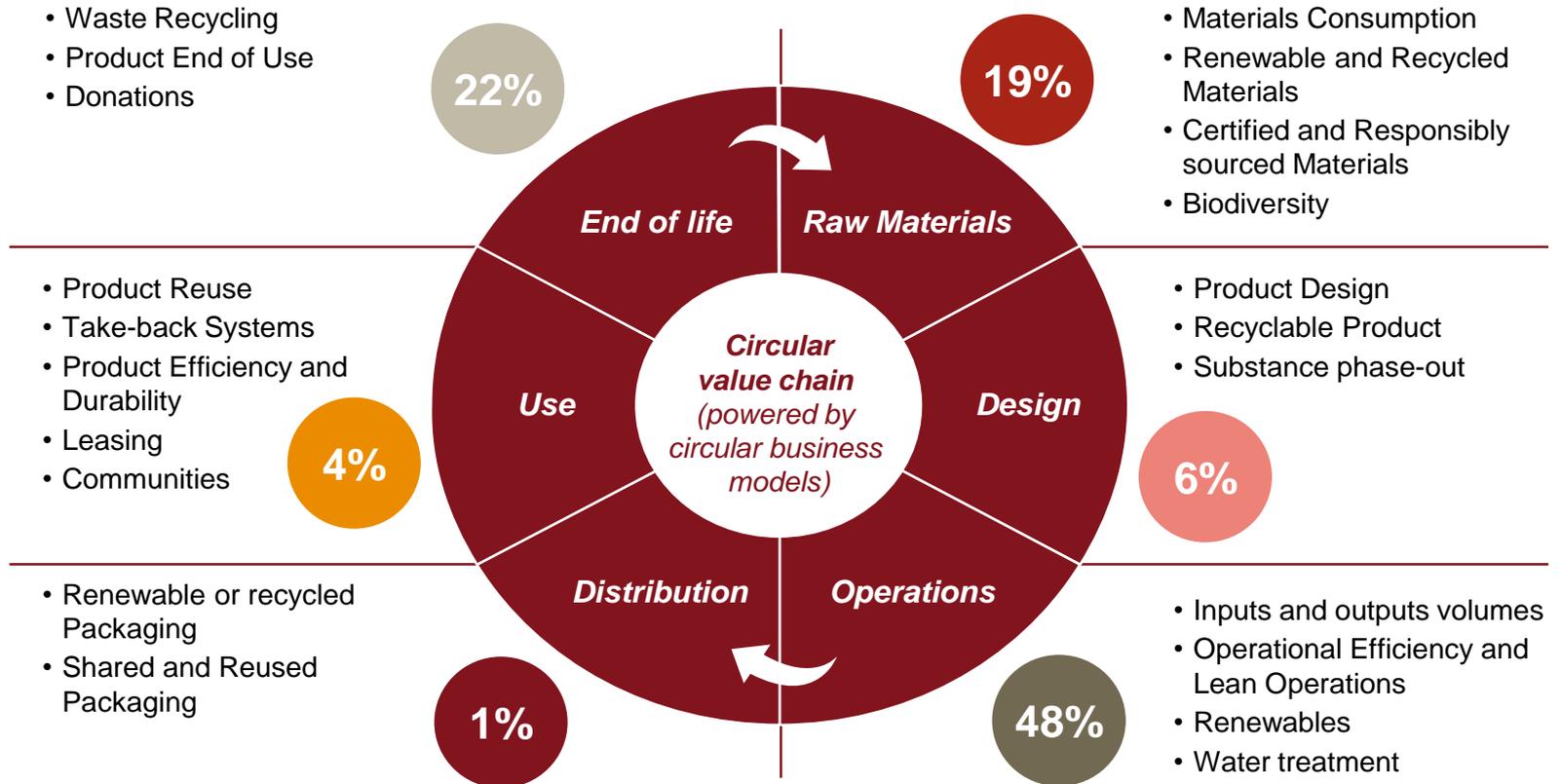


Source: WBCSD-PwC interviews with 39 companies worldwide

- **Business performance is the main reason mentioned by companies who measure their circularity**
- The **framework** should allow players to structure their Circular Economy strategy with respect to a « best in class » target while remaining inclusive to companies beginning their circular journey

2. Ensure flexibility and inclusion

Metrics embrace the whole value chain



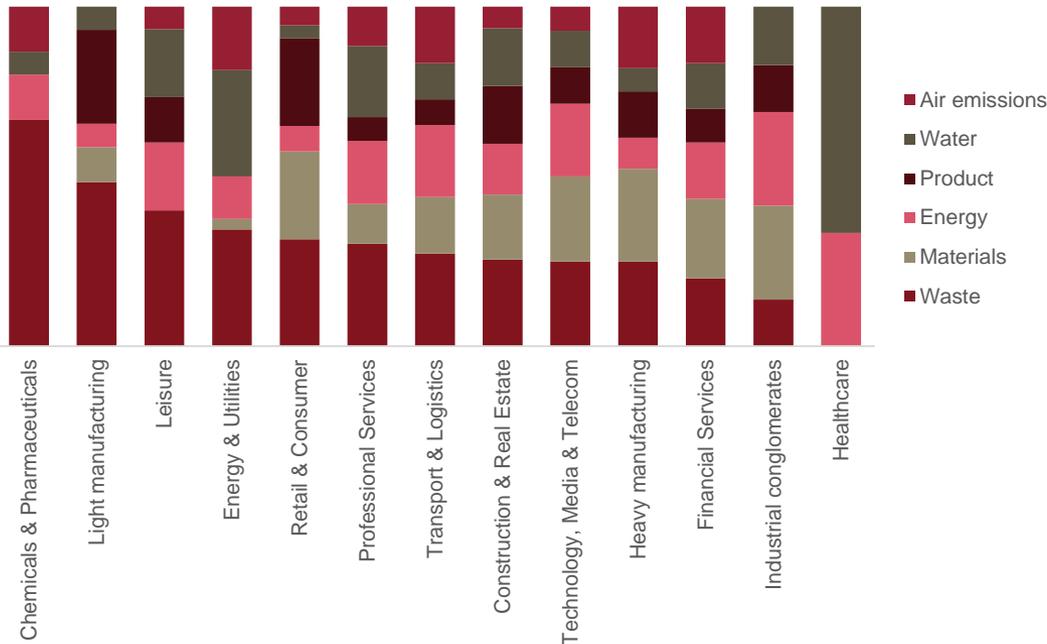
Source: Review of 140 annual reports of worldwide companies

2. Ensure flexibility and inclusion

Indicators scope and type vary by sector

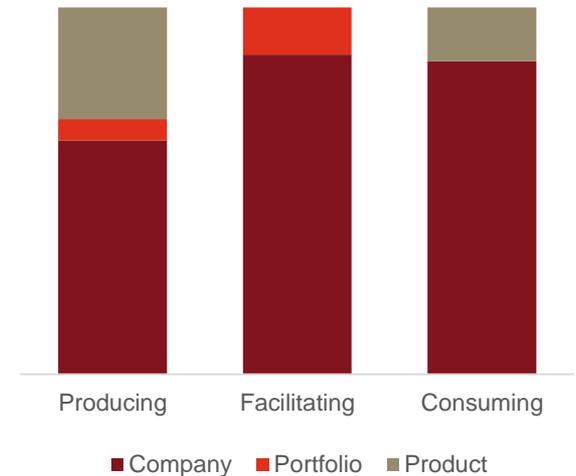


Themes of CE indicators reported by companies by sector of activity



Source: PwC review of 140 companies' annual reports worldwide

Indicators by scope and type of companies



Source: WBCSD-PwC interviews with 39 companies worldwide

- The **framework should be flexible** to address sectors' specificities and issues (e.g. product consideration for manufacturing, retailing & consumer, investments portfolio for financial services...).
- And so, **it should also enable to include** different levels of metrics (e.g. corporate, portfolio, product).

2. Ensure flexibility and inclusion

Set indicator according to prime sector issue



- The Bellagio Principles: **indicators should be linked to specific policy objectives and have the effect of supporting and driving those objectives.**
- Setting regulatory targets based on new indicators has significant implications and care thus needs to be taken to ensure that the indicators are appropriate to the policy objectives, **since they may have unintended consequences.**

Example:

End of life vehicle and WEEE directives (1990s) seek to avoid hazardous emissions and recover mass materials. However, the recovery of critical materials has now assumed a much higher priority.

By not recognizing the importance of critical materials present at low levels, achieving such broad recycling targets can lead to losses of technology-critical metals (Hagelüken, 2014).

Each sector may ask: what is our key unlocking move to a circular economy? For example:



Agriculture



Soil fertility (improve)



Healthcare



Hazardous waste (reduce)



Construction



Virgin materials (reduce)



Manufacturing



Close loop (ensure)



Waste management



Down-cycling (minimize)



Mining



Urban mining (leverage)



Financial services



Circularity of portfolio (increase)

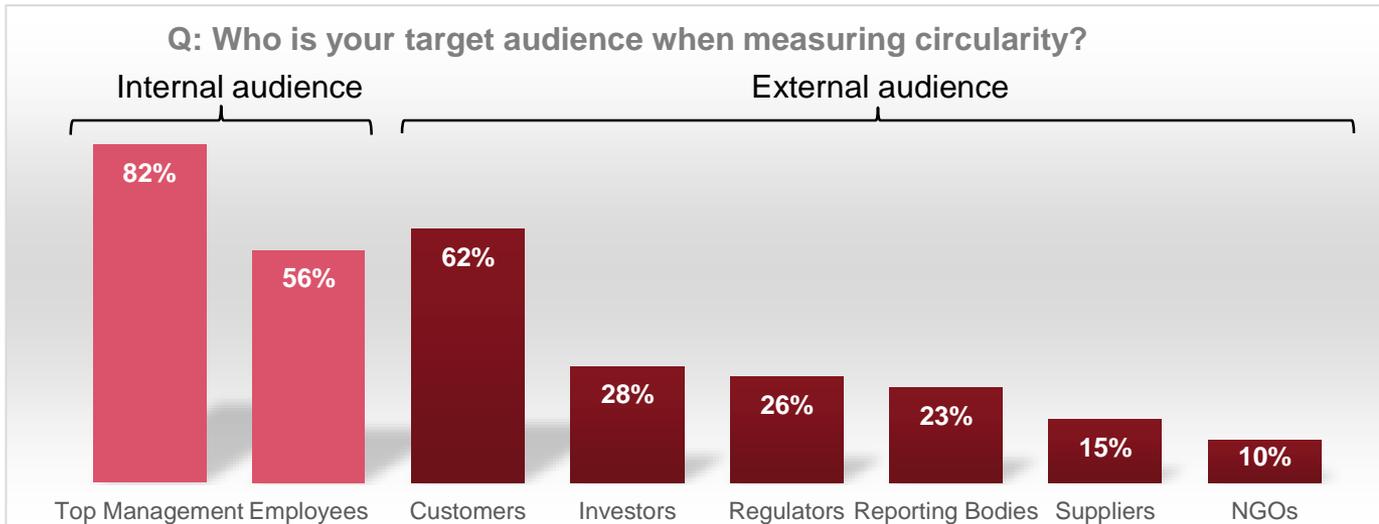


Transport & Logistics



Fleet use and lifetime (maximise)

3. Address the target audiences (internal and external) that companies find most critical



Source: WBCSD-PwC interviews with 39 companies worldwide

- The audience targeted when measuring circularity is both internal and external
- A circularity measurement framework must deliver indicators that fit into an integrated dashboard, as well as an external report, as well as customer/client communication
- **The framework should facilitate both internal and external buy-in**

“All stakeholders are involved in our CE approach; our government took our approach as a model for the national CE plan”

Oil&gas market player

3. The framework should be compatible with government-led CE initiatives



Example of initiatives launched throughout the world by public bodies (not exhaustive)



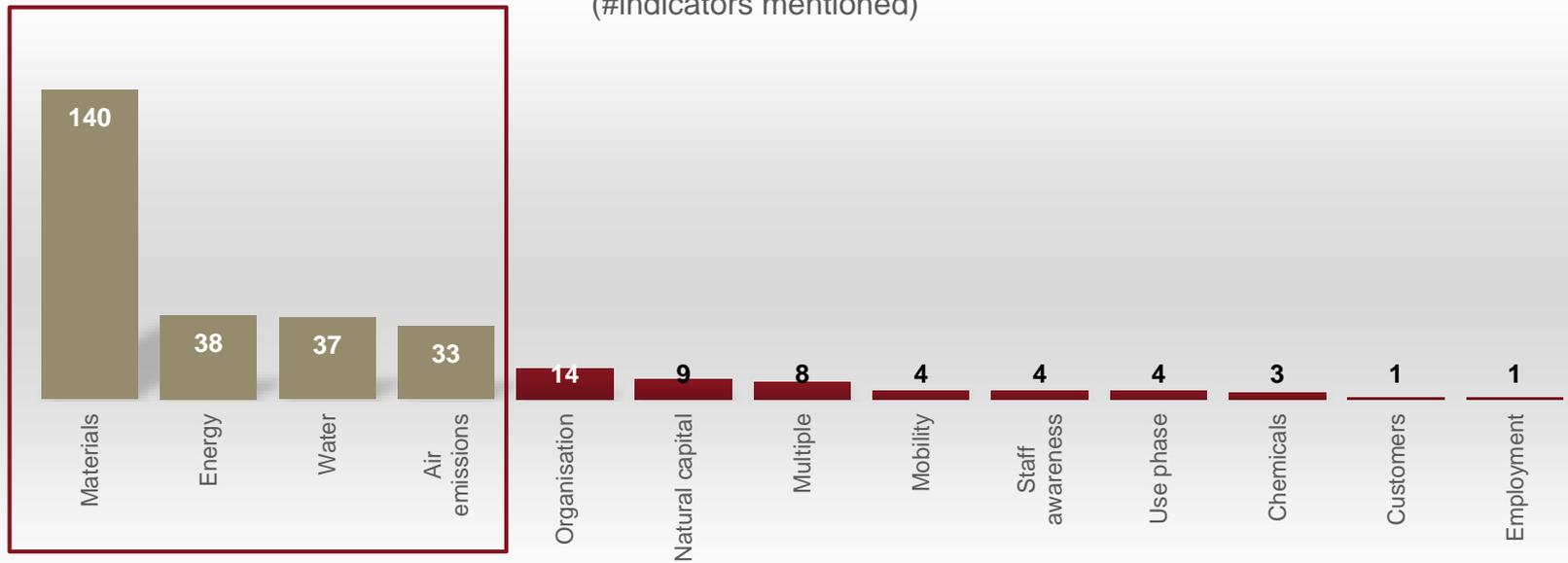
Source: PwC Strategy& analysis

4. Cover a comprehensive sustainability scope

Almost 50% of companies frame water, materials and energy indicators as “circular”



Themes covered by circular indicators
(#indicators mentioned)



Source: WBCSD-PwC interviews with 39 companies worldwide

5. Build on existing frameworks/standards and innovate on circular-specific metrics



A circularity measurement framework can solve the problems around measuring circularity most efficiently by focusing on the **truly innovative elements of circularity, such as capturing value/ preventing leakage, product use maximization, and circular design, while referring back to established standards** such as the (updated) GHG-protocol for GHG emissions and to the GRI-standard for waste management.



Natural Capital Protocol



GHG Protocol



GRI Standards



Integrated Reporting Framework



Cradle to Cradle® Assessment Framework



Sustainable Development Goals

- **80% of indicators relate to existing standards** like GRI environmental indicators and GHG Protocol
- **Other indicators** can be either economic and financial, physical or social, for example:



% of revenues from circular products
€ spend on resources consumption
€ savings generated from integrating recycled or bio-sourced materials



CE index of products
products lifetime
of trees and litres of water saved from reuse and repairing of pooled pallets



of people in communities for which income is improved by purchasing the company's products

Source: PwC review of 140 companies' annual reports worldwide

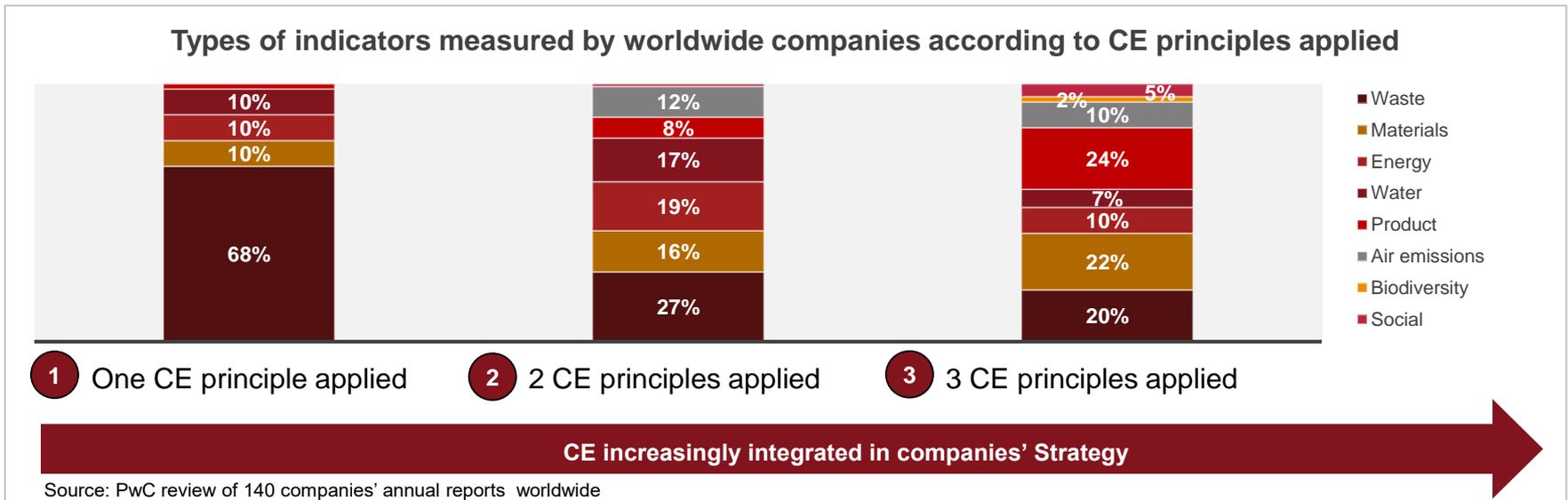
6. Adopt a phased approach



3 levels of integration were identified while reviewing annual reports, based on the number of CE principles applied by companies:

- 1 At a basic level, companies focus on the waste related to **Byproduct & Waste Recovery** principle, mainly global volumes and waste recycling, related to natural capital.
- 2 Resource supply related to **Use of Finite Resources Optimization** principle, including also operational efficiency, starting with product considerations. Related financial capital is measured in some cases.
- 3 When CE is more integrated in the company’s strategy and business model, the **Product Use Maximisation** principle is more addressed, which results in a more holistic view. Social capital starts to be measured besides natural and financial capital.

The framework should facilitate such a phased approach



7. Drive cultural change and provide guidance

“Culture eats strategy for breakfast”*



Circular leaders address cultural evolution and change systematically to ensure sustainable results

Companies and their staff have since the rise of consumerism in the 60's been programmed to think linear:

- Quarterly reporting
- Pressure to reduce payback-time
- Supply chains A ⇒ B (not back)
- 'Endless' flow of **finite** materials
- Etc.

Leaders invest time in building a circular culture through:

1. Tone at the top ('SOUL')
2. Structures ('SYSTEMS')
3. Decision making ('STAMINA')

Case studies

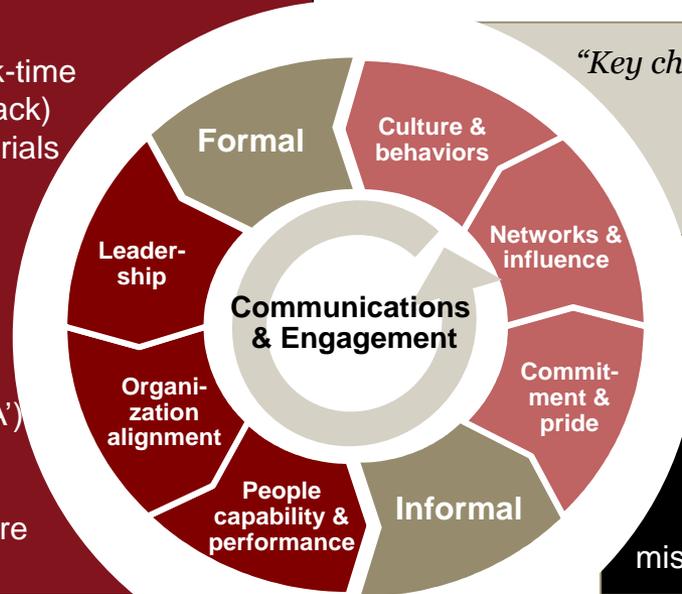
Interface, Ben & Jerry's, Umicore

*“Key enabler of progressing on a circular journey is to **connect people to our purpose**, where we want to go”*

Leading European retail company

*“Key challenge is to **bring people in this transition**, to lead culture change”*

International luxury group



Example indicators

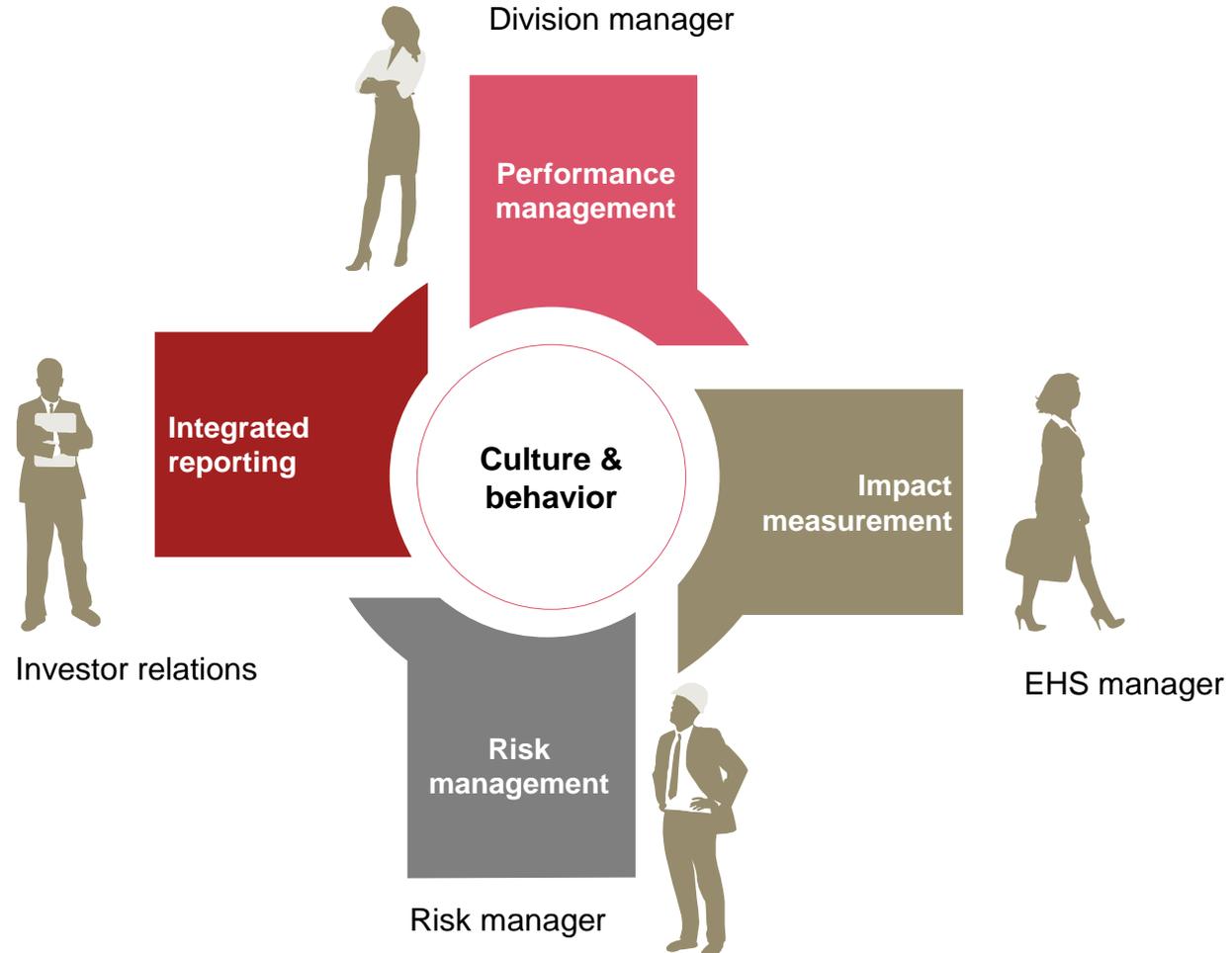
staff trained in circular design

% employees engaged in campaign

mission statement incl. circular aspiration

* Peter Drucker

Circular culture and behavior drives take-up by internal stakeholders and alignment with their frameworks & practices



Next steps



1. Gather feedback (*by 23 April*)
2. Finalize the Landscape analysis report (*by April 30*)
3. Framework development kick-off workshop in May (*mid-May, TBD*)

Feedback



Thank you



© 2018 PwC. All rights reserved.

PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity. Please see www.pwc.com/structure for further details.

This content is general information purposes only, and should not be used as a substitute for consultation with professional advisors.

Strategy& | PwC