## A Behavioural Competency Model for Sustainability Leaders



# **Executive Summary**

Our world faces greater challenges than ever before – including declining global ecosystems, population growth and unprecedented macro-economic stress.

Today, a growing number of organisations are establishing sustainability strategies to address these complex issues. This evolving role of business has led to the emergence of a new professional within the workforce: the Sustainability Leader.

Sustainability Leaders are required to operate across a variety of initiatives; ranging from marketing campaigns aimed at influencing consumer behaviours to multistakeholder partnerships that work to create shared value in the marketplace. Whether working full-time or assuming this role alongside other responsibilities, the majority of Sustainability Leaders recognise that whilst some of their efforts to create a more sustainable world will work, many will not.

With the stakes so high and the task so complex, the key question this paper aims to answer is: what are the critical behavioural competencies of effective Sustainability Leaders?

#### **Result Highlights**

Research findings suggest that Sustainability Leaders need a wide-ranging and divergent mix of behavioural competencies to be effective. Where leaders have more developed competencies, they are able to respond to sophisticated challenges in a way that others are not.

- The majority of "critical" behaviours for effective sustainability are found in past qualitative reviews.
- Two new behaviours were identified as critical to effective sustainability leaders: "impressing people" and "valuing individuals".
- Four behaviours previously identified in the literature were not found to be significant within the sample: "convincing people", "directing people", "embracing change" and "taking action".

See the 'Results Commentary' section of this paper for further insights. The refined Behavioural Competency Model for effective Sustainability Leaders is shown in the conclusion.

# Critical behavioural competencies of effective Sustainability Leaders

This paper explores the critical behavioural competencies of effective Sustainability Leaders and, through a deductive research approach, proposes a model for more effective leadership in this field.

Thematic analysis was undertaken to interpret content from previous qualitative research. Five competency groupings informed a hypothesis, which was tested with primary data collected via the Saville Consulting Wave® Professional Styles questionnaire, a self-report tool that enables quantitative analysis of behavioural competencies.

I identified research participants via purposeful sampling, while peer-validated responses ensured that the behaviours identified were relevant.

The results provide evidence of the ten critical and prominent behaviours exhibited amongst Sustainability Leaders. Overall, the leaders in this research validate eighteen behaviours identified in previous academic findings. Two new behaviours are identified as critical for a leader's effectiveness, and four behaviours detailed in the literature were found not to be prominent within the sample. Additional results provide insight into how a Sustainability Leader's sector, location, years of experience and level of qualification impact their effectiveness.

Finally, the Behavioural Competency Model, initially created in response to the literature review, provides a means for more focused leadership. It enables leaders to map their current behaviours and also monitor their progress over time. The assessment of an individual's profile allows developmental practices to be tailored and can also be applied as a tool for recruitment. I invite Sustainability Leaders to draw upon this research to accelerate their own transformation and that of the people, organisations and systems they impact.

### The Sustainability Leader: a working definition

A Sustainability Leader is defined as someone who represents the discretionary actions of an organization "to integrate social, environmental, ethical human rights and consumer concerns into their business operations and core strategy in close collaboration with their stakeholders." (European Commission, 2011). For the purpose of this research, I focus solely on those leaders who have a formally recognised job role in Sustainability.

### Literature Review

Empirical research on the competencies of sustainability leadership is limited and incomplete (D'Amato, et al, 2009; Fernández et al., 2006). A key issue is that the research on these competencies has not converged around a common framework.

For the purpose of this research, I identified 12 past qualitative reviews on the behavioural competencies of sustainability leaders (Berns, et al., 2009; Egri & Herman, 2000; Hames, 2007, 2009; Hind, et al., 2009; Kakabadse, et al., 2009; Luenburger & Goleman, 2010; Morton & Grayson, 2009; Quinn & Baltes, 2007; SustainAbility, 2008; WBCSD, 2011; Wilson & Holton, 2003; Wilson, et al., 2006). In reviewing existing literature to identify critical behavioural competencies, I was able to create a summary (Figure 1) of five competency categories which were identified as a result

of recurring themes across ten or more sources in this review. It was evident that, while some sustainability leadership studies proposed critical behavioural competencies, none specifically focused on Sustainability Leaders. Accordingly, my research seeks to propose a model for understanding the behavioural competencies of effective Sustainability Leaders. In doing so, via a personality questionnaire, this paper builds upon existing research. Findings therefore either confirm or reject the distinct behavioural competencies identified in the literature.

Figure 1: Behavioural competencies of Sustainability Leaders identified in the literature		
Competency groupings An effective Sustainability Leader is someone who is	Related behaviours	
RESULTS DRIVEN	Articulating information	
action-biased with a passion for learning, an ability to 'make things happen' and confident in their decisions	Taking action	
	Developing expertise	
	Making decisions	
A VISIONARY THINKER	Developing strategies	
inter-disciplinary understanding, strategic in their outlook with an ability to envisage the future and persevere through difficulties	Pursuing goals	
	Providing insights	
	Exploring possibilities	
ETHICALLY ORIENTED	Upholding standards	
determined to act with integrity, has an ethical approach and builds trust-based relationships	Interacting with people	
	Empowering individuals	
	Conveying self-confidence	
A CHANGE AGENT	Convincing people	
willing to challenge established views, seize opportunities and embrace change with optimism	Embracing change	
	Seizing opportunities	
	Generating ideas	
	Challenging ideas	
	Thinking positively	
AN INCLUSIVE OPERATOR	Understanding people	
understands the motivations of others, caring attitude and a collaborative approach that engenders trust in their leadership	Team working	
	Directing people	
	Establishing rapport	

# Research methodology

Based on the findings of the literature review, I used statistical analysis to test the hypothesis of the critical behavioural competencies grouped around five competency groups for effective Sustainability Leaders.

To do this, I selected a quantitative research method in an attempt to add statistical rigour to the evaluation of behavioural competencies identified in the literature review. I applied the Saville Consulting Wave®

Professional Styles questionnaire ("Wave®") as it provides peer-validated ("rater") measures which enable quantitative analysis of the reported behavioural competencies.

To test the hypothesis, Wave® data was secured from a sample population of ninety-seven Sustainability Leaders. I initially reviewed all thirty-six behaviours captured by Wave® to check the accuracy of the twenty-two behaviours used in the hypothesis.

Subsequent analysis of each behavioural competency by sample demographics gave rise to trends across participants and highlighted the range of differing responses. I then documented research findings to either confirm or reject the distinct competencies identified in previous qualitative research (i.e. a confirmatory research strategy). Through an iterative process of returning to the raw data, I was able to identify, refine and verify the critical behavioural competencies of Sustainability Leaders. See figure 2 below for an outline of the deductive research approach.

#### Figure 2: The deductive research approach

#### Step 1: Theory

- 26 theories explicitly mentioned in sustainability leadership literature, with input from over 70 academics were reviewed (Figure 1)
- Thematic analysis was undertaken to interpret content from qualitative research conducted within the last 15 years
- Inductive category development was used to define 5 behavioural competency groupings (Figure 2)
- 12 research papers were identified with access to source data providing over 500 competency references (Figure 3)

#### Step 2: Hypothesis

- Wave® was selected from available personality questionnaires due to its 0.45 reliability measure for predicting work performance (Figure 8)
- A behavioural competency model was designed with input from Step 1 and use of the Wave® taxonomy (Figure 5)
- 4 subject matter experts refined and validated the 5 competency groupings and 22 behaviours detailed in the hypothesis

#### Step 3: Observation

- Purposeful sampling identified 163 Sustainability Leaders from professional networks and research participant referrals
- 97 research participants completed Wave®, a 59% response rate. Of the reported data, 74% of responses were peer-validated (Figure 7)
- All 36 behaviours measured by Wave® were analysed, inclusive of the 22 behaviours detailed in the hypothesis
- 59 participants, 61% of the sample, took-up the option to informally discuss their personal responses

#### Step 4: Confirmation

- Participant data, including peer-validated responses, was reviewed to verify reported sten scores for each behaviour
- Systematic analysis of the raw data was carried out across all 36 behaviours captured by Wave® to identify any missing items
- Comparison with the hypothesis established in Step 2 identified key trends by sample demographic
- Returning to raw data refined the view of 'critical' behavioural competencies and ensured that the research findings are reliable - enabling the model to be refined

# Wave® analysis and the Behavioural Competency Model

Wave® measures the effectiveness of each competency on a 'standard to ten' ("sten") scale, where 1 is low and 10 is high. The mean average and range of scores can be calculated per behaviour to determine the effectiveness of each competency grouping within the sample population. If the behavioural competencies identified in the hypothesis are indeed required for Sustainability Leaders, research participants demonstrating competencies in the upper quartile of the sten scale (i.e. 8, 9, 10) are deemed to be the most effective. Additionally, those behavioural competencies which consistently return a higher sten score across the sample population can be recognised as 'critical'.

These scores were measured against my hypothesis for the critical behavioural competencies (grouped around five competency groups) for effective Sustainability Leaders (see Figure 3 below). "Sustainability professionals want to ensure long-term success of their corporation, so they want to make sure the world where we live also exists long-term. They think much larger – they don't just do their jobs like most peers."

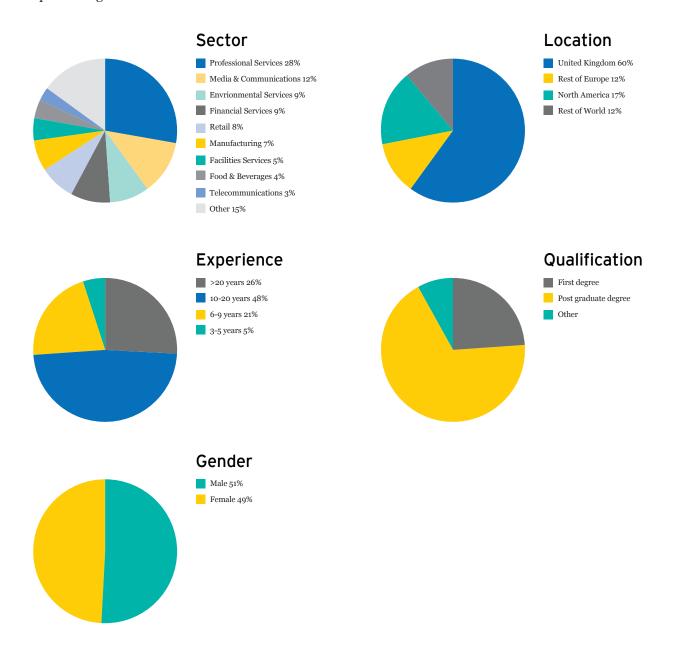
#### **Luis Neves**

Sustainability and Climate Change Officer

#### Figure 3: Hypothesis: Sustainability Leadership Behavioural Competency Model Visionary Thinker · Developing strategies · Pursuing goals · Providing insights · Exploring possibilities **Results Driven Change Agent** · Articulating information · Convincing people · Taking action Embracing change · Developing expertise Seizing opportunities · Making decisions · Generating ideas · Challenging ideas · Thinking positively **Ethically Oriented Inclusive Operator** · Upholding standards · Understanding people · Interacting with people Team work · Empowering individuals · Directing people · Conveying confidence Establishing rapport

## Research Sample

Purposeful sampling was used to access participants from specialised populations (Bryman & Bell, 2013). After communicating with an initial pool of 209 potential candidates, 163 leaders in the sample population all confirmed that they hold, or have held, upper management to senior level sustainability positions in their respective organizations.



## **Findings**

I examined peer-validated data points captured by Wave® and produced an aggregated view of sten scores across the sample. I then ranked behaviours ("(#)") to show those which are most relevant in the sample. This helped to identify the most critical and prominent behaviours of effective Sustainability Leaders, based on mean and median sten scores per behaviour and taking outlier values into account. The strongest and therefore most critical behaviours in the aggregate sample profile are shown via box plot in Figure 4.

Where the third quartile ("3Q Box") in the sten score distribution, also referred to as the 50th – 75th percentiles, demonstrated competencies of 8 or more, this validated the behaviour as critical for effective Sustainability Leaders. The majority of these behaviours reflect those found in past qualitative reviews. However, there are two newly identified behaviours: "impressing people" and "valuing individuals". These both had a median result of 7, with low outlier values, indicating that they should be added to the Behavioural Competency Model.

"We live in a resource-depleted world with increasing populations and a changing climate that has an impact on everything. I like to try to understand what that means for the business I am working for."

**Colin Braidwood** Director, EnergyABC Ltd

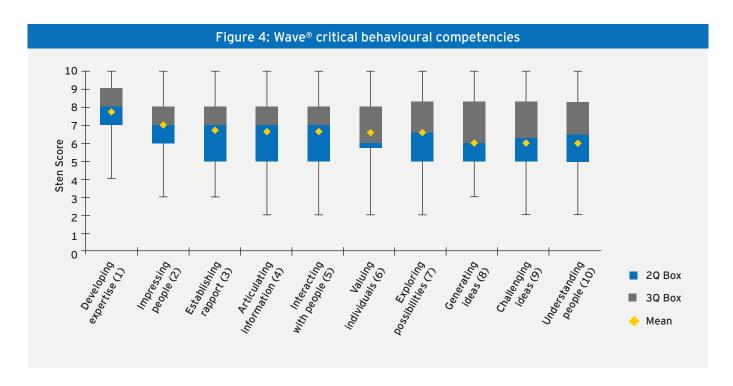
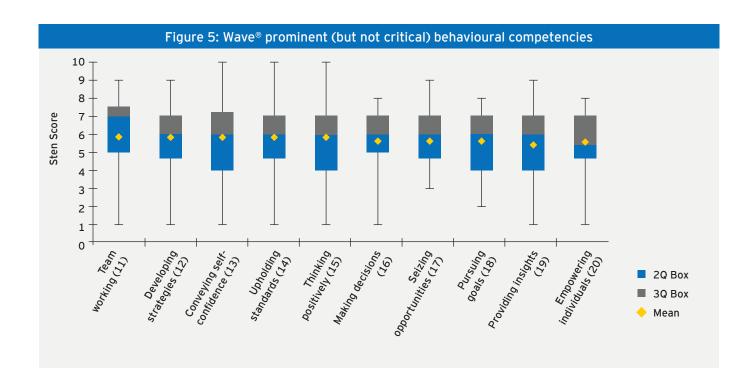


Figure 5 shows additional behaviours that were prominent in the sample. The 3Q box for these behaviours demonstrated competencies between a 5.5 and 7.5. Such behaviours are therefore understood to be meaningful for effective Sustainability Leaders, but not critical due to the lower distribution of sten scores and subsequent ranking relative to Figure 4.

All prominent behaviours displayed are reflected in past qualitative reviews. However, there are four behaviours detailed in the literature which are not prominent within the sample. These are: "convincing people", "directing people", "embracing change" and "taking action".

Each had a median result of 5, with either a wide range of responses or high outlier values. This demonstrates lower relevance and indicates that they should be removed from the Behavioural Competency Model.

A further 12 behaviours captured by Wave® are not detailed in these research findings due to lower sten score responses which indicate their limited relevance for effective Sustainability Leaders. A summary of the results is given in Figure 6.



Compentency Groupings  An effective Sustainability Leader is someone who is	Related behaviours		
	Identified in the literature – listed by frequency of citation in past qualitative reviews	Evidenced in the research findings – ranked by critical and prominent behaviours in the sample	
RESULTS DRIVEN		<ul> <li>Articulating information</li> </ul>	[1] Developing expertise (1)
action-biased with a passion for learning, an ability to 'make things happen' and confident in their decisions	<ul> <li>Taking action</li> </ul>	[+] Impressing people (2)	
	<ul> <li>Developing expertise</li> </ul>	[]] Articulating information (4)	
	• Making decisions	[-] Making decisions (16)	
		[-] Taking action	
AN INCLUSIVE OPERATOR		<ul> <li>Understanding people</li> </ul>	[1] Establishing rapport (3)
understands the motivations of others, caring attitude and a collaborative approach that engenders trust in their leadership	<ul> <li>Team working</li> </ul>	[+] Valuing individuals (6)	
	<ul> <li>Directing people</li> </ul>	[l] Understanding people (10)	
	• Establishing rapport	[J] Team working (11)	
			[-] Directing people
A CHANGE AGENT		<ul> <li>Convincing people</li> </ul>	[1] Generating ideas (8)
willing to challenge established views, seize opportunities and embrace change with optimism		<ul> <li>Embracing change</li> </ul>	[1] Challenging ideas (9)
	ge	<ul> <li>Seizing opportunities</li> </ul>	[1] Thinking positively (15)
	<ul> <li>Generating ideas</li> </ul>	[‡] Seizing opportunities (17)	
	<ul> <li>Challenging ideas</li> </ul>		
	<ul> <li>Thinking positively</li> </ul>	[-] Convincing people	
		[-] Embracing change	
ETHICALLY ORIENTED		<ul> <li>Upholding standards</li> </ul>	[1] Interacting with people (5)
determined to act with integrity, has an ethical approach and builds trust-based relationships	<ul> <li>Interacting with people</li> </ul>	[1] Conveying self-confidence (13)	
	<ul> <li>Empowering individuals</li> </ul>	[↓] Upholding standards (14)	
	Conveying self-confidence	[]] Empowering individuals (20)	
A VISIONARY THINKER		<ul> <li>Developing strategies</li> </ul>	[1] Exploring possibilities (7)
inter-disciplinary understanding, strategic in their outlook with an ability to envisage the future and persevere through difficulties	<ul> <li>Pursuing goals</li> </ul>	[J] Developing strategies (12)	
	<ul> <li>Providing insights</li> </ul>	[l] Pursuing goals (18)	
	<ul> <li>Exploring possibilities</li> </ul>	[l] Providing insights (19)	

## **Key Results**

Here follows a brief commentary of some of the key results from the Wave® review, as identified through the core competency groupings of my hypothesis.

#### Results driven

- "Developing expertise (1)" is the most critical behaviour identified. This provides corroborating evidence for traits in existing literature such as enhancing capabilities (Berns et al., 2009), networked intelligence (Hames, 2007) and self-development (Wilson et al., 2006).
- "Impressing people (2)" is a behaviour not previously associated with Sustainability Leaders. It highlights the need to attract attention, promote personal achievement and gain recognition (Saville et al., 2012). This unexpected presence may be explained somewhat by the fact that previous research methods have relied solely on qualitative, self-reported data.

#### An inclusive operator:

- "Establishing rapport (3)" is a critical behaviour less prevalent in past qualitative research and highlights the importance of building trust-based relationships (Morton and Grayson, 2009).
- The addition of "Valuing individuals (6)" is the second behaviour not previously associated with Sustainability Leaders. It refers to showing consideration and tolerance for the beliefs and world-view of others as critical to a person's effectiveness (Saville et al., 2012).

#### A change agent:

- "Generating ideas (8)" is the most critical behaviour in this competency grouping. It reflects traits found in existing literature such as a proficiency in product development (Berns et al., 2009), the ability to innovate (Morton and Grayson, 2009; SustainAbility, 2008; Wilson and Holton, 2003) and original thinking (Wilson et al., 2006).
- "Challenging ideas (9)" is also shown as critical, despite its limited presence in past qualitative reviews (Wilson et al., 2006).

#### Ethically orientated:

- "Interacting with people (5)" is identified in both this sample and previous research (Hames, 2009; Luenberger and Goleman, 2010; Morton and Grayson, 2009; Wilson and Holton, 2003; Wilson et al., 2006). This provides corroborating evidence for traits such as networking and stakeholder engagement (Saville et al., 2012).
- "Conveying self-confidence (13)" is also prominent in the findings, which shows the importance of Sustainability Leaders who project inner strength (Egri and Herma, 2000) and leave their "ego at the door" (Morton and Grayson, 2009.

#### A Visionary thinker:

• "Exploring possibilities (7)" is the most critical behaviour in this competency grouping. It reflects traits found in existing literature such as conceptual thinking (Egri and Herman, 2000), interdisciplinary understanding (Hames, 2009), handling paradoxes and conflicting priorities (Kakabadse et al., 2009), managing unquantified risks and new opportunities (Luenberger and Goleman, 2010) and taking an all-encompassing view of a problem (WBCSD, 2011).

#### **Experience:**

- Sustainability Leaders who have 10-20 years' experience have the strongest sten scores across the majority of behavioural competencies. However, respondents with over 20 years' experience are the strongest inclusive operators (8) and those with 6-9 years' experience are the most effective visionary thinkers (8.3). This indicates, perhaps unsurprisingly, that those working for a longer period as Sustainability Leaders are more effective.
- Where those with over 20 years' experience have shown weaker sten scores, this could be attributed to a shift in the required behavioural competencies as the role has evolved over time.

"Most people don't even want to think about the global challenges we face, because it is too frightening. I believe we need to frame these issues differently, to give people hope and empowerment."

Joe Starinchak

Outreach Coordinator, U.S. Fish and Wildlife Service

I also conducted an analysis of the Wave® review results in relation to the following factors identified in the sample: location, qualification and gender.

#### Location:

It is evident from the prevalence of European and North American literature and past qualitative research that locations are at different stages of development when it comes to sustainability. Despite this, the research findings show that a Sustainability Leader's level of qualification has a greater impact on their behavioural competencies than their location.

#### **Qualification:**

The most effective Sustainability Leaders in the sample had post-graduate degrees. In particular, they exhibited stronger (+1) visionary thinker behaviours than those with other qualifications. This highlights that there is a direct correlation between higher levels of academic achievement and effectiveness in-role.

#### Gender:

The impact of gender on the effectiveness of Sustainability Leaders is minimal. There are no aggregate trends identified in the sample population.

### Conclusion

The purpose of this research was to provide a model for assessing the behavioural competencies of Sustainability Leaders (figure 7). The model highlights ten critical and prominent behaviours, which have been mapped to corresponding competency groupings. These are understood to be the behavioural competencies that such leaders require to respond effectively to sustainability challenges.

"A profit motive is not enough, it doesn't excite, it doesn't engage and it is not going to create organizations that sustain over the long term."

Alexandra Stubbings Managing Director, Talik & Co.

#### Figure 7: The refined behavioural Competency Model for effective Sustainability Leaders **Results Driven** · Developing expertise · Impressing people · Articulating information · Making decisions **Inclusive Operator** Change Agent · Establishing rapport · Generating ideas · Valuing individuals · Challenging ideas · Undering people · Thinking positively · Team working · Seizing opportunities 1 5 **Ethically Oriented** Visionary Thinker · Interacting with people · Exploring possibilities · Conveying confidence · Developing strategies Upholding standards · Pursuing goals · Empowering individuals · Providing insights

Analysis of the sample population shows that consultants display stronger behavioural competencies compared to in-house Sustainability Leaders, particularly those working in Environmental Services. It also shows a diverse mix of competencies across sectors.

This may be indicative of the value placed on a subset of behaviours within each sector (as a result of either the available development opportunities or the prevalent work culture) and has further implications for Sustainability Leaders moving between sectors. A person's years of experience in sustainability also have a significant impact on their effectiveness, and results indicate that the required behavioural competencies evolve over time.

In a relatively new profession, this means that the Behavioural Competency Model should be refined at least every five years to ensure it is construct validity.

There is strong evidence that first and post-graduate degrees strengthen a Sustainability Leaders' effectiveness. The only competency grouping this doesn't apply to is "inclusive operator". This could indicate either that academic qualifications in Sustainability Leadership need to incorporate the related behaviours in their curriculum, or that Sustainability Leaders should be looking at other qualifications to develop this competency grouping.

Although a Sustainability Leader's gender does not have a significant impact on their effectiveness in-role, it is worth noting that there is disparity in career progression and pay for women. This is likely mirrored in other professions, but is a useful insight for women and recruitment firms specialising in sustainability.

An important part of this is understanding the path of development itself (Global Association of Corporate Sustainability Officers, 2011). The Behavioural Competency Model detailed in this research provides a means of enhancing this understanding by:

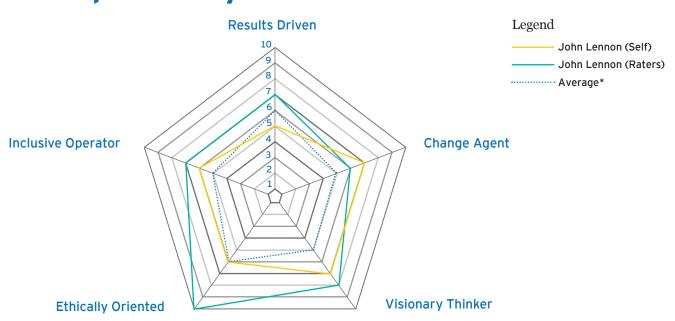
- enabling Sustainability Leaders to map their current behaviours and monitor their progress over time;
- assessing an individual's profile, which allows developmental practices to be tailored to their needs; and
- becoming a competency assessment tool for recruitment.

#### Implications for Future Research

Based on the findings of this paper, several recommendations can be suggested for future research:

- Increase the sample size to improve the quality of analysis and further refine the model. Alternatively, perform a longitudinal study to show how behaviours change over time.
- 2. Use the model to examine the variables between consultants and in-house Sustainability Leaders. With an increased sample size, multi-factor analysis could also generate additional conclusions in terms of sector and location.
- 3. Design leadership development modules to strengthen Sustainability Leaders' competencies, implement training and conduct quasi-experimental research with repeated measures to assess the change in performance.

## Report example: Sustainability Leadership Behavioural Competency Model



\*Note: The average shown is established from Sustainability Leaders with comparable demographics (e.g. based on sector, location, experience and qualification).

#### An effective Sustainability Leader is someone who is... Related behaviours **RESULTS DRIVEN** · Articulating information action-biased with a passion for learning, an ability to 'make · Taking action things happen' and confident in their decisions · Developing expertise · Making decisions A VISIONARY THINKER Developing strategies inter-disciplinary understanding, strategic in their outlook with an · Pursuing goals ability to envisage the future and persevere through difficulties · Providing insights · Exploring possibilities ETHICALLY ORIENTED · Upholding standards determined to act with integrity, has an ethical approach and · Interacting with people builds trust-based relationships · Empowering individuals · Conveying self-confidence A CHANGE AGENT · Convincing people willing to challenge established views, seize opportunities and · Embracing change embrace change with optimism · Seizing opportunities Generating ideas Challenging ideas Thinking positively AN INCLUSIVE OPERATOR Understanding people understands the motivations of others, caring attitude and a · Team working collaborative approach that engenders trust in their leadership · Directing people · Establishing rapport

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