Sustainability Leadership: Linking Theory and Practice

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Abstract

The paper aims to create a clearer understanding of the nature of sustainability leadership and how it can contribute to transformational change. It does this by locating sustainability within the leadership literature, defining the concept of sustainability leadership, and presenting a model of sustainability leadership in practice. The model was tested with a sample of senior business leaders and refined in line with their feedback. The model presents insights on sustainability leadership in three areas: context, individual characteristics, and actions. The model is illustrated using quotes from senior business leaders that are focused on sustainability in their organizations.

Introduction

This paper is based on research conducted by the University of Cambridge Institute for Sustainability Leadership (CISL), which works with business, government and civil society to build the capacity of leaders, both to meet the needs of their stakeholders and to address critical global challenges. The paper is an attempt to create a clearer understanding of the nature of sustainability leadership and how it can contribute to transformational change.[1]

The Model of Sustainability Leadership that we have developed was corroborated by interviews with the following business leaders, conducted in 2010: Neil Carson, CEO of Johnson Matthey; Ian Cheshire, CEO of Kingfisher; Jeffrey Immelt, CEO of General Electric; Philippe Maso, CEO of AXA; Jan Muehlfeit, Chairman of Microsoft Europe; Truett Tate, Group Executive Director: Wholesale, for Lloyds Banking Group; José Lopez, Executive Vice President: Operations and GLOBE of Nestle; and Sandy Ogg, Chief Human Resources Officer for Unilever. The paper and the model are illustrated by extensive quotations from these interviews.

Definitions and Theories of Leadership

De Vries (2001) reminds us that the Anglo-Saxon etymological root of the words *lead*, *leader* and *leadership* is *laed*, which means path or road. The verb means to travel. Thus a leader is one who shows fellow travellers the way by walking ahead. He also suggests that leadership – which focuses on the effectiveness of strategy – is different to management – which deals with the efficiency of operations.

Ian Cheshire (2010), CEO of Kingfisher, says "leadership is about getting people to go where they wouldn't have gone on their own". Rather more flamboyantly, management guru Tom Peters (1989) suggests leadership is about "discovering the passion, persistence and imagination to get results, to be able to find the Wow factor and to be able to think the weird thoughts necessary to learn and thrive in a disruptive age".

The element of transformational change in Peters' definition makes it particularly relevant to sustainability. We have a working definition of leadership, as follows:

> *"A leader is someone who can craft a vision and inspire people to act collectively to make it happen, responding to whatever changes and challenges arise along the way."*

In addition to definitions, there are also various theories on leadership and while it is not our intention to provide an exhaustive review of these, they do set a frame for sustainability leadership. Hence, we can distinguish three main approaches to understanding leadership:

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[1] Our research on sustainability leadership is also presented in the CISL (2011) report, entitled *A Journey of a Thousand Miles: The State of Sustainability Leadership 2011*.

1. *The Trait/Style school*, which focuses on the characteristics or approaches of individual leaders (McCall & Lombardo, 1983; Tannenbaum & Schmidt, 1973);
2. *The Situational/Context school*, which focuses on how the external environment shapes leadership action (Hersey & Blanchard, 1999; Vroom & Yetton, 1973); and
3. *The Contingency/Interactionist school*, which is about the interaction between the individual leader and his/her framing context (Fiedler, 1971; De Vries, 2001).

To these can be added the rather more practical tenets of leadership as described by Goffee and Jones (2009):

1. Leadership is *relational*. It is something you do with people, not to people. Put simply, you cannot be a leader without followers. Like all relationships, it needs to be monitored and cultivated.
2. Leadership is *non-hierarchical*. Formal authority or a title doesn't make you a leader. Leaders can be found at all levels.
3. Leadership is *contextual*. You need to size up and tap into what exists around you and then bring more to the party.

Defining Sustainability Leadership

These definitions and theories provide the background for understanding sustainability leadership, which has emerged as a topic in its own right in recent years. According to a survey of 766 United Nations Global Compact (UNGC) member CEOs (Accenture & UNGC, 2010), 93% of CEOs see sustainability as important to their company's future success. But this begs the question: what do we mean by sustainability leadership? We offer the following simple definition:

> *"A sustainability leader is someone who inspires and supports action towards a better world."*

The Sustainability Leadership Institute's (2011) offers another definition, suggesting that sustainability leaders as "individuals who are compelled to make a difference by deepening their awareness of themselves in relation to the world around them. In doing so, they adopt new ways of seeing, thinking and interacting that result in innovative, sustainable solutions."

Based on a review of the leadership literature and our experience in working with senior leaders on sustainability, we take the view that sustainability leadership – or more precisely, leadership for sustainability – is not a separate school of leadership, but a particular blend of leadership characteristics applied within a definitive context. If it is to be aligned with a mainstream school of leadership at all, the *Contingency/Interactionist school* is probably most relevant, as the context – comprising the sustainability challenges facing the world and our aspirations for a more sustainable future – calls for particular types of leadership and is manifested in key areas of action.

Sandy Ogg (2010), Chief Human Resources Officer for Unilever, explains this contingency approach when he says, "I don't think there's any difference between character or timeless elements [of leadership], whether you're leading sustainability or whether you're leading for profit. But when it comes to the differentiators, why is it that Paul Polman [CEO of Uniliver] stands out? It's because he understands the context and he understands leading with empathy in a multi stakeholder environment."

Interestingly, a number of business leaders felt that the need to differentiate sustainability leadership from leadership in general may be a necessary, but temporary phenomenon. For instance, Ian Cheshire (2010) believes that "sustaining the [sustainability] agenda and really

embedding it in the organisation is the unique current set of challenges on a 10 year view. Beyond that, hopefully it becomes much more business as usual." Similarly, Neil Carson (2010), CEO of Johnson Matthey, says: 'This is like the quality revolution that we had in the eighties. What happened was companies either died or they got quality. One day this is going to be the same for sustainability. But there's an interim period where that's only true for some companies. So you've probably got ten years or maybe longer of there being a need for it to be pointed out that there is *sustainability* leadership and that it's important.'

Drawing on both the theory of leadership and the practice of sustainability by leaders, we designed and tested a Sustainability Leadership Model – depicted and described below – which has three components: the external and internal context for leadership; the traits, styles, skills and knowledge of the individual leader; and leadership actions. None of these elements is unique to sustainability leaders, but collectively they encapsulate a distinctive set of characteristics and actions in response to sustainability challenges.

The sustainability leadership that we observe in practice and describe below is geared towards bringing about profound change, whether in our political and economic systems, our business models and practices, or in the broad social contract with stakeholders and society. Hence, the leadership model we have developed is implicitly about creating change.
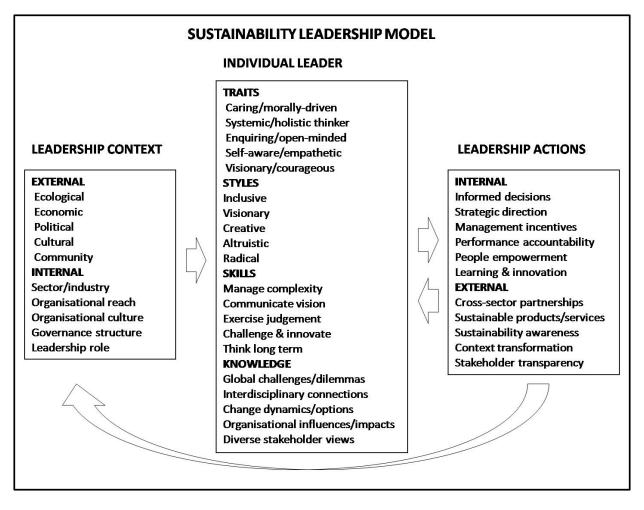
A Model of Sustainability Leadership

See Figure 1: The Cambridge Sustainability Leadership Model

Context

In our model, context refers to the conditions or environment in which leaders operate, which have a direct or indirect bearing on their institutions and on their decision making. This context is broadly divided into the context that is *external* to their institution and over which they may have a lesser degree of influence (e.g. ecological, economic, political, cultural and community contexts), and *internal* to their institution or sector, over which they are generally assumed to have higher levels of influence (e.g. the organizational culture, governance structure or role of leadership).

Many business leaders are conscious of the role of context. For example, Jeff Immelt (2007), CEO of General Electric says, "The most important thing I've learned since becoming CEO is context. It's how your company fits in with the world and how you respond to it."

Figure 1: The Cambridge Sustainability Leadership Model

SUSTAINABILITY LEADERSHIP MODEL

INDIVIDUAL LEADER

LEADERSHIP CONTEXT

TRAITS
Caring/morally-driven
Systemic/holistic thinker
Enquiring/open-minded
Self-aware/empathetic
Visionary/courageous

STYLES
Inclusive
Visionary
Creative
Altruistic
Radical

SKILLS
Manage complexity
Communicate vision
Exercise judgement
Challenge & innovate
Think long term

KNOWLEDGE
Global challenges/dilemmas
Interdisciplinary connections
Change dynamics/options
Organisational influences/impacts
Diverse stakeholder views

EXTERNAL
Ecological
Economic
Political
Cultural
Community

INTERNAL
Sector/industry
Organisational reach
Organisational culture
Governance structure
Leadership role

LEADERSHIP ACTIONS

INTERNAL
Informed decisions
Strategic direction
Management incentives
Performance accountability
People empowerment
Learning & innovation

EXTERNAL
Cross-sector partnerships
Sustainable products/services
Sustainability awareness
Context transformation
Stakeholder transparency

Similarly, José Lopez (2010), Executive Vice President Operations and GLOBE of Nestle, explained that "the context is that sustainability processes in place today are not trending in the right direction. As a matter of fact, poverty is going up, the world is not moving on essential things like waste, like emissions and utilisation of resources. So with that realisation companies incorporate in their vision and mission what they are in business for, and then that gets enacted by continuous improvement processes that they carry out. What is important is the context. When you look at the creating shared value approach you don't have any more, in the case of Nestlé, just a 'making money' kind of context."

Individual Characteristics

 Understanding the sustainability leader requires that we appreciate their traits, styles, skills and knowledge. It is a combination of these that make the individual leader unique. For example, when asked, "How would people in Unilever describe you as a leader?" Paul Polman (2009), CEO of Unilever, said: "I hope that the word integrity comes into that. I hope the word long term comes into that. I hope the word caring comes into that, but demanding as well."

Individual sustainability leaders are unlikely to embody all of the traits, styles, skills and knowledge in our model. Rather, they need to draw on what is appropriate or fitting to their own personality and circumstances, so as to be most effective in addressing sustainability challenges. Furthermore they will seek to develop these qualities in others, building teams that bring as many of the required

elements to bear, and in effect enabling a form of distributed leadership (Center for Excellence in Leadership et. al, 2007) to exist within the organisation.

Doppelt (2010) cites the case of Interface, which focuses more on team structure than on individual leaders. He writes, "some are entrepreneurs, some are team builders, some are competitors, some are commanders, some are safety orientated and some are creators. Few people excel in all these areas. The entrepreneur is the antithesis of those who are safety orientated. The commander is the antithesis of the team builder. While no single person may have all these attributes, they are all needed for Interface to achieve its potential."

Traits

There are any number of lists of ideal leadership traits. For example, Kouzes and Posner (2007) argue that good leaders are honest, forward looking, competent, inspiring and intelligent. In a globalising world, Morrison (2000) emphasises the importance of leaders developing competencies tailored to their company.

We believe the sustainability leader typically embodies a number of traits, by which we mean distinguishing attributes, qualities or personal characteristics which are generally seen as being enduring. The following summarises those that are included in our Model as strongly correlated with leadership for sustainability.

Caring/morally-driven

Care for the well-being of humanity and all other forms of life, as well as being guided by a moral compass are often associated with sustainability leadership. Tuppen and Porritt (2003) refer to the moral case for sustainable development as including equity today, environmental justice, intergenerational equity and stewardship.

Philippe Maso (2010), CEO of AXA, believes there is a moral dimension to sustainability, but that this is often underplayed, in order to keep the agenda clear and simple. "It's not moral in the religious sense," he says. "But there is a lot of what is good and what is right and wrong in what we do. In the whole debate we have been having over the last 5 years we have overshadowed some of the damage of the problem in order to keep clarity."

Similarly, Truett Tate (2010), Group Executive Director, Wholesale, for Lloyds Banking Group, believes there is a "personal, almost spiritual commitment that needs to be epitomised in someone who is going to be successful in this sustainability space. So, a morality, a spirituality [which has] a great coupling with [having a] longer term vision." He adds that their credibility must come from "the way that they behave and interact with the world. They epitomise interconnectedness. They understand community [in the sense of] communion with facets of the world around us."

Asked about the leaders who basically say I don't care at all, Lopez (2010) replied: "I think that breed is becoming extinct." That may be true, but Jan Muehlfeit (2010), Chairman of Microsoft Europe, believes "we're at the crossroads". He explains that Adam Smith spoke in his 'Wealth of the Nations' about profit and care, saying that the first thing we do is take care of ourselves, but the second thing we do is take care of others. "By care," says Muehlfeit, "I don't only mean care about other people, but also care about society and care about nature. I think what we do today is pretty much like the way we teach the classical MBA programme: we teach about profit but we don't teach enough about care."

Systemic/holistic thinker

The ability to appreciate the interconnectedness and interdependency of the whole system, at all levels, and to recognise how changes to parts of the system affect the whole is key for sustainability leaders. Lopez (2010) insists that "one of the elements that will really get us going in this sustainability fight is the elimination of the root cause for unsustainable behaviour, unsustainable business morals, unsustainable practices and so on. The ability to see the root cause on those things will set companies apart. They have to do with the profound thinking that you have and the processes of how you invest money and how you train your people and how you develop resources."

A similar theme is adopted by Immelt (2010) who believes that in order to develop leaders able to tackle the big problems of today and tomorrow requires systems thinking. "In time periods of relative stability, you don't need to be a systems thinker [but] we're in a period now of great volatility," he says. "So the type of people that ultimately are going to lead at sustainability (and one of the reasons why it's so tough) is that it really requires a new generation of systems thinkers to make it work. Not to be harsh but the NGO community in and of itself has been largely ineffective in terms of driving change, mainly because they have one lever that they pull all the time. But what you want are people that see business opportunity, customer satisfaction, job creation, pollution reduction and public policy. And that's why some of these issues are so hard to solve because they really require forward systems thinking, solutions orientation."

Enquiring/open-minded

Sustainability leaders actively seek new knowledge and diverse opinions, questioning received wisdom, including being willing to have one's own opinions challenged. Examples include being willing to question the value of a product or service to society, and the willingness to challenge traditional models of economic growth.

Immelt's background in science, he believes, has helped to make him an effective leader. "There is an inquisitiveness and a problem ... or just a curiosity and a willingness to see things through other people's point of view." He believes Bill Gates typifies this enquiring spirit. "When I hear that Bill Gates is working on malaria, I get the sense that maybe it can be solved. That gives me great hope because he's going to apply tremendous resources and a headset for solutions that allow some of these big problems to be solved."   Seeking new knowledge and being open to diverse opinions, questioning received wisdom, including being willing to have one's own opinions challenged are seen by many as crucial elements, with examples include being willing to question the value of a product or service to society, and the willingness to challenge traditional models of economic growth.

Maso (2010) says leadership in the sustainability era need to be able to cope with a "very rapid transformation of mentality. It is about looking outside [and staying] permanently engaged. There is a community activity which brings you a lot of information", he admits, but it's also about "talking and making sure you get enough challenge on what you do." There is also an intergenerational element, explains Maso: "Our children are looking at the world differently. They will have heard a different stream of information day in day out from businesses and from politicians and have a different attitude to this problem. If we are going to be in power in the next 10 or 20 years, we need to make sure we can respond to this demand properly."

Tate (2010) agrees, saying that sustainability leaders have an "enquiring mind to explore how things are connected".

Self-aware/empathetic

Other traits which feature strongly in the model include high levels of emotional intelligence, i.e. the ability to understand their own emotions and those of others, popularised by Goleman (1995), as well as sincerity, personal humility (Collins, 2001) and reflexiveness, i.e. the ability to see their own place in and influence on a situation. Scharmer (2008) observes that, "for those in leadership situations in business or government, the demands are so enormous that a deeper space of reflection becomes one of the anchor points that they use every day to be more effective."

Immelt echoes this need for humility. "What I always fear in GE is arrogance. What every big institution has to fear is arrogance. So somehow you have to bridge between what's worked classically versus what's gonna work in the future and that's never easy in a company or government or in a university." He goes on to demonstrate his own self-reflective ability when he says: "If you look at the world the way you think it's going to be, you're going to have to change yourself in order to get there."

Cheshire (2010) believes that "real leadership is about greater and greater self-awareness and being more and more authentically yourself". Then you can "use that knowledge or that mastery to put together and drive better teams – because you're more clear about who you are, what your impact is, what you have to offer and what you don't have and therefore you need." And by association that implies "the humility to listen and be aware as opposed to being on broadcast and an egomaniac, which I think is the traditional model of CEOs."

For Muehlfeit (2010) "the future curricula must be much more balanced between the traditional IQ and the EQ, the emotional intelligence, which I think for leaders will be very, very important. Over the next ten years, not just in ICT, but in general, the only way individuals, organisations and countries will succeed and compete will be through the ability to unlock human potential. I think as a leader for the future you would need to distinguish between motivations – you can motivate people's hands or their brains but you can't motivate their hearts; it takes real inspiration. I think that takes quite a different leadership if you wanted to make sure that people are using their hearts, following your vision."

Visionary/courageous

For many the most important trait of sustainability leaders is that they bring inspiration, creativity, optimism and courage to bear in the role, driven to produce results and possessing the ability to balance passion and idealism with ambition and pragmatism. Collins (2001) claims that a leader must retain absolute faith that they can and will prevail in the end, regardless of the difficulties, and at the same time confront the most brutal facts of their current reality, whatever they might be. Similarly, McDonough points out that that the early world explorers didn't know at first where they were going. "But they had to lead. It's a state of mind and not a map. That's the point. We have to go draw a map." (Quinn & Norton, 2004).

Neil Carson (2010) reminds us that being visionary and courageous isn't just about tackling risks, but also seizing opportunities, saying "Until everybody on the whole planet gets sustainability there's a real competitive advantage in moving in this direction aggressively. The more competitive the individual leader is in terms of natural inclinations then the more quickly they'll latch on to sustainability."

Ogg (2010) believes courageous leadership is critical: "Do we have the courage to put up a magnetic north out there for our company in an environment where everything changes every day? It's absolutely necessary. You have to have the courage to say, 'You know what, I don't necessarily know

the end destination, but I know it's gonna look something like this and we're going that way. That's one thing I love about Paul Polman. He says, 'Listen, I may be wrong, but I'm not confused'."

Styles

We make a clear distinction between traits of individual leaders and the style, or the the manner and approach which they use to provide direction, to motivate people and to implement plans. Lewin, Llippit and White (1939) carried out leadership decision experiments and identified three different styles of leadership: autocratic, democratic and laissez-faire[2]. One particularly influential model was Blake and Mouton's (1968) Managerial Grid, which concluded that leadership styles were all essentially varying combinations of concern for people and concern for tasks. Similarly, The sustainability leader typically draws on a combination of number of styles, as illustrated below.

Inclusive

The inclusive style of leadership is collaborative and participative. It is about building commitment through dialogue and consensus, democratic approaches, coaching and affiliative behaviour, i.e. promoting harmony among followers, helping to resolve conflict and making sure followers feel connected to each other (Goleman et al., 2002). Among the benefits of this approach, Amar, Hentrich and Carsten (2009) argue that innovation and efficiency can increase when executives give up some of their authority and give employees more control over their jobs.

Sustainability leaders focus on creating a culture and structure that provides peer support and encouragement and recognises achievement. The Centre for Effective Leadership et al. (2007) claims that a sustainability leader "builds a climate of support and accountability, rather than control". Similarly, Immelt (2007) says "Today, it's employment at will. Nobody's here who doesn't want to be here. So it's critical to understand people, to always be fair, and to want the best in them."

One way sustainability leaders demonstrate inclusivity is by building formal cross-sector partnerships, as well as innovative and inclusive collaborative processes such as social networking (Web 2.0). Flowers (2008), co-author of Presence, poses the challenge as a question, saying, "We know a lot about heroic action because that's in the past of leadership. But how do you have leadership in groups across boundaries, multi-nationally?"

Cheshire (2010) believes "leaders actually lead through teams. The idea that you have a superstar leader," he says, "is just nonsense. The whole aspect of selecting, developing and managing teams as the core challenge of leadership is something I feel particularly strongly about. A great definition of leadership, he goes on to say, is 'about getting people to go where they wouldn't have gone on their own. If they can get there on their own then they don't really need a leader. Equally, you can't always be dragging them in the opposite direction to where they want to go." Hence, leadership is about "the leader and the followers working together to get to certain outcomes".

Visionary

As the seriousness of the global challenges we face becomes ever more apparent and the talk turns to breakdown and potential collapse we look to our leaders to formulate a response. Thomas Homer-Dixon, in *The Upside of Down* (2006), says: "Turning a breakdown to an advantage will

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[2] Other popular styles of leadership that have been identified and studied include: charismatic (Musser, 1987), participative (Coch & French, 1948; Vroom & Yetton, 1973), situational (Hersey & Blanchard, 1999), transactional (Burns, 1978; Adair, 1984; Drucker, 1993), transformational (Bass, 1990), quiet (Collins, 2001) and servant leadership (Greenleaf, 1977).

require inspired leadership and a new story that articulates a positive vision grounded in what is best in the society's values and history" (p281).

The visionary style of leadership brings passion and charisma into the mix. It focuses on challenging and transforming people's perceptions and expectations and motivating them to transcend narrower forms of self-interest. This is often included in the definitions of 'heroic' leadership. The Centre for Effective Leadership et al. (2007) suggest that sustainability leaders build and share an inspirational vision, "helping others understand and feel how things will be different when the future vision is achieved" (19).

As an example, Ray Anderson, CEO of Interface, who inspired his team with the goal of creating the world's first sustainable or restorative company calls on "our people, our customers, our suppliers, our communities and our owners ... to learn and believe in a new and better way to be more profitable, and to reach for significance beyond success—a higher purpose for us all." He sees this as a process of inclusion: "Today for Interface, sustainability is broader than before: sustainability reaches out to embrace people, processes, products, place, the planet and profits - we now know that none can long be afforded allegiance at the expense of the others" (Quinn & Norton, 2004).

Ogg (2010) reflects that "there's so much going on now in the world that if you don't have amplification and time compression, then it doesn't rumble. So I call that leading big. If you've got something meaningful and important that you want to do, have the courage to lead big. You can't let it drool or dribble out into an organisation like ours and expect to have any impact. People are just too busy, there's too much going on. I think that the thunder is important too because people have to feel it. A message that is linked to emotion."

Creative

Equally pressing in the face of the need for transformational change is the need for real creativity to be part of a leader's style, playing the role of designer, architect, innovator, game-changer and transformer of the system. Such leaders are able to find the key leverage points in the system and are often referred to as 'transformational' leaders. For De Vries (2001), being creative fulfils the architectural role of the leader as designer.

One way for sustainability leaders to act as a systems re-designer is to adopt the principles of cradle-to-cradle production, internalising externalities and extending these principles to the supply chain. For example, Motorola demonstrated lifecycle thinking in mobile phones, with the launch of the world's first carbon neutral mobile phone – MOTO W233 Renew – early in 2009 (ADL, 2005). Similarly, Interface introduced the industry's first climate neutral carpet, Cool Carpet™, as well as the only carpet product to be designed using bio mimicry (Forum for the Future, 2006).

Altruistic

The emphasis of visionary leaders on transcending self interest and focusing on the collective or the good of the whole is also characteristic of the altruistic style of leadership, which is often characterised as servant leadership (Greenleaf, 1977; Kalungu-Banda, 2006) or quiet leadership (Collins, 2001). According to Greenleaf (1977), the best test for servant leadership is "do those served grow as persons; do they, while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servants?" Collins (2001) describes quiet leaders - in contrast to high profile, big personalities – as being self-effacing, quiet, reserved and shy; a blend of personal humility and professional will, more like Lincoln and Socrates than Patton or Caesar.

Muehlfeit (2010) reflects on the inspirational role that Bill Gates has had in Microsoft: "Bill is absolutely the model for people in Microsoft – especially with what he is doing with Africa in terms of the education, what he is doing in India. It is a very good example of a leader because he is basically saying, 'I will spend my money on the big issues that this planet is having.' For me personally – I've been with the company for 17 years – it's a huge role model for what to do to change the world for the better."

Radical

In contrast with the more low key style of quiet leadership, the Radical style of leadership is often far more visible, and is characterised by taking risks, acting like a revolutionary or activist and challenging of the status quo. These leaders are campaigners or crusaders for important causes. This can be referred to as missionary leadership. For example, founder of The Body Shop, Anita Roddick (2001) exhorted leaders to "be daring, be first, be different, be just" and is famously quoted saying: "If you think you're too small to have an impact, try going to bed with a mosquito".

Ultimately, leaders need to find their own, most effective style. Immelt (2007) says "leadership is an intense journey into yourself. You can use your own style to get anything done. It's about being self-aware. Every morning, I look in the mirror and say, 'I could have done three things better yesterday'."

Skills

A survey of business and sustainability leaders in the UK (Isos MORI, 2010) found that 99% recognise that developing the skills that will be needed for a sustainable economy is important to the future success of the UK economy, while 70% believe that the gap in skills for a sustainable economy will become one of the most pressing challenges facing UK businesses in the next 5 years. At the same time, only 15% think that developing the skills needed for a sustainable economy is well-established or partly established in UK businesses in general (as compared with 48% for their own organisation).

The skills for sustainability leadership, as per our Model, are introduced below.

Manage complexity

The sustainability leader is good at analysing, synthesising, and translating complex issues, responding to risk, uncertainty and dilemmas, recognising and seizing opportunities and resolving problems and conflicts. The report of the UK Launch Conference for the UN Decade of Education for Sustainable Development emphasises that in future, we will need to give future leaders the skill "to make sound choices in the face of the inherent complexity and uncertainty of the future" (Scott, 2006: 8). Part of this skill is learning to live with what Kalungu-Banda (2006) calls the Madiba paradox of simultaneous hope and despair.

Reflecting on the complex issues that leaders need to tackle in today's world, Immelt (2010) says: "We're in a period now of great volatility and where you have problems to solve - how do you take a Western, lets say health care system and fit it into India or how do you reduce carbon emissions in the developed world? We need people that know how to solve those problems."

Lopez (2010) believes that understanding sustainability is context-specific. "Some of these leaders speak about very noble things like democracy and justice. Well, justice according to who? Democracy according to who? I have been dealing with and managed to resolve Nestlé's differences with Greenpeace and I'm very happy that we've been able to establish a working relationship with

them, because, having led my company down in Malaysia gives you a perspective of what justice is, what democracy is."

Maso (2010) admits that sustainability is "a complex thing to conceive and everyone who comes with too simplistic views [is] not effective, because reality would prevail at some point in time. You have to accept that there is a huge complexity of knowledge and the way we frame it." In the face of such complexity, he continues, "you need to be quite sure you are pushing in the right direction. There is a quantum of uncertainty that needs to be not too high, so you can really have positive actions."

Communicate vision

The sustainability leader is adept at sharing a vision and facilitating dialogue that inspires action and creates shared meaning (active listening, emotional intelligence, reflection) and creating conditions that encourage learning from experience. In his research on "good to great" companies, Collins (2001) found that great leaders focus their companies and staff on what they deeply passionate about, what they can be the best in the world at and what drives their economic engine. Greenleaf (1977) talks about the ability of leaders to communicate a vision of hope. He says, "When I started to write on the servant-leader theme, I was trying to communicate a basis for hope ... with the intent that the combined influence might give a greater basis for hope than is now generally available to young people, and make for a better society".

The Ipsos MORI (2010) survey on the skills required for sustainability leadership in the UK found that for senior managers and board directors the ability to inspire change in a range of people, and consistently work towards a longer term vision are seen as most important. The ability to deliver "effective and persuasive communication using clear and accessible language" was seen as particularly critical skill for middle managers, function heads and customer-facing staff.

For Cheshire (2010) "the key thing for leadership agendas is the ability to genuinely communicate – which is actually a two way process of genuinely listening well and communicating well. Because in some pure sense we don't actually build anything with our hands; all we do as leaders is communicate. We basically get things to happen through communication. I do think that A-grade leadership is very hard to do without good communication skills. You can go so far if you're technically gifted but not terribly good at communication." He adds that communications is "most critical and most difficult in increasingly complex organisations."

Exercise judgement

The sustainability leader is known for making good and decisive decisions in a timely fashion, including prioritising, making difficult choices and handling dilemmas. A McKinsey (2009) survey showed that the kinds of leadership behavior that executives say will most help their companies through the current financial crisis, such as inspiring others and defining expectations and rewards, are the same ones they say will help their companies thrive in the future. At the same time, respondents reported that during the crisis they had seen far more leaders focus on monitoring individual performance —even though they see that as one of the least helpful ways of managing the crisis.

Reflecting on his experience in the insurance sector, Maso (2010) says: "If there is a tsunami during the Christmas period or people stranded because of volcanic ash and the press is covering the issue with a very specific angle, if you don't take the right stance or you can't communicate properly, you can destroy your franchise very quickly. That is true as well for an environmental message."

Challenge and innovate

Sustainability leaders are good at imagining possible solutions/futures or alternatives, thinking outside the box, and bringing creativity into thinking and practice. Newman (2005) notes that "the seemingly contradictory 'sustainable' and 'development' can be reconciled by accepting that due to two factors, the inherent complexity and uncertainty of human and natural systems, and the ability of human society to innovate, sustainable development must be dynamic." Scharmer (2008), author of Theory U, believes that "as a leader, you can create this other reality, this innovation space for yourself that keeps your spirit uplifted, that keeps you on this other energy loop", a process he describes as 'presencing'.

Think long term

The sustainability leader is skilled at envisioning and using strategic, long thinking and planning. They can see the whole, while not discounting the future. De Vries (2001) says "leaders shouldn't look in the mirror; they should look out the window" (82). Similarly, sustainability architect Bill McDonough eloquently reflects the inclusive, multi-generational, long term view that characterizes sustainability: "I feel emotionally connected to all the species ... my job is to be a tool of nature and not simply view nature as a tool. In every design decision I make, I ask 'Am I loving the children of all species for all time?'" (Quinn & Norton, 2004)

It is noteworthy that the top two sustainability issues identified by CEOs are education and climate change – both long term issues (Accenture & UNGC, 2010). Also reflecting this long term thinking, the UK Ipos MORI (2010) survey found that 45% of business and sustainability leaders claimed their organisation is engaging with the future workforce to develop skills for a sustainable economy (31% with schools and 36% with higher education institutions).

Carson (2010) believes that "companies think much longer term than governments, and good companies think much longer term than bad companies." He makes the point that in terms of sustainability, long-term thinking is especially important for leaders of sunset industries. "If you're into coal mining and turning coal into heat and power, then you've got to think of the long term. You're not really a coal miner, you're a power supplier. You can look at ways of making things more efficient. Then you can look at ways of sequestering the CO_2. You can make all these plans ahead of time and move in the right direction. Of course, one day you'll have to shut everything down and replace it with windmills or nuclear or something. And our experience is that the employees will really react very well to those kind of long-term plans. You get more out of the employees than you might expect if you embark on such a journey."

Lopez (2010) praises leaders for taking a long term perspective, but reminds us that the market does not always reward this behaviour in the short term. "A guy like Jeffrey Immelt, he has been losing market capitalisation since he took over from Jack Welch. His response has been truly, sincerely behaving as a leader for sustainability. He's now starting to recover. In other words, the long-term attitude that he took to all his decisions will eventually pay off, because sustainability comes hand in hand with prosperity, happiness and so on. [But] there are a number of different timelines."

According to Maso (2010), "you need to paint a picture which is a bit more forward looking. Obviously the picture is difficult to paint because we are not just there [yet]. It is an intellectual struggle to find a way to paint the picture in such a way that you have all the power of the forward looking vision but also all the constituents of a shorter action-oriented set of measures. If you can't bridge that, you fail as a leader but you fail also as an advocate for sustainable development." He concludes that "what we need are people who really understand both sides of the equation, not people who exploit the potential short term benefits of the politically correct set of ideas, but with

no capacity to push the agenda over time. You need to have that courage to put the cursor at the right level."

For Tate (2010), to be credible in the sustainability space "there needs to be a clear demonstration of a vision of 50 to 100 years from now. Sustainability must have a longer term vision and must be able to articulate that." Muehlfeit (2010) admits that "what is quite difficult, even for companies like Microsoft, IBM and others, while we want to be long-term oriented, obviously we are public companies and as you know, the stock exchange is very short-term oriented." Hence, he believes it is critical to "make sure that investors are at the same place, because I'm a strong believer that if you are an investor, if you think about that long-term, you'd rather invest into the company which has CSR as a priority and part of the business."

The Ipsos MORI (2010) survey on the skills required for sustainability leadership in the UK found that middle managers and function heads especially need sufficient knowledge about sustainability to translate it into successful business strategies, as well as effective and persuasive communication using clear and accessible language.

Knowledge

The Ipsos MORI (2010) survey on the skills required for sustainability leadership in the UK found that middle managers and function heads especially need sufficient knowledge about sustainability to translate it into successful business strategies, as well as effective and persuasive communication using clear and accessible language.

The most important areas of knowledge for sustainability leaders are introduced below.

Global challenges and dilemmas

Sustainability leaders cultivate knowledge about social and ecological system pressures and the connections between these systems and political and economic forces. Polman (2009) is typical of a leader that wants to play his part when he says: "This world has tremendous challenges. The challenges of poverty, of water, of global warming, climate change. And businesses like ours have a role to play in that. And frankly, to me, very appealing." This includes dealing with what Denis Meadows (2008) calls universal and global problems. Universal problems, such as pollution of a river/lake or poverty in a community, can happen anywhere in the world, but the costs/impacts and benefits/solutions tend to be felt locally, whereas global problems, such climate change or the spread of infectious diseases, create impacts around the world and can also only be solved through international collaboration.

The Accenture & UNGC (2010) survey of CEOs reveals that the top social/environmental issues they face are education (72%), climate change (66%), although resource scarcity (especially water) and health are also of increasing concern.

Immelt (2010) believes so strongly in the importance of understanding today's global challenges that he says every college/university student should spend their junior year focused on them. For instance, "you'd say ok you can pick one of three things: you can pick clean energy, affordable healthcare or solving poverty right, uplifting the bottom third." This is not a theoretical proposition. Immelt reflects on his daughter's future: "My daughter's graduating from college this year, so she's gonna be alive, let's hope in 2090 or 2080. She in some way is going to have to be a member of a generation that understands affordable healthcare."

Maso (2010) says, "I strongly believe that science will provide us with the right solutions which will create a link, the bridge, between the vision and the capacity to deliver it. And businesses will listen to science because through good science we can make good businesses. … We need to establish a strong science and technology platform that businesses can use, or the Western world can use, to eventually enact something to the benefit of everyone."

Muehlfeit (2010) says, "If you look at a couple of the really big challenges that we face as a society this century, I think probably the first challenge is inclusive globalisation.
The other global issue is the gap between the rich and poor, the inequality gap. The other one has to do with the emerging markets, because 20 years ago we had one billion people in the western style of capitalism, today it's probably 3 to 4 billion. We are moving more and more towards a multilateral world where there will be a couple of different super powers and we will need to have much higher global awareness. That's where I think leadership, if you take both the political leadership and also the corporate leadership, needs to go, to be much more aware of those global issues. I think this also needs to be taught in the business schools, it's not the case yet." He concludes that "what the business leaders need to do is to create a bigger picture and also to be much more connected to the big global challenges."

Ogg (2010) believes that "there is a 21st century context for leadership and that at any given moment in time there are differentiators that separate the good from the great. By 21st century context I mean it's no longer growth at any price. It's growth without stealing from the future generations. Companies are not going to get the right to grow unless they have a business model that enables them to be able to grow in a sustainable way, and also have the willingness to look at sustainability in the broadest possible context which is their full value chain."

Interdisciplinary connectedness

Sustainability leaders are aware of the relevance and interconnectedness of the physical sciences, social sciences, technology, business and other disciplines. It is clear that sustainability – with its underlying 'triple bottom line' concept of integrated social, environmental and economic performance – needs a deep appreciation for the ecological and social sciences and how they relate to one another.

Immelt (2010) reflects: "How do you develop leaders for this time period of volatility we live in today? One of the things that we are quite keen on is what we call systems thinking. It's people that can integrate between technology, market needs, public policy and so on. You have to integrate many things all at the same time."

Mervyn King, chair of the Global Reporting Initiative, reflects that "the five capital assets of financial, human, natural, social and technological have become critically interdependent. No entity can plan for the long term in the economy in which we find ourselves without taking account of these critical, interdependent assets." (KPMG, et al., 2010)

Change dynamics and options

A sustainability leader understands how complex systems work and the range of options for promoting beneficial change in them, e.g. financial markets, policy options and trends, technology options, consumer behaviour and attitudes, organisational dynamics, change models and metrics. Applied at the organisational level, Doppelt (2010) argues that "just as systems and elements interact within the natural environment in ways that lead to continual replenishment of the stocks and flows of nature, so by skillfully engaging and distributing power and authority among all those involved, sustainable governance systems create a positive reinforcing mechanism that

continually pushes and organsation towards a higher purpose of providing for socioeconomic wellbeing while conserving the environment."

Asked how he would like to be described or remembered as a leader, Immelt (2010) used just two words: drove change. Similarly, Carson (2010) is very aware of his role as a catalyst and the importance of understanding change dynamics. "What could easily happen is that when taking small steps to start with, they become large bounds later. Intuitively, I'm a practical being and I think that there's no other way of doing it, you can't go from 0 to 60 miles an hour in one bound. My instinct is that we've probably got 10 or 20 years, but also that things can accelerate once you get started. Businesses will lead consumers along this path, they'll start to get engaged and then governments will follow in the end."

For Ogg (2010) the key to leading change is link vision with capabilities: "When you put a vision out there, what's always frustrating is that people tend not to overlay it on the present. Look at the capability gaps that exist in order to frame what is required to get us from here to there." Using the example of Unilever's strategic goal of tripling the size of their 1 billion Euro business in Indonesia while simultaneously reducing their environmental impact, he says: "How do you solve any big problem? You break it down. Let's go to Indonesia. Let's get specific. Let's talk about the supply chain and what is it that you can do there? That's probably something that we can solve. If you think it all the way through, you can have a plan in Indonesia of two or three things which, if we focus on it and pay attention to it, we can have a business that's 3 billion. But we broke it down."

Organisational influences and impacts

Sustainability leaders generate knowledge of an organisation's full impact (footprint), finding and developing opportunities for value creation and new markets. Forum for the Future (2006) cites a number of examples. Nike's 2004 report took transparency to new levels by disclosing the full factory base to which its production is outsourced. AWG is using environmental accounting methods to understand the impact of sustainable development on its profits. The environmental accounts state how much it would cost to avoid or restore the environmental impacts of its energy use, waste disposal and water abstraction. And BT has created a key performance indicator (KPI) measuring its performance on ethics. The measure includes staff awareness of Business Principles, an external benchmarking survey and responses from the annual staff survey.

Lopez (2010) explains how they were able to convince Greenpeace to drop their campaign against Nestle. "It's been achieved by putting on the table a very technical view of the issues we are talking about. We've demonstrated that we have a logic, a path and a process that drives continuous improvement into topics of high concern, which in this case is deforestation. What matters is not that we agree on how the world should look at the end of all that and who should be in charge and how should people behave and so on, but that we agree that what we are doing truly delivers improvement and betterment of the sustainability of nature."

Diverse stakeholder views

Sustainability leaders are open to different world views and belief systems, both within communities and across geographic, cultural and political divides, and how to incorporate these appropriately. Reflecting this approach, Immelt (2007) says, "I may know an answer, but I'll often let the team find its own way. Sometimes, being an active listener is much more effective than ending a meeting with me enumerating 17 actions". Nike also embraces a stakeholder approach. In February 2004 Nike hosted its first global stakeholder forum to receive feedback on emerging corporate responsibility challenges. It found, for instance, that one key issue of concern was the potential impact of the end

of the World Trade Organisation's Multi-Fibre Arrangement, and initiated various support programmes as a result (Forum for the Future, 2006).

Part of the stakeholder participation approach is about building trust. Indeed, according to the recent CEO survey (Accenture & UNGC, 2010), Strengthening brand, trust and reputation is the strongest motivator for taking action on sustainability issues, identified by 72% of CEOs. 58 % of survey respondents selected the consumer among their most important stakeholders, even above employees (45%) and governments (39%).

Reflecting on Greenpeace's 2010 campaign against Nestle, Lopez (2010) says "my discussions with Greenpeace, which were a great learning exercise, allowed us to demonstrate to the people there that the work that we do [on sustainability] deserves a better understanding by them, which they have recognised. As you know, they have called off their campaign against Nestle."

Old top-down styles of leadership have changed in recent years, according to Maso (2010). "Through technology and the evolution of our mentality, we ask leaders to be much more capable of engaging in a web of relationships," he says. "We know the difference between being an influencer versus being a commander or controller." The stakeholder-orientation is seen in "a new breed of people which is emerging everywhere who have been trained in doing things differently" and can "carry messages that are very difficult to get across" and "require a very specific attitude, which is a rare but increasingly recognised skill."

Ogg (2010) says "the leader doesn't manage any more for a simple win win. You have to have a win for the business and a win for the community and a win for the consumer and … So, it's these ands that are important."

Leadership Actions

According to the Accenture & UNGC (2010) survey, CEOs believe that execution is now the real challenge to bringing about the new era of sustainability. Leadership action is particularly important, because the gap between sustainability aspirations or imperatives and actual performance remains wide. For example, IBM's (2009) sustainable enterprise survey of more than 220 senior executives worldwide shows that 60% believed CSR had increased in importance over the past year. Yet, there continues to be a significant gap between the business and sustainability goals companies are setting for themselves and what they are actually doing to attain them. Hence, "walking the talk" is the real test. As Polman (2009) says, "you cannot talk yourself out of things you've behaved yourself into".

The individual leaders and the actions they take have a self-evidently reciprocal relationship, each having the potential to impact and change the other.

Internal Actions

Sustainability leaders typically respond to the challenges and opportunities of sustainability through the following internal (organisation-oriented) actions:

Informed decisions

Sustainability leaders act in accordance with the best available knowledge. Polman (2009) says "the art of leadership is to look reality in the eye." Carson (2010) believes this is where institutions like CISL and universities generally have a role: "The urgency is something that you have to keep pointing out."

Strategic direction

Sustainability leaders provide a compelling vision and clear strategic goals. Ellsworth (2002) says: "At the heart of effective corporate leadership rests the responsibility to define, promote, and defend a meaning overarching purpose of corporate activity - one that ennobles those who serve it, stimulates individual commitment, and brings unity to cooperative action. This responsibility is at once strategic and moral" (327). As an example, Wessex Water in the UK has developed a vision that sets out what a fully sustainable water company would look like, using the Five Capitals Framework (natural, human, social, manufactured and financial) (Forum for the Future, 2006).

There is evidence of significant progress. 81% of CEOs—compared to just 50% in 2007—stated that sustainability issues are now fully embedded into the strategy and operations of their company (Accenture & UNGC, 2010)

Cheshire (2010) believes that "the sustainability leadership challenge right now is framing the question correctly so the organisation can engage with it. So what does it mean for my particular organisation? What is the sustainability to do list? What is the sets of risks and opportunities? Really from a leadership point of view, if you frame that right and get the right people on the case, that's your job done."

Muehlfeit (2010) says "we took a different approach from other companies – we put CSR as part of our business strategy.It was not like a charity, something nice to have. If you think about the big challenges like healthcare, education and the reforms we need, technology can make a huge positive difference."

Management incentives

Sustainability leaders align management and incentive structures (e.g. the governance system and corporate culture). The 2003 World Economic Forum survey of CEOs stated that several large businesses, including Diageo, Statoil, Siemens and Merck, were starting to build sustainability related performance criteria into their remunerations systems for executives, recognising that ultimate responsibility for future proofing the business lies at the highest level. Similarly, BT has a CSR governance framework that includes a management council, a Board level community investment committee and an environmental group. BT has also established an external Leadership Panel to review current and future issues (Forum for the Future, 2006). According to Immelt (2007): "There is no real magic to being a good leader. But at the end of every week, you have to spend your time around the things that are really important: setting priorities, measuring outcomes, and rewarding them."

The Accenture & UNGC (2010) interviews with CEOs found cases of companies beginning to integrate sustainability issues into their executive compensation packages, as well as design and innovation functions, more than in 2007. Despite this, the survey conceded that "full integration of sustainability into performance management frameworks and approaches to training and development remains some way off."

Performance accountability

Sustainability leaders demonstrate accountability and performance improvement (reporting, measurement, auditing). For example, Novo Nordisk include committing its Board to oversee continuous social, environmental and economic performance and creating dedicated positions relating to aspects of CSR such as the Senior Vice President of Stakeholder Relations (Forum for the

Future, 2006). Immelt (2007) says "good leaders are never afraid to intervene personally on things that are important. Michael Dell can tell you how many computers were shipped from Singapore yesterday".

Mervyn King, chair of the Global Reporting Initiative, takes a strong line on this, saying: "It has become essential that the G20 agree to legislate that all entities within their jurisdictions report or explain how they have impacted on society, the environment and the economy. Stakeholders need integrated reporting". In their research of mandatory and voluntary approaches to sustainability reporting in 30 countries, it was found that there are already 142 country standards or laws with some sustainability reporting requirement or guidance, of which 65% were mandatory (KPMG et al., 2010).

Sustainability leaders implement structures and processes for good governance, transparency and stakeholder engagement. Accountability does not have to be all about structures and controls however. Collins (2001) believes great leaders foster a culture of discipline: "When you have disciplined people, you don't need hierarchy. When you have disciplined thought, you don't need bureaucracy. When you have disciplined action, you don't need excessive controls" (13). According to Immelt (2007), "Enron and 9/11 marked the end of an era of individual freedom and the beginning of personal responsibility. You lead today by building teams and placing others first. It's not about you."

People empowerment

Sustainability leaders provide opportunities and resources for self-development , innovation in organisations and societal contribution, including instituting dialogues that draw on diverse expertise and perspectives. As Polman (2009) put it, "my definition of leadership is very simple: if you positively influence someone, you are a leader". Immelt (2007) sees it as allowing freedom within set boundaries: "The boundaries are commitment, passion, trust, and teamwork. Within those guidelines, there's plenty of freedom. But no one can cross those four boundaries."

Sustainability leaders deepen knowledge and skills and provide opportunities and resources for appropriate action. Greenleaf (2002) says: "The servant-leader is servant first. It begins with the natural feeling that one wants to serve. Then conscious choice brings one to aspire to lead. The best test is: do those served grow as persons; do they, while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servants?" Collins (2001) endorses the importance of the people aspect of change. Good-to-great leaders "first got the right people on the bus, the wrong people off the bus, and the right people in the right seats - and then they figured out where to drive it." (13).

In a recent UK research on the leadership skills required for a sustainable economy, 92% of the business and sustainability leaders agreed that businesses need to do more to prepare their people for the transition to a sustainable economy. Lopez (2010) agrees. "I'm an optimistic person, obviously. I would not do this job if I wasn't. I always think that people will eventually want to prosper and to do better. The sense of continuous improvement, for me, is very much linked to self awareness and also self esteem which is a key driver to happiness. I'm much more concerned with the way than with the end."

For Cheshire (2010) "the job of the leader is to create conditions for other people to succeed and to do that in a sustainable way so that the business endures. You might be technically brilliant, you might even be a great communicator, but unless you can genuinely put together a diverse and effective team and then manage it for performance, you're not actually an effective leader." Speaking about sustainability, he says: "If we've decided that this is our playing field and this is our

agenda and our view of where we want to go, how do I then mobilise people around this agenda? How do I get the right teams together on the right topics? How do I sustain the level of interest in this going forward? How do I make it become a business as usual part of the DNA as opposed to forcing it through?"

Learning and innovation

Sustainability leaders empower sustainability learning and innovation throughout the organisation (through education and recognition). The DfES Sustainable Development Action Plan 2005/06 describes sustainable development as "an innovation agenda, inviting us to rethink how we organise our lives and work so that we don't destroy our most precious resources". Gough (2003) of the Centre for Research in Education, University of Bath suggests that "if you wanted to test for a sustainable society, one of the questions you would ask would be: are people learning all the time in this society?" And according to Immelt (2007) "a leader's primary role is to teach. People who work with you don't have to agree with you, but they have to feel you're willing to share what you've learned".

Ninety-one percent of CEOs in a recent survey (Accenture & UNCG, 2010) reported that their company would employ new technologies (e.g., renewable energy, energy efficiency, information and communications technology) to help meet their sustainability goals over the next five years.

External Actions

Sustainability leaders typically respond to the challenges and opportunities of sustainability through the following external (stakeholder-related) actions:

Cross sector partnerships

Sustainability leaders engage in structured, sustained alliances for delivering solutions. Tennyson (2003) says "only with comprehensive and widespread cross-sector collaboration can we ensure that sustainable development initiatives are imaginative, coherent and integrated enough to tackle the most intractable problems" (180). According to a review of 122 partners across 27 partnerships for sustainability by Findlay-Brooks et al. (2009), the most common aims are improved water and sanitation for the poor and education, although issues of development, biodiversity and conservation are also included.

78% of CEOs believe that companies should engage in industry collaborations and multi-stakeholder partnerships to address development goals. Despite this finding, it is interesting to note that the influence of NGOs appears to be declining - just 15% of CEOs identified NGOs as one of the key stakeholders influencing their approach to sustainability, down 12% from 2007.

Sustainable products and services

Sustainability leaders focus R&D, sales and marketing on sustainability principles. Tomorrow's Leaders Group (2006) describes this as "developing technologies and products that enable the world to address social and environmental challenges". There are numerous examples of such products and services, from Toyota's Eco-Project programme (which produced, among other things, the Prius and a zero-waste production facility in New Zealand) and General Electric's 'Ecomagination' programme (which set the target of double revenues (a minimum of US$20 billion) from products and services providing customers with significant and measurable environmental benefits) to CEMEX's Patrimonio Hoy low cost housing initiative that has been growing at a rate of 250% per

year and has enrolled more than 20,000 poor families since its inception, with a goal to reach 1 million families in 5 years (Forum for the Future, 2006).

One key element of sustainable products and services is integrating sustainability requirements throughout the value chain. This remains one of companies' biggest challenges. Research by Accenture & UNGC (2010) finds a significant performance gap between those CEOs who agree that sustainability should be embedded throughout their subsidiaries (91%) and supply chain (88%), and those who report their company is already doing so (59% and 54%, respectively).

Sustainability awareness

Sustainability leaders are good at sharing knowledge and understanding with wider stakeholder groups (public, customers, etc.) and promoting appropriate responses. For example, Reckitt Benckiser found that almost two-thirds of that carbon footprint came from product consumption by its customers (ADL, 2005). Hence, it has an ongoing programme - as part of its Carbon 20 initiative in November 2007 to reduce its products' total carbon footprint by 20% by 2020 - of educating and enabling consumers to reduce their energy and water consumption in the home when they're using its products.

Context transformation

Seek to change the operating environment (context/policy frameworks/rules of the game), challenge the status quo, and create enabling conditions for positive action. For example, the mission of the Corporate Leaders Group on Climate Change – a coalition of CEOs across Europe – is "to trigger the step-change in policy and action needed both to meet the scale of the threat posed by climate change, and to grasp the business opportunities created by moving to a low climate risk economy". Similarly, CISL's (2006) Sustainable Economy Dialogue talks about moving from "dumb growth" to "smart growth" and recommends a range of business actions – from better governance to full cost accounting – to create an operating environment that enables sustainability.

In a recent survey (Accenture & UNGC, 2010) 54% felt that a cultural tipping point (when the majority of companies worldwide reach this new era in which sustainability is fully integrated across their global business footprint) is only a decade away—and 80% believe it will occur within 15 years.

Maso (2010) believes business has an important, but limited, role in transforming the political context, especially on changing the development path of emerging economies. "I am not sure that businesses will ever have enough credibility to engage in that dialogue with the Third World because businesses are not by definition macro thinkers, they are micro thinkers. Each of the business is there to optimise their own environment; they don't have the platform to create a political message. But," he continues "I think they are vital to support the political process because they anchor the whole process on something which is real. They make sure we keep in the political expression of this vision enough elements of concrete aspects to make it viable."

Stakeholder transparency

Sustainability leaders encourage openness and trust building in stakeholder engagement. For example, Harris (2007) highlights the role of leadership as one of the crucial elements in the capacity for stakeholder engagement of extractive companies in Australia on issues of sustainability.

KPMG's (2008) survey of global sustainability reporting trends found that 79% of the Fortune Global 250 Companies already disclose environmental, social and governance information, and 77% of those use GRI to do so.

Wim Bartels, Global Head of Sustainability Assurance at KPMG, says: "In this era of low trust in the corporate world, it would seem to be the duty of all parties to ensure that transparency is elevated to a level where an organisation's stakeholders can understand its comprehensive performance in such a way that trust is rebuilt and decisions can be taken in an environment where dialogue is an integral part of the business" (KPMG, et al., 2010).

Conclusion

Although we have presented sustainability leadership as a simple model, one of our most compelling and persistent findings was that sustainability leadership is fraught with paradoxes. As the competitive landscape shifts and global challenges evolve, companies that were lauded in the past as sustainability leaders may be discredited in the present. Similarly, today's targeted villains may end up being tomorrow's sustainability heroes and vice versa. The paradoxes of sustainability leadership are explored in more detail in the CISL (2011) report, entitled *A Journey of a Thousand Miles: The State of Sustainability Leadership 2011*.

In this report, we also present a simplified and synthesized version of the model presented in this paper, in which we propose seven key characteristics of sustainability leadership, including systemic understanding, emotional intelligence, values orientation, compelling vision, inclusive style, innovative approach and long term perspective.

In the final analysis, sustainability leaders realise that their task is, ultimately, about survival. Ogg (2010) says "This is what Paul Polman has been very, very clear about. This is not some aspirational dream to help us to try to recruit the best people in the world. At the end of the day this is a survival issue. We will not get the right to grow, and even worse, will not have the right to be in business, if we create a big environmental disaster. The world won't put up with it. There's too much awareness and amplification. You think about the impact a blogger can have when they choose to amplify their message".

References

Accenture & UN Global Compact, 2010. A new era in sustainability [CEO survey].

Adair, J., 1984. Action centred leadership. London: McGrawHill.

ADL, 2005. Innovation High Ground: How Leading Companies are Using Sustainability-Driven Innovation to Win Tomorrow's Customers. Arthur D Little.

Amar, A.D. & Hentrich, C., 2009. To Be a Better Leader, Give Up Authority. Harvard Business Review 87(12): 22-24.

Bass, B.M., 1990. From transactional to transformational leadership: Learning to share the vision. Organizational Dynamics, Winter: 19-31.

Blake, R.R. & Mouton, J.S., 1968. The Managerial Grid; Key Orientations for Achieving Production through People. Houston: Gulf Publishing Company.

Burns, J.M., 1978. Leadership. New York: Harper & Row.

Carson, N., 2010. Interview with Neil Carson, CEO of Johnson Matthey, conducted by Polly Courtice, 15 June 2010.

Center for Excellence in Leadership, London South Bank University & Forum for the Future, 2007. Leadership for sustainability: Making sustainable development a reality for leaders. Center for Excellence in Leadership (CEL).

Cheshire, I., 2010. Interview with Ian Cheshire, CEO of Kingfisher, conducted by Polly Courtice.

Coch, L. & French, J.R.P., 1948. Overcoming resistance to change. Human Relations 1: 512-532.

Collins, J., 2001. Good to Great: Why Some Companies Make the Leap... and Others Don't. HarperBusiness.

CISL, 2006. Sustainability Economy Dialogue Report. Cambridge Institute for Sustainability Leadership.

CISL, 2011. A Journey of a Thousand Miles: The State of Sustainability Leadership 2011. Cambridge Institute for Sustainability Leadership.

De Vries, M.K., 2001. The Leadership Mystique: Leading Behavior in the Human Enterprise. Financial Times/ Prentice Hall.

Doppelt, B., 2010. Leading Change Toward Sustainability: A Change-Management Guide for Business, Government and Civil Society, 2nd Edition. Sheffield: Greenleaf.

Drucker, P., 1993. The Practice of Management. Collins.

Ellsworth, R.R., 2002. Leading with Purpose: The New Corporate Realities. San Francisco: Stanford Business Books.

Fiedler, F.E., 1971. Leadership. General Learning Press.

Findlay-Brooks, R., Visser, W. & Wright, T., 2009. Corporate Social Responsibility and Regulatory Governance – Towards Inclusive Development? In Marques, J.C. & Utting, P. Corporate Social Responsibility and Regulatory Governance – Towards Inclusive Development? Palgrave.

Flowers, B.S., 2008. CISL Sustainability Leadership Research Interview. Cambridge Institute for Sustainability Leadership & W. Visser.

Forum for the Future, 2006. Are you a leader business? Hallmarks of sustainable performance. Forum for the Future: Stephanie Draper, Lena Hanson, Sally Uren.

Goffee, R. and Jones, G., 2009. Authentic leadership. Leadership Excellence, May.

Goleman, D., 1995. Emotional Intelligence. New York: Bantam Books.

Goleman, D., Boyatzis R. & McKee, A., 2002. Primal Leadership. Boston: Harvard Business Press.

Gough, S., 2003. Learning the Sustainability Lesson: Tenth report of session 2002-03. House of Commons, Environmental Audit Committee, Volume 2.

Greenleaf, R.K., 1977. Servant leadership. Paulist Press.

Greenleaf, R.K., 2002. Servant Leadership: A Journey into the Nature of Legitimate Power and Greatness. Paulist Press.

Harris, N., 2007. Corporate Engagement in Processes for Planetary Sustainability: Understanding Corporate Capacity in Non-Renewable Resource Extractive Sector, Australia. Business Strategy and the Environment 16: 538–553.

Hersey, P. & Blanchard, K. H., 1999. Leadership and the One Minute Manager. William Morrow.

Homer-Dixon, T., 2006. The Upside of Down: Catastrophe, Creativity, and the Renewal of Civilization. Island Press.

IBM, 2009. Leading a sustainable enterprise - Leveraging insight and information to act. IBM Institute for Business Value

Immelt, J., 2007. GE's Jeff Immelt on the 10 keys to great leadership. Fast Company, 19 December.

Immelt, J., 2010. Interview with Jeffrey Immelt, CEO of General Electric, conducted by Polly Courtice in February 2010.

Isos MORI, (2010). Skills for a Sustainable Economy The Business Perspective, Report for Business in the Community/EDF Energy.

Kalungu-Banda, M., 2006. Leading like Mandela: Leadership Lessons from Nelson Mandela. Double Storey Books.

Kouzes, J.M. & Posner, B.Z. , 2007. The Leadership Challenge, 4th Edition. Jossey-Boss.

KPMG, 2008. International Survey of Corporate Responsibility Reporting 2008. Amsterdam: KPMG.

KPMG, Unit for Corporate Governance in Africa, GRI & UNEP, 2010. Carrots and Sticks: An update on trends in voluntary and mandatory approaches to sustainability reporting.

Lewin, K., LIippit, R. & White, R.K., 1939. Patterns of aggressive behavior in experimentally created social climates. Journal of Social Psychology 10: 271-301.

Lopez, J., 2010. Interview with José Lopez, Executive Vice President Operations and GLOBE of Nestle, conducted by Polly Courtice, 17 June 2010.

Maso, P., 2010. Interview with Philippe Maso, CEO of AXA, conducted by Polly Courtice.

McCall, M.W. Jr. & Lombardo, M.M., 1983. Off the track: Why and how successful executives get derailed. Greenboro, NC: Centre for Creative Leadership.

McKinsey, 2009. Leadership through the crisis and after: McKinsey Global Survey results. McKinsey Quarterly, October.

Meadows, D., 2008. CISL Sustainability Leadership Research Interview. Cambridge Institute for Sustainability Leadership & W. Visser.

Morrison, A.J., 2000. Developing a global leadership model. Human Resource Management 39(2&3): 117–131.

Muehlfeit, J., 2010. Interview with Jan Muehlfeit, Chairman of Microsoft Europe, conducted by Polly Courtice.

Musser, S.J., 1987. The determination of positive and negative charismatic leadership. Grantham: PA: Messiah College.

Newman, L., 2005. Uncertainty, innovation, and dynamic sustainable development. Sustainability: Science, Practice & Policy 1(2).

Ogg, S., 2010. Interview with Sandy Ogg, Chief Human Resources Officer for Unilever, conducted by Polly Courtice.

Peters, T., 1989. Thriving on Chaos: Handbook for a Management Revolution. HarperBusiness.

Polman, P., 2009. McKinsey conversations with global leaders: Paul Polman of Unilever. McKinsey Quarterly, October.

Quinn, L. & Norton, J., 2004. Beyond the bottom line: Practicing leadership for sustainability. Leadership in Action, March/April.

Roddick, A., 2001. Business As Unusual. Thorstens.

Scharmer, O., 2008. CISL Sustainability Leadership Research Interview. Cambridge Institute for Sustainability Leadership & W. Visser.

Scott, B., 2006. Report of the UK Launch Conference for the UN Decade of Education for Sustainable Development. Available at www.unesco.org.uk/UserFiles/File/DESD/ConferenceReport_BillScott4.pdf

Sustainability Leadership Institute, 2011. Website www.sustainabilityleadershipinstitute.org [Accessed 15 July 2011]

Tannenbaum, R. & Schmidt, W.H., 1973. How To Choose a Leadership Pattern. Harvard Business Review, May-June.

Tate, T. 2010. Interview with Truett Tate (2010), Group Executive Director, Wholesale, for Lloyds Banking Group, conducted by Polly Courtice.

Tennyson, R., 2003. The Partnering Handbook. London: IBLF.

Tomorrow's Leaders Group, 2006. A manifesto for tomorrow's global business. Tomorrow's Leaders Group.

Tuppen, C. & Porritt, J., 2003. Just Values: Beyond the business case for sustainable development. BT & Forum for the Future.

Vroom, V.H. & Yetton, P.W., 1973. Leadership and decision-making. Pittsburg: University of Pittsburg Press.

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Since publication of this report, the Cambridge Programme for Sustainability Leadership has changed its name to the Cambridge Institute for Sustainability Leadership. This has been updated within the report.