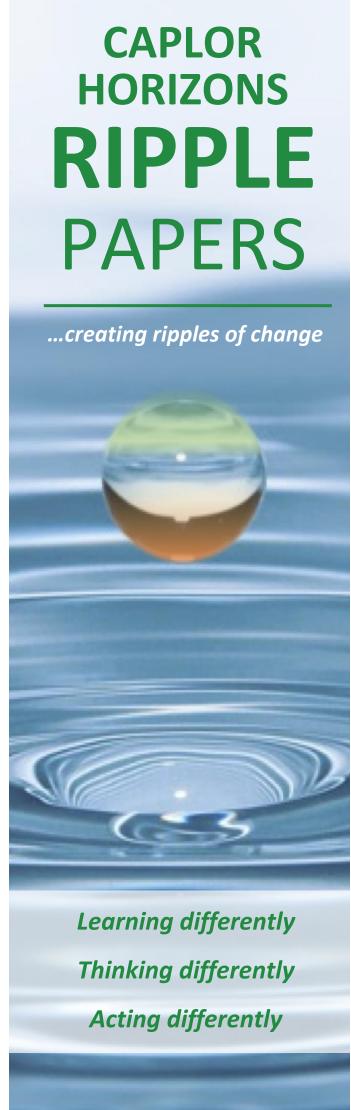


Governance and Long Term Environmental Challenges

Dr Peter Moore – Governance Advisor





Governance and Long Term Environmental Challenges

What on Earth can our Board do...?

Contents

Summary	3
Introduction	4
What are the key long term environmental challenges?	4
Adding social and political conditions	6
What have long term environmental challenges got to do with us?	8
But it's difficult	10
Why the board?	10
What can the board do?	12
1. How board meetings are conducted	12
2. How the board works with management	14
3. The role of the Chair	17
4. The role of committees	17
5. How the board works outside meetings	17
6. Board recruitment and development	18
Links to the Caplor House	
Conclusion	21

Summary

This paper is about the governance of organisations in the context of long term environmental challenges. It particularly focuses on the not-for-profit sector. However, it is also relevant to governance in the business and public sectors. People in governance roles - whatever the sector and whatever the size of the organisation - have important responsibilities to think short, medium and long term and to contribute towards achieving a sustainable future.

Several daunting environmental challenges threaten humankind in the medium to long term. Among them, climate change stands out for its difficulty and importance, as reflected in the outputs of the COP27 in 2022. On the opening day of the conference, UN Climate Change Executive Secretary Simon Stiell called for aligning "every corner of human activity" with the 1.5°C goal: "Everybody, everywhere in the world, every single day, doing everything they possibly can to address the climate crisis."

After introducing long term environmental challenges and their relevance to boards, this paper suggests practical examples of possible board responses to these challenges. Here is a summary of some of the key points, expressed as questions for the board to consider:

- 1. How board meetings are conducted
 - a. Do our agendas reflect long term environmental challenges?
 - b. How can our decisions take into account these challenges?
 - c. How could these challenges be brought vividly into meetings?
 - d. Do meeting logistics respond to environmental needs?
- 2. How the board works with management
 - a. How can long term environmental challenges be reflected in the board's work on context, mission, strategy, risk, policies and oversight of management?
 - b. How should we measure our progress in relation to these challenges?
 - c. Are we supporting a culture that takes these challenges seriously?
- 3. The role of the Chair: Are environmental challenges reflected in how the Chair guides meetings, works with board members and works with the Chief Executive?
- 4. The role of committees: Should there be an environmental committee or taskforce? Or should the issues be included in the remit of a risk or audit committee?
- 5. How the board works outside meetings: Do visits to programmes and the board's social activities reflect concerns about environmental challenges?
- 6. Board recruitment and development: How do environmental challenges affect the recruitment, induction, development and performance evaluation of board members?

Introduction

Human institutions and individuals struggle with the tension between the important and the urgent. This is especially true of the boards of non-governmental organisations (NGOs) and social enterprises because of the overall responsibilities of boards and the values-driven objectives of such organisations. Boards need to give time, energy and attention to matters such as how the behaviour of donors is changing and restrictions on the space in which civil society operates. Such matters, often long term and externally oriented, are easily driven off the agenda by immediate and internal pressures such as understanding the last quarter's figures, tackling staff problems and approving plans and policies.

The ultimate challenge to boards' focus on longer term important issues is posed by environmental challenges that are long term, global, complex and uncertain. This paper is an attempt to suggest practical examples of possible board responses to these challenges. It introduces the variety of key long term environmental challenges through the framework of "planetary boundaries". These are of importance to all organisations, especially NGOs and social enterprises, including those of small and medium size. This paper relates planetary boundaries to six main functions of boards and then suggests practical responses structured around six types of board activity. The aim is to offer questions and points to consider rather than prescribing solutions. There are few simple answers but much can be done.

What are the key long term environmental challenges?

A group of scientists led by Johan Rockström from the Stockholm Resilience Centre and Will Steffen from the Australian National University described major long term environmental challenges as "planetary boundaries". These were nine limits outside which there were likely to be runaway effects and tipping points with dangerous and unpredictable consequences. Publication in 2009¹ was followed by an update and extension of the model in 2015².

The limits concern the following³:

No.	Global Process	Measurement
1	Climate change	Atmospheric carbon dioxide concentration
2	Biosphere integrity a) Genetic diversity b) Functional diversity	a) Extinction rate (number of species per million per year) b) Index of plant and animal population changes from preindustrial levels caused by humanity

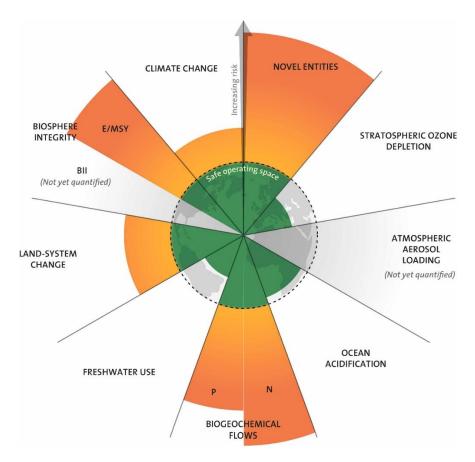
¹ Rockström, J et al, "A safe operating space for humanity", Nature 461 (7263): 472–475, 24 September 2009.

² Steffen, W et al, "Planetary Boundaries: Guiding human development on a changing planet", Science 347 (6223), February 2015.

³ Modified from Steffen, W et al, "How Defining Planetary Boundaries Can Transform Our Approach to Growth", Solutions Journal 2 (3) May 2011.

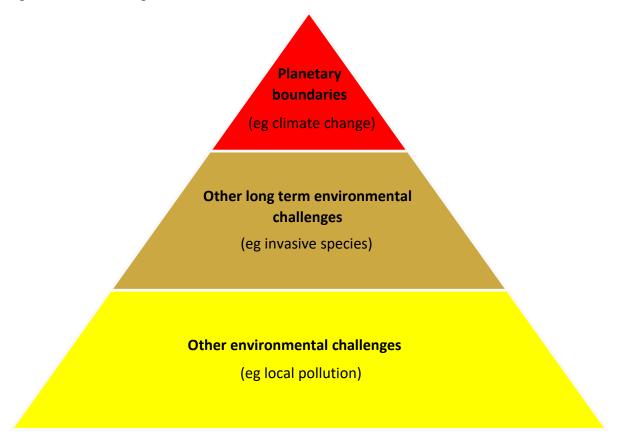
3	Ozone depletion	Stratospheric ozone concentration	
4	Ocean acidification	Acidity of surface seawater	
5	Biogeochemical flows a) Nitrogen cycle b) Phosphorus	 a) Nitrogen removed from the atmosphere for human use (millions of tonnes per year) b) Phosphorus flowing into the oceans (millions of tonnes per year) – mostly from fertilisers, as with nitrogen 	
6	Land-system change	Remaining forest cover (per cent of original)	
7	Freshwater use	Global human consumption of water (cubic km per year)	
8	Atmospheric aerosol loading	Aerosol optical depth: a measure of the extinction of sunlight by dust and haze.	
9	Novel entities	Concentration of substances new to the environment (eg plastics or new organisms) or made more common (eg heavy metals)	

The following diagram shows how humankind has already breached five of the boundaries⁴:



⁴ Ferretto et al, www.sciencedirect.com/science/article/pii/S2213305422000285#bib52

The relatively stable Holocene epoch of the last 11,700 years is the only state of the earth system that we know for certain can support advanced human societies. Human activities are affecting this system by breaching the planetary boundaries, thus potentially jeopardising the survival of humankind. It is therefore essential that humankind pays greater attention to these boundaries in particular among the many environmental challenges. This paper explores how boards can respond. The hierarchy of priorities in terms of our survival can be summed up in the following diagram which divides all environmental challenges into three categories:



Adding social and political conditions

Kate Raworth⁵ has added to the outer set of planetary boundaries an inner set of underlying human needs such as health, education and income to create a (US-type) "doughnut" of conditions within which humanity can thrive. Her "social foundation" of needs is as follows, with some examples of possible indicators of the extent to which the needs are not met:

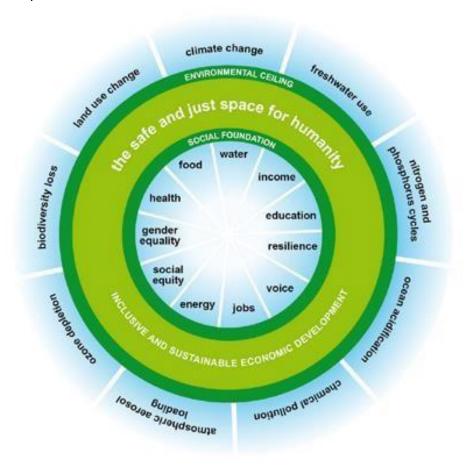
No.	Social Foundation	Illustrative Indicator of Global Deprivation
1	Food security	Population undernourished
2	Income	Population living below \$2.15 per day (current World Bank global poverty line)

[.]

⁵ www-cdn.oxfam.org/s3fs-public/file_attachments/dp-a-safe-and-just-space-for-humanity-130212-en_5.pdf

3	Water and	Population without access to an improved drinking water
	sanitation	source
4	Health care	Population without regular access to essential medicines
5	Education	Children not enrolled in primary school
6	Energy	Population lacking access to electricity
7	Gender equality	Employment gap between women and men in waged work
		(excluding agriculture)
8	Social equity	Population living on less than the median income in relatively
		unequal countries (Gini coefficient exceeding 0.35 ⁶)
9	Voice	Population living in countries perceived (in surveys) not to
		permit political participation or freedom of expression
10	Jobs	Labour force not employed in decent work
11	Resilience	Population facing multiple dimensions of poverty

The doughnut can be pictured as shown below:



⁻

 $^{^{6}}$ Gini coefficients in 2017-2019: Netherlands 0.28, France 0.32, UK 0.35, USA 0.41, Brazil 0.53.

Forum for the Future⁷ had earlier offered a circular model, with three rings around a bullseye, as a "Framework for a sustainable economy in 2040":

- Outer ring: 12 environmental boundaries similar to the planetary boundaries of Rockström and Steffen above, with the addition of stocks of renewable and non-renewable resources.
- Middle ring: 16 social conditions, half of which are similar to those in Raworth's social foundation above.
- Inner ring: 15 characteristics of an economy which respects the environmental and social boundaries of the other two rings.
- Bullseye: "A resilient, sustainable economy that maximises quality of life for all, so that people can develop their full potential and lead productive, creative lives within environmental limits."

These models can be seen as a development of the idea of a **Triple Bottom Line** of three sets of measures proposed by John Elkington nearly 30 years ago⁸: People (social value), Profit (economic value) and Planet (environmental value). Elkington's idea was focused on private sector companies but the same need for a broad understanding of the purpose of organisations applies equally to NGOs. Indeed progress in reporting by some companies such as Unilever and Marks & Spencer suggests that many NGOs have some catching up to do. The development of the triple bottom line concept and the implications for strategy and management are explored in a complementary paper by Caplor Horizons⁹. Many aspects of the Planet and People dimensions reflect respectively the planetary boundaries and the social foundation in Raworth's doughnut model and the outer two rings of the Forum for the Future model.

What have long term environmental challenges got to do with us?

Many NGOs, social enterprises and, indeed, private sector companies have objectives that can be related to Raworth's social foundation and Forum for the Future's social conditions. These models tell us that this is not enough. Many NGOs are driven by a concern for human rights and inevitably they therefore tend to focus on the People part of the triple bottom line but these organisations also have to consider the key long term environmental challenges, the planetary boundaries. In summary, this is because the values, objectives and enlightened self-interest of most NGOs and social enterprises require them to recognise and respond to planetary boundaries. In more detail, the reasons include the following:

• The **missions** of some NGOs, notably environmental NGOs, directly relate to some or all of the planetary boundaries.

⁷ Forum for the Future, "Sustainable economy in 2040: a roadmap for capital markets", September 2011

⁸ Elkington, J, "Cannibals with Forks: The Triple Bottom Line of 21st Century Business", Capstone, 1997

⁹ Caplor Horizons, "The Essentials of a Sustainable Future".

- The explicit and implicit values of many NGOs and social enterprises express, or are at least aligned with, concern about the long term sustainability of humankind's use of resources.
- The personal values of board members and staff often echo this concern, so that the organisation's response to planetary boundaries is important for their **recruitment**, **motivation** and **retention**.
- **Beneficiaries and partners** are asking for action: climate change is a major concern of many of the people with whom international development NGOs work.
- The Glasgow Climate Pact at COP26 in 2021 recognised "the important role of indigenous peoples, local communities and civil society, including youth and children, in addressing and responding to climate change, and highlighting the urgent need for multilevel and cooperative action" 10.
- The **consequences** of breaching the planetary boundaries directly or indirectly threaten to undo the work of many NGOs: for example, changes in land use are sweeping thousands of plant and animal species to extinction.
- NGOs and social enterprises often aspire to act as role models for the private and public sectors: they cannot urge car companies to use resources responsibly while throwing away old computers into landfill.
- Action on widely accepted priorities brings credibility and legitimacy to NGOs: visitors to an NGO
 office will notice the bicycle park that dominates the entrance.
- **Donors and supporters** of NGOs frequently also support other organisations or campaigns relating to one or more of the planetary boundaries: they will worry about the greenhouse gas emissions of livestock as well as giving a goat for Christmas.
- NGO activities may offer opportunities to promote awareness and actions relating to planetary boundaries, for example in educational work and advocacy to governments.
- Global systemic problems require solutions that frequently involve **action at all levels** from global to local and from governmental through organisational to individual. An NGO cannot be exempt: as part of society, it too must use less water.
- The goals of many NGOs and social enterprises are included in or close to parts of the Sustainable
 Development Goals¹¹ which were adopted at the UN Sustainable Development Summit on 25–27

 September 2015. Taken together, they express the systemic relationships between poverty,
 exclusion and the environment.

¹⁰ Glasgow Climate Pact: https://unfccc.int/sites/default/files/resource/cop26_auv_2f_cover_decision.pdf

¹¹ UN website: https://sdgs.un.org/

Plausible solutions often involve changes in behaviour and changes in the ways in which political
and social power are used and expressed – the kind of changes that NGOs are frequently
advocating within their areas of expertise. It may often make sense to link together different but
related campaigns for change.

But it's difficult

The importance of the key long term environmental challenges, the planetary boundaries, is matched by the difficulty of responding to them:

- The problems are global, either entirely (eg climate change) or with regional manifestations as well (eg pollution by novel entities).
- They require a long term perspective: both causes and effects usually take place over decades.
- They concern complex systems. In most cases an undesirable outcome is linked to several primary and intermediate causes. This makes it difficult to pin down responsibilities and preventative actions.
- Action in one sector or country can be rendered ineffective by inaction or contrary actions in another.
- In some cases, such as climate change, effective action is likely to require large scale changes in behaviour and economic systems.
- The combination of complexity, global scale, regional variation and long timescales means that the data are incomplete in every case and many important features are only partly understood or controversial.
- These difficulties provide plenty of excuses for NGOs, like governments, to take little or no action themselves while calling for others to do more.

Why the board?

The board is ultimately responsible for making sure that the organisation delivers what it was set up to achieve within the context in which it operates. For the reasons given above, NGOs and social enterprises have to recognise and respond to planetary boundaries. Therefore, given the importance and complexity of the issues raised by planetary boundaries, the board has to examine them and agree how to respond.

Issues raised by planetary boundaries arise within all the main functions of NGO and social enterprise boards, which can be summarised as follows with our 5M Model:



The following examples illustrate the kind of issues that arise within each of these five functions of effective governance:

1. Mission

- O Does the board build planetary boundaries into its scanning of the context?
- O What does "long term" mean for the people we work with?
- Does the mission acknowledge the systemic nature of target problems, so that we avoid solving one problem while exacerbating another?
- Is the strategy flexible enough to respond to new information that will continue to emerge on planetary boundaries?

2. Monitoring implementation of the strategy

- How do we take account of the actions of others on planetary boundaries when we study our impact?
- What do we measure to track our own contributions to processes that threaten planetary boundaries?

3. Money and risks

- o What are the financial costs and benefits of action on planetary boundaries?
- o What is our exposure to reputational risk linked to planetary boundaries?

4. Managing the chief executive

- What should we seek in a new chief executive to ensure they can respond effectively to planetary boundaries?
- How should we assess what support our chief executive needs to deliver our plans relating to planetary boundaries?

5. Maintain board development

- What are the skills, experience and knowledge relating to planetary boundaries that we need to have on the board?
- How do we ensure that our meetings have the right balance between long term issues and short term monitoring of the implementation of our strategy?

What can the board do?

The rest of this paper explores practical examples of possible board responses to the challenge posed by planetary boundaries. Many of these practices are also suitable for tackling other long term issues such as changes in the global or national political context but in this paper the examples focus on planetary boundaries. It seems helpful to categorise these examples by types of board activity, which often combine several of the governance functions listed above:

- 1. How board meetings are conducted
- 2. How the board works with management
- 3. The role of the Chair
- 4. The role of committees
- 5. How the board works outside meetings
- 6. Board recruitment and development

1. How board meetings are conducted

The board's most visible activity is holding board meetings to discharge the functions listed in the previous section. How board meetings are conducted can be broken down into component activities, each of which offers scope for responding to the challenge posed by planetary boundaries:

a. Setting the agenda

i. There is a choice to be made about discussions of planetary boundaries: should they be **mainstreamed** into most other items or should they be set apart for a separate focused debate? If mainstreamed they may be crowded out by more urgent matters while if separately discussed their impact on other decisions may be weakened. As with

gender and risk, other board concerns that span much of the content of board discussions, I believe it is best to do both, but there is certainly a choice to be made.

- ii. If the choice is to reserve some separate time, **how long and how often**? This time can be reserved both through an annual board work plan or calendar and at the level of individual meetings preferably not always at the end where it will get squeezed! This is easily said but it is not easy to decide how much time or what proportion of time.
- iii. There is also a **choice within the planetary boundaries**: which of the nine planetary boundaries the organisation should focus on. Most of them are relevant to environmental and international development NGOs. For example support to smallholder agriculture may involve livestock emitting greenhouse gases, changing land use, using fertilisers and diverting or extracting freshwater. Housing NGOs might consider the implications of sources of land, heat and water. A cancer charity could be involved with both the pollution caused by waste radioactive materials and the links between cancer and particles in the air (the atmospheric aerosol loading boundary).
 - iii. Boards often find it helpful to be explicit about whether an agenda item is for **information, discussion or decision**. The complexity and, for some boards, unfamiliarity of planetary boundaries may require more emphasis on receiving and discussing information at first. This will then help the board to decide what the key decisions might be.

b. How decisions are made

- i. It is easy for a small number of factors to sway a board decision. How best can the longer term and broader issues raised by planetary boundaries be taken account of? It may be helpful to agree a general set of criteria for decision making including, for example, links to mission, cost, risk and impact on planetary boundaries.
 - ii. A related approach is to require **any paper proposing a decision** to address planetary boundaries explicitly and separately. This could be a kind of environmental impact statement, broadened to take account of effects of the long term environment on the decision as well as the effects of the decision on the environment.

c. Bringing the mission and context into the meeting

Meetings usually involve a small number of people, most of them on just one computer screen or in just one place. A continuing challenge is how best to infuse and enthuse the meeting with the context of an NGO's work, its mission and the perspective of those with whom it is working. Some ways of doing this in relation to planetary boundaries include:

i. Bringing in (online or physically) people such as partners who can give their perspective directly and powerfully

- ii. Inviting technical experts to meetings to introduce and lead discussions
- iii. Showing posters or YouTube clips in the breaks or at the start, for example illustrating where the earth is and where it is heading in each of the planetary boundaries
- iv. Displaying or giving board members symbolic objects such as masks dirty with smoke particles or bags of partly broken down plastic from the sea

d. Where, when and how the board meets

- i. Frequent face-to-face meetings with many participants making long journeys at rush hour mean higher costs in carbon dioxide and aerosol emissions as well as money and the time of board members. Many boards and, especially, smaller groups like committees, find that **phone and online** links are adequate provided there is a face to face meeting at least once a year to sustain personal relationships. It may also be possible to reduce the environmental costs of meetings by changing their time and frequency.
- ii. Materials: If the local tap **water** is safe, is the water at face-to-face meetings tap water in jugs or water in throwaway bottles? Even at a face-to-face meeting, do any of the board **papers** really need to be printed? Can they be shorter?

2. How the board works with management

Many of the functions of the board listed in the previous section can be expressed here:

- a. Working with management on understanding the context:
 - i. Do we build planetary boundaries into our scanning of the context?
 - ii. What does "long term" mean for the people we work with?
- b. Developing the organisation's mission and strategy:
 - i. Does the mission acknowledge the systemic nature of target problems, so that we avoid solving one problem while exacerbating another?
 - ii. Is the strategy flexible enough to respond to new information that will continue to emerge on planetary boundaries?
 - iii. Do planetary boundaries suggest new opportunities such as new areas of work, new partners, new sources of income or new types of donor?

- c. Identifying and minimising risk including financial sustainability
 - i. What is our exposure to reputational risk linked to planetary boundaries?
 - ii. What are the financial costs and benefits of our actions on planetary boundaries?
- d. The board's role in approving **policies** is another key lever for influencing effective response to planetary boundaries. Some relevant policies include:
 - i. Procurement policies: how do we ensure that companies that supply goods and services are responsible in their approach to planetary boundaries?
 - ii. Financial policies: are we happy with our bank's lending to fossil fuel projects? What about the investment of our reserves?
 - iii. Recycling and waste disposal policies
 - iv. Donor policies: what criteria are used to decide whether potential donor organisations are responsible in their approach to planetary boundaries?
 - v. Fundraising policies: what are the attitudes of potential celebrity supporters?
 - vi. Partner policies: what criteria are used to decide whether potential partners are responsible in their approach to planetary boundaries?
 - vii. Health and safety policies, for example relating to air quality in the office
 - viii. Transport, expenses and benefits policies, for example provision for cyclists and encouraging the use of public transport
 - ix. Other environmental policies, for example to minimise the use of paper and water and to replace travel by online meetings.
- e. The choice of measures used to monitor organisational performance is a key opportunity to build in recognition of planetary boundaries and to encourage appropriate action. Work by Caplor Horizons explored reporting on the triple bottom line of three sets of measures: People (social value), Profit (economic value) and Planet (environmental value). A board may find helpful the following tips for sustainability reporting when thinking about how management reporting should reflect planetary boundaries:
 - i. Have a sustainable organisational purpose and strategy and build your measures around them, measuring what is most important to the organisation
 - ii. Choose measures that express and support the desired organisational culture, including triple bottom line thinking and honesty about bad news

- iii. Use existing indices and frameworks such as the planetary boundary measures published by Rockström and Steffen, Raworth's social foundation and Forum for the Future's framework (see references 1-5 and 7 above)
- iv. Use consistent and standardised measures such as the Global Reporting Initiative (GRI) Universal Standards¹¹ to facilitate benchmarking with and learning from other organisations
- v. Seek short term measures of long term effects as well as immediate outcomes
- vi. Combine quantitative measures for ease of collection, comparison and reporting with qualitative measures that bring the information to life
- vii. Make the reporting accessible and engaging as well as informative, as otherwise no one will want to read it
- viii. Collaborate with third parties for verification and assurance to add integrity to reporting
- f. The question of **attribution** is an especially difficult and important part of measuring and reporting on the organisation's impact: how do we take account of the actions of others on planetary boundaries when we study our impact?
- g. Are there measurements that could act for the board as **key performance indicators** to give a regular summary of aspects of progress?
- h. Recruiting, managing, supporting and challenging the chief executive are key board roles that offer major opportunities to influence the organisation's response to planetary boundaries:
 - i. What should we seek in a new chief executive to ensure they can respond effectively to planetary boundaries?
 - ii. How should we assess what support the chief executive needs to deliver our plans relating to planetary boundaries?
 - iii. A difficult balance for the board to achieve is that between challenging the chief executive on longer term issues such as planetary boundaries and ensuring delivery of high quality programmes today.
- i. As the governing body, the board has a key role in **establishing the values and influencing the culture** of an organisation. For example, the questions that board members ask, inside and outside formal meetings, are powerful indicators to staff of what matters. If board

_

¹¹ www.globalreporting.org/standards/standards-development/universal-standards/

members visiting a housing project ask questions about carbon dioxide emissions or the destination of waste materials they convey a message as strong as a formal policy. A regular staff climate/attitude survey is one way of checking how staff feel about planetary boundaries.

3. The role of the Chair

Three key parts of the Chair's role, listed below, offer opportunities for responding to planetary boundaries:

- a. **Guiding meetings and the board's culture**: The Chair has the leading role in ensuring that how meetings are conducted (item 1 above) and how the board works with management (item 2 above) acknowledge the importance of planetary boundaries. Giving time and energy to longer term issues is not easy in a meeting with a crowded agenda but if the Chair does not, others will find it much harder.
- b. Working with board colleagues both in meetings and outside them offers many opportunities for reinforcing priorities. A particularly important opportunity is any form of regular one to one contact such as an annual discussion with the Chair of how the board member feels they are contributing.
- c. Working with the Chief Executive, the Chair is the key link between board and management, with corresponding influence on how systematically planetary boundaries are acted on, through requests, guidance, questions, suggestions and even tone of voice: "Oh and do you think we really have to look at what this means for emissions of CO2?"

4. The role of committees

- a. It is not easy to **choose what is focused on by a committee** and what is only considered by the whole board. Finance is often seen as needing the attention to detail that a committee can offer, but there are arguments both ways on whether, for example, risk or programmes are so important that the whole board should be involved throughout. Should there be a planetary boundaries committee?
- b. An alternative to a committee is a **temporary task force or working group**. This might be a good way to start for a board that has not yet become familiar with what planetary boundaries are and the issues around them.
- c. Depending on what measures are used (see 2e above) another approach is add the monitoring of planetary boundary measures to the remit of a **finance**, **risk or audit committee**.

5. How the board works outside meetings

Outside meetings of the board and its committees, the board works in other ways such as visiting programmes, getting together socially and discussing issues informally by phone and e-mail:

- a. The **choice of which programmes to visit** as a board or as individual board members, including for induction, is another powerful expression of priorities, as well as the questions asked on visits, as in 2i above.
- b. **Social gatherings** and informal discussions are very important for building the relationships and mutual understanding that make a board work well. Without being a killjoy, one should at least be aware of the contradictions involved in worrying about climate change in a meeting and then feasting on beef steak with asparagus flown in from Peru.

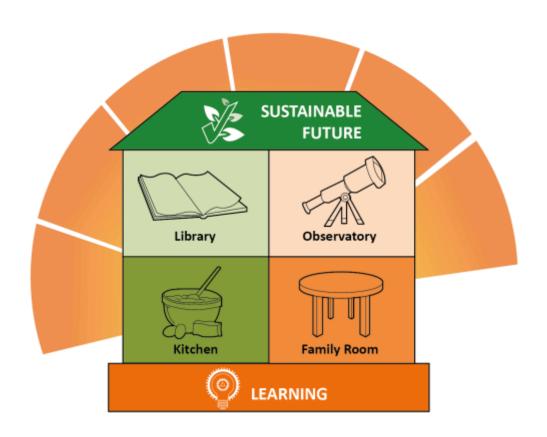
6. Board recruitment and development

- a. Recruiting and inducting new board members: some questions to consider are:
 - i. What skills, experience and knowledge relating to planetary boundaries should we seek in potential board members?
 - ii. How do we assess whether candidates are likely to take a long term strategic perspective?
 - iii. How do we ensure that our induction process brings out the importance of planetary boundaries to us as an organisation?
- b. Evaluating and improving board performance: it is helpful to have a **regular review of the board's performance**, perhaps annually or perhaps thoroughly every three years with an annual lighter 'Away Day' session. Such reviews could include questions about the board's awareness of and response to planetary boundaries.
- c. Developing the skills and knowledge of board members
 - i. Many boards find it helpful for each board member to have an annual discussion with the board Chair about their aspirations and challenges on the board and how they can best contribute. Part of that discussion could include their skills and knowledge relating to planetary boundaries.
 - ii. **Training, books and internet** searches can help board members learn more about planetary boundaries. The organisation can help with subscriptions to relevant magazines or recommendations of blogs.
 - iii. A **board drive or intranet** is a powerful way in which to have a lot of information, some of it confidential, accessible to board members for use whenever they wish. This could include information about planetary boundaries and the organisation's response to them.
 - iv. Board members will have **networks of contacts** that include people on other boards and working for other organisations. Many of these may bring different perspectives

- on planetary boundaries, all potentially valuable for understanding the issues and deciding what to do about them.
- v. Board members can be encouraged to **present to their colleagues** key information or powerful perspectives that they have come across perhaps as part of a regular board meeting slot that includes feedback on visits to programmes.
- vi. They can also be encouraged to share more immediately through social media.
- vii. Other sources of ideas and information outside meetings are **staff and external technical experts**. Experts can be invited to support the organisation by offering their time and knowledge to be consulted by board members individually as well as by leading discussions at board meetings.

Links to the Caplor House

The Caplor House offers an integrated model for inspiring and enabling a sustainable future through four rooms corresponding to four styles of thinking and behaving¹²:



¹² The Caplor House model was created by Ms Ann Alder and Dr Geoff Cox. They worked with various people within Caplor Horizons. This included Ms Usha Ladwa-Thomas and Dr Ann-Marie Brouder, who developed work on "The Roof". For more details see www.caplorhorizons.org/the-caplor-house-overview.

The **roof** of the Caplor House focuses on a sustainable future and is particularly relevant to this paper. The roof tiles contain three overlapping and balancing principles concerning people, planet, and the economy, linked to the concept of the triple bottom line discussed on page 8 above. Based on earlier work within Caplor Horizons led by Dr Ann-Marie Brouder and Ms Usha Ladwa-Thomas, Dr Vicki Howe settled on the following definition: "A sustainable future is one in which a healthy environment, economic prosperity and social justice are pursued simultaneously to ensure the well-being and a good quality of life of present and future generations." The accompanying principle in relation to the planet is "Tread softly - Planet: care for the environment by looking after our fragile eco-systems and controlling our use of natural resources (that future generations may depend on) by considering how what we use affects others globally." This principle underlies this paper.

The flavours of the **four rooms** can be suggested as follows:

• Observatory: vision, ideas, imagination

• Library: reason, logic, analysis

Kitchen: operations, order, routines

Family Room: society, emotions, communication

The practical questions and suggestions in the previous section can be placed in the House as shown below. All the rooms are well used, illustrating the way that the challenges posed by planetary boundaries require a response that uses all parts of a board's combined expertise.

LIBRARY	OBSERVATORY
 Setting the agenda for board meetings Making decisions in board meetings Developing the mission and strategy Approving policies Identifying and minimising risk 	 Bringing the mission and context into board meetings Understanding the context Opportunities from planetary boundaries Development through training, books, internet, intranet, networks, experts Sharing ideas with colleagues
KITCHEN	FAMILY ROOM
 Measuring and attributing performance Key performance indicators Using committees and task forces What the board eats and drinks Reviewing the board's performance 	 Where, when and how the board meets Reporting on performance Recruiting and managing the Chief Executive Establishing values, influencing culture Chair: guiding meetings, working with board members Visiting programmes Recruiting and inducting board members

Conclusion

These questions and suggestions about possible board responses to planetary boundaries, the key long term environmental challenges to humankind's survival, may appear quite daunting, especially for a small NGO. A good first step would be a discussion by the board that includes:

- Do planetary boundaries matter to our organisation? Why? Which ones?
- What are realistic priorities for how we respond? Who will do what?
- Is there anything we need to establish to take this forward such as a task force or an annual review? How will we know that we are making progress?

The setting for this kind of discussion could be an annual 'Away Day' or 'Away Weekend': an occasion with more time and less pressure than a regular board meeting.

Caplor Horizons – Background

Established in 2014, Caplor Horizons is an independent charity. We work with other charities and responsible businesses and now have over 50 Advisors. These are outstanding people that bring specialist knowledge and experience. They contribute their time on a voluntary basis, or at reduced rates, so that Caplor Horizons can provide high quality and distinctive services at an accessible cost.

Working locally, nationally and internationally, we help other organisations think differently about themselves and the new horizons that they face. We support them in strengthening their leadership, renewing their strategy and improving their influence.

We want to encourage and assist a new generation of organisations that are committed to making a positive and lasting impact. We believe that if we are to achieve real, sustainable change, we need to inspire and enable people to learn differently, think differently and act differently.

Our vision is: Change makers creating a sustainable future

Our purpose is: To be courageous, compassionate and creative in facilitating transformational change

Our values are:

- Courageous We are courageous change makers committed to challenging assumptions, taking risks and having difficult conversations
- Compassionate We are open, understanding and heartfelt, encouraging the nourishment of our whole selves and others
- Creative We learn, think and act differently, and are innovative and resilient in an ever-changing world

Our beliefs are:

- Through diversity we ignite dynamic innovation
- Collaboration helps achieve greater impact
- Everyone matters
- We are all leaders in our individual and collective ways
 we are all change makers!
- Learning is more effective if it is fun, engaging and creative
- Building on people's strengths creates greater resilience

Our strategic goals:

- Goal 1: Transforming Leadership
- Goal 2: Strengthening Resilience
- Goal 3: Increasing Collaboration

Learning differently
Thinking differently
Acting differently

