Shift

CAPITALS COALITION

INTERIM DISCUSSION PAPER

ACCOUNTING FOR A LIVING WAGE

A COLLABORATION BETWEEN SHIFT AND THE CAPITALS COALITION

ACCOUNTING FOR A LIVING WAGE – INTERIM DISCUSSION PAPER

A set of propositions for companies to report publicly on progress towards living wages in their workforce and supply chains.

February 2022

ABOUT THIS INTERIM DISCUSSION PAPER

This interim paper was circulated by Shift and the Capitals Coalition among participants of multi-stakeholder consultations held in February 2022 to serve as a basis for discussion. It is intended as a ***working proposition****, which is being further refined and tested by piloting companies.* ***It does not represent the final output of the project****. To learn more about the project's timeline and to download the final output once it is ready, please visit accountingforalivingwage.org*

ABOUT SHIFT

Shift is the leading center of expertise on the UN Guiding Principles on Business and Human Rights. Our global team of experts works across all continents and sectors to challenge assumptions, push boundaries and redefine corporate practice in order to build a world where business gets done with respect for people's dignity. Shift is a non-profit, mission-driven organization headquartered in New York City. Follow us at @shiftproject and visit shiftproject.org to learn more.

ABOUT THE CAPITALS COALITION

The Capitals Coalition is a global collaboration redefining value to transform decision making.
We sit at the heart of an extensive global network that has united to advance the capitals approach to decision-making. The Coalition provides an overview of the landscape, highlights connections, engages in outreach and facilitates expert advice within the capitals community. To learn more, visit capitalscoalition.org

ABOUT THE ACCOUNTING FOR A LIVING WAGE PROJECT

The Accounting for a Living Wage project is a collaboration between Shift and the Capitals Coalition to help companies leverage the power of accounting to tackle wage inequality. The project is made possible thanks to the generous support that we've received from Porticus.

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A. Overview

1. Introduction

Today's current accounting standards, for the most part, reflect the value that a workforce brings to an organization as a cost. Increased wages and other investments in the workforce show up as a debit to the profit and loss account, thus reducing profit. This creates the perverse incentive for organizations to minimize employee-related costs such as salaries and benefits in order to increase profits, ignoring the harm to workers' well-being and resulting risks to longer-term profitability.

This matters.

The Universal Declaration of Human Rights states that, 'everyone who works has the right to just and favorable remuneration ensuring for himself and his family an existence worthy of human dignity.' The typical term used today is a 'living wage'. Moreover, the UN Guiding Principles on Business and Human Rights reflect the responsibility of all businesses to respect all internationally-recognized human rights, meaning that they should avoid infringing on these rights and should address any harms with which they are involved, whether in their own operations or through their value chains and other business relationships.

Defining a living wage

The remuneration received for a standard workweek by a worker in a particular place sufficient to afford a decent standard of living for the worker and her or his family.

Source: Global Living Wage Coalition

However, recent decades have seen persistent trends in many countries to maintain wage levels substantially below a living wage, including due to direct pressures from business. There have been trends in many industries to shift workers into more precarious forms of employment, with less predictable contracts and hours, and less or no obligations to provide benefits. The erosion of collective bargaining coverage has negatively impacted wage growth, with fewer workers benefiting from the higher wages in collective agreements[1] These realities have made decent work ever less accessible for workers – particularly those already at the lower end of the socio-economic spectrum. They have played a central role in generating the growing levels of inequality, with an increasing prevalence of in-work poverty, that today characterize many economies and societies. The resulting loss of social cohesion and stability, the erosion of trust in democratic institutions and the rule of law, and polarization within societies, represent a fundamental challenge to the achievement of sustainable development and pose a systems-level risk to business itself.

[1] Mishel, Lawrence 'The enormous impact of eroded collective bargaining on wages' 2021 Economic Policy Institute https://www.epi.org/publication/eroded-collective-bargaining

Reversing these trends and unpicking these root causes of inequality[2] will ultimately require that financial accounts themselves reflect the value of human capital as an asset, and include greater disclosure and more comparable data regarding the payment of living wages. Pending such a change, a more complete accounting in the front end of annual reports for progress towards living wages, and of the value to society of living wages, can offer the more comprehensive picture needed for decision making by managers, investors and other stakeholders, and help change the mix of incentives for how companies view the payment of wages.

Research and experience suggest that concerted progress towards living wages is also in the interest of companies. A forthcoming paper on the case for living wages highlights evidence of business benefits that include greater employee retention, improved productivity and product quality, better employee satisfaction, engagement and relations, and improved quality of supply, with some early signs that they may improve revenues and profits.[3]

2. Objective of this project

The objective of this project is to propose an accounting model that enables organizations to articulate progress towards payment of a living wage for their own employees, contractors, and workers at their first-tier suppliers**.**

Our theory of change is that by developing a workable model for companies to report publicly on progress towards living wages, sustainability reporting standard-setters can then readily integrate this into their reporting requirements for companies; by doing so, they will help focus company and investor attention more clearly on the issue of living wages and create incentives for businesses to take action; this will in turn help scale up and speed up progress beyond the handful of current leading businesses on this issue.

In particular, the model seeks to bring to the forefront of accounting and reporting approaches:

- The understanding that the living wage is a **critical threshold** when considering the social impact of companies, which represents the remuneration necessary for a worker and their family to be able to have a minimum decent standard of living.
- The understanding that the value of human capital, including **value to society**, is eroded or enhanced based on whether workers are paid a living wage.

Three key criteria have guided the development of the accounting model:

1. It can be applied consistently and in a straightforward way by organizations in different sectors and countries.
2. It incentivizes progress towards paying living wages over time and provides insight into a company's approach to tackling inequality.

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[2] While wages that fall below a living wage most directly contribute to income inequality, they are also both a cause and effect off gender and racial inequalities, and exacerbate inequalities in both opportunities and outcomes.

[3] Barford, Gilbert, Beales, Zorila and Nelson. Forthcoming. The Case for Living Wages: how to improve business performance and tackle poverty.

3. It points towards the value to society as well as workers of being paid a living wage.

The proposed model is divided into two parts:

- The first includes **basic disclosures** that could be adopted today by reporting standard-setters as part of companies' public reporting on wages specifically, or on the income-related drivers of inequality more generally. In doing so, it will help providers of capital reward companies that progress towards living wages.
- The second provides for a **more advanced set of estimates** of the erosion of human capital that results from paying below living wages and the regeneration of value that results from reducing the living wage deficit. This can be used both to aid companies' internal decision-making and as part of voluntary disclosures or future evolutions in sustainability reporting standards that reflect multi-capital accounting and integrated thinking.

The focus on wages that fall below the living wage is informed by the fact that while positive value to society flows from the payment of wages above a living wage, this cannot off-set the negative consequences for human capital and society of those paid below a living wage.[4] Negative impacts need to be assessed and reported separately from positive, to avoid aggregation though a net figure that hides impacts on the human right to a living wage.

The model also seeks to reflect and support incentives for business and finance, which play an important role in driving continued and sustained progress to tackle inequality through paying a living wage. This means:

- recognizing the fact that a significant proportion of companies today will have people in their workforce (including contractors) and first tier supply chain who are not receiving a living wage;
- enabling companies that are making progress to demonstrate that reality, not only once workers meet the living wage benchmark but as they move towards that threshold;
- recognizing that this can take time, notably in relation to workers employed by third parties.

The model therefore enables demonstration of the year-on-year movement of workers towards the living wage threshold, the closing of the living wage deficit and the regeneration of value to society that results.

3. Caveats and limitations

Importantly, the model put forward in this paper is not proposing a new methodology for measuring what living wages are in different locations. Rather, it leverages the long-standing and continuing work by a number of organizations to develop credible methodologies for estimating living wages, to agree some common criteria that any methodology should meet, and to produce resulting benchmarks. These are important inputs to the model and will be strengthened as methodologies continue to converge and with progress in making more benchmarks publicly accessible.

[4] UN Guiding Principle 11.

In many companies' supply chains, it may be that wages that fall below the living wage threshold represent a more severe negative impact where they occur beyond the first tier of the supply chain. However, this accounting model extends only to the first tier given that actual wage data beyond that level is particularly difficult to secure. This approach does not alter the need for companies to prioritize and address severe impacts on workers, wherever they occur in their value chain[5].

The limitations of current definitions within accounting standards have required us to pursue a model that looks at other forms of value and capitals, beyond financial capital. Therefore, while the project does not propose capitalizing the workforce, it seeks to cast light on the pathway of companies towards the living wage threshold, and to highlight the potential costs to society of businesses paying below that threshold. This is a more amenable way (for now) of appropriately reflecting the value of the workforce in public reporting disclosures. It deliberately borrows from, and builds on, innovations in human capital accounting. This includes, in the more advanced elements of the model, using new approaches to estimate and value the consequences for society of paying low wages and bringing this into companies' decision making. While the environmental movement has had great success using these approaches, they remain nascent when applied to a business' impacts on people.

The IFRS Conceptual Framework for Financial Reporting states that, '[t]o a large extent, financial reports are based on estimates, judgements and models rather than exact depictions'. In the same vein, this project applies estimates and models in a couple of important ways. Living wage benchmarks are not a single or exact measure of a living wage in any location, but offer a range of estimates of what a worker in that location needs to earn in order to live a minimum decent standard of living for themselves and their family. These are not estimates of the value of a worker, but of the value of what it takes to have a minimum decent standard of living, recognizing differences in dollar purchasing power in different locations.

Similarly, there are various approaches that could be taken to measuring and valuing the consequences for well-being of low wages. We have selected a methodology based on health impacts for which data is available today at a global level and which is good enough to inform decision making. It too is an estimate, not an exact calculation of a company's impacts; and it does not reflect the full range of costs to workers and wider society where wages fall below the living wage threshold. However, it provides a measurable and meaningful proxy (while recognizing that actual erosion of human capital will likely be higher), which is key for companies to know where to intervene and to prioritize action.

Finally, the model does not propose how companies should go about reducing their living wage deficits. Moreover, nothing in this approach is intended to undermine the importance of collective bargaining

[5] Under the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises, the responsibility of companies to respect people's human rights encompasses any negative impacts on those rights that are connected to their operations, products or services, whether they result from their own activities or from business relationships, including in their upstream or downstream value chain (See commentary to UNGP 13). The standards also make clear that where companies cannot address all negative impacts at the same time, they should first address those that are most severe in terms of how grave, how widespread or how hard to remedy an impact is. (See UN Guiding Principle 24).

both to wage-setting and to determining an appropriate pathway towards (and beyond) the living wage threshold.

4. This Document

This document is the result of an iterative process of research, engagement and the testing of ideas that has to date involved almost 100 experts in human rights, living wages, value accounting, accountancy and economics across academia, business, standard-setters and non-governmental organizations. It reflects feedback gathered through prior consultations and provides an updated set of propositions for how the accounting model could work, as a basis for further discussion and feedback.

Part A and Part B of this paper provide an overview of the approach taken in the accounting model.

Annex A expands on this through a number of propositions and supporting explanations with regard to:

a. *the scope of application of the model*, namely: the categories of worker to be considered; the application of the model to those categories; the reflection of progress over time; and the aggregation or disaggregation of data by location; and
b. *inputs to the model*, namely: approaches to measuring actual wages, gathering wage data and selecting and applying living wage benchmarks.

Annex B sets out the proposed basic disclosures for reporting standards and the additional estimates for internal decision-making and expanded disclosures.

Annex C provides further background on the concept of the Health Utility off Income (HUI).

Annex D provides a list of 2021 HUI factors by country.

Annex E provides a glossary of terms.

B. Accounting Model

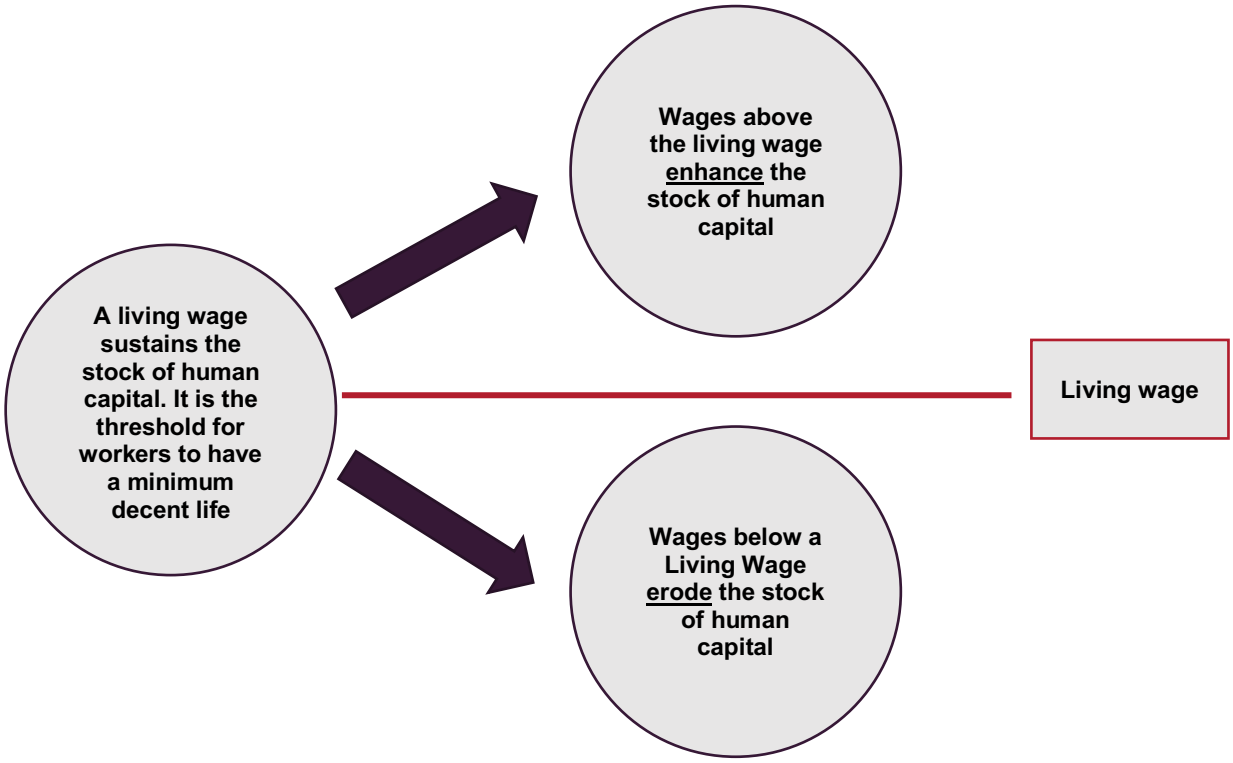
The proposed accounting model focuses on recognizing a living wage as a threshold for creating value to society, as well as to business, through the remuneration of workers, and the erosion of human capital that occurs where wages fall below that level.

The living wage represents a standard concept. Although the actual living wage varies widely across different locations, as it is based on local economic factors, living wage benchmarks are deliberately designed to represent the level of remuneration that is necessary to afford the same minimum decent standard of living for a worker and their family in each location. While there is no single agreed figure for each location, due to some variances in calculation methodology, the underlying construct is essentially the same and sets boundaries on what a credible figure for any location can be. It is important to note that the erosion of human capital as defined by the model is neither based on, nor intended to reflect, the value of individual workers, nor to suggest that workers in different locations have different value. Rather, it is an estimation for the (health-related) value eroded by companies where workers are paid below a living wage.

1. Foundational Propositions

Three foundational propositions underpin the model to explain how wages impact human capital, as illustrated in Figure 1.

Figure 1: Three foundational propositions of the Accounting for Living Wages model.



First, **wages are a key driver of the value of the stock of human capital for workers, for business and for society.** Human capital can be eroded, restored or created, through business activities. Wages paid to workers compensate them for the effort, energy and time put into business operations and enable people to be fed, stay healthy, access housing, ensure their children can stay in school, and access a range of further opportunities to enhance their and their families' well-being.

Second, **the living wage sustains the stock of human capital. It is the threshold for workers to have a minimum decent life.** Wages below a living wage mean workers cannot benefit from a minimum decent standard of living that enables them to maintain their health and well-being, which in turn affects their ability to do productive work. Wages above the living wage generate a positive impact, for workers, for business and for society. The living wage (as a human right of workers), and the basic stock of human capital it sustains, is therefore considered to be a threshold below which companies should not fall. It also protects a company's ability to generate enterprise value.

Third, **wages below a living wage therefore erode the stock of human capital.** It is widely recognized that workers receiving less than the living wage experience a range of negative consequences related to their economic and social well-being. For companies, this means they are depleting the stock of human capital upon which they rely to deliver value. For societies, it creates costs through pressures on public healthcare and other state or community-based support systems, less taxes, reduced development and other knock-on effects. The model divides workers paid below a living wage into four cohorts to reflect how far below the living wage threshold their wages fall: those paid 90%-99% of the living wage benchmark being applied; those paid 75% to 89%; those paid 50% - 74%, and those paid below 50% of a living wage. The model estimates the (health-related) impact on human capital of paying below a living wage for a given country of operations and captures the progress made to reduce this impact over time.

Specifically:

1. **For the purpose of basic disclosures and reporting standards**:

    - **The model estimates the Living Wage Deficit for any given year:**

        1. The living wage threshold based on all workers being paid a living wage
        2. The number and proportion of workers paid below a living wage and by how much below a living wage they are paid.
        3. Year-on-year changes in those numbers, including whether and to what extent they demonstrate progress in moving workers towards and above the living wage threshold.
        4. Contextual indicators that enable the better interpretation of the living wage deficit, in terms of company commitments, workforce composition, worker voice, pay ratios, and actions taken to address living wage deficits.

2. **For the purpose of internal decision-making and expanded disclosures**:

    - **The model estimates the consequences of the Living Wage Deficit:**

        - In terms of the effects on value to society that result from impacts on worker health, measured in physical terms (through changes in life expectancy).
        - In terms of the effects on value to society that result from impacts on worker health, valued in monetary terms.
        - Year-on-year changes in those numbers, including whether and to what extent they demonstrate the restoration of value to society through progress towards living wages.

This data would be reported for the company's own workforce (employees and core contractors), non-core contractors (e.g. cleaning, security catering staff on company premises) and workers in the first-tier supply chain (suppliers' employees and core contractors), while allowing that it may take time for companies to gather the data to cover the full scope of these workers. (See Annex A for further definitions of these categories of worker.)

2. Basic Disclosures for Reporting Standards

This project proposes that standard setters should require all reporting companies to make a number of basic disclosures regarding the payment of living wages that can be included in sustainability reporting standards. These disclosures are based on a number of key inputs. This project proposes certain criteria and principles to ensure that the determination and calculation of these inputs is sufficiently robust, while recognizing the need for flexibility in certain regards, including as the consensus on methodologies for calculating actual wages and living wages further develops.

Table 1 below provides an overview of these inputs, while Annex A sets out in full the project's propositions regarding:

- **The scope of application of the model**, including: clarity on the definitions of 'workforce' and 'first tier suppliers' and the categories of worker included; what is meant by 'progress over time'; as well as recommendations on the identification of 'priority countries' for which disaggregated data would be disclosed.

- **The calculation of inputs to the model**: notably, principles for measuring actual wages and gathering wage data, and criteria for selecting and applying a living wage benchmark.

The model proposed in this paper focuses on identifying wages that fall below the threshold of the living wage. However, interpreting this data requires some context, which can be provided through a range of supporting indicators as well as narrative explanation, contributing to a fuller understanding of the factors that may be underpinning low wages and driving (or holding back) progress. Key supporting indicators relate in particular to issues such as workforce composition, pay ratios, the role of worker voice in determining wages, and the company's commitment and core practices to secure living wages. Such indicators already appear in various reporting frameworks and standards. The indicators proposed for inclusion in the company's reporting alongside its living wage data are set out in Annex B, Disclosure 8.

Table 1: Summary of Key Inputs to the Accounting Model

1. Scope	Identification of the categories of workers for which the company is reporting living wage information in the current reporting year, based on clear definitions.
2. Benchmarks	Identification of the living wage benchmark or benchmarks that meet the criteria set out in this paper, and against which wages are assessed.
3. Actual wages	For each category of worker, data on their actual wages, calculated in line with the principles set out in this paper
4. Priority countries	The countries where the impacts associated with wages below the living wage threshold are most severe, based on one of the criteria set out in this paper, and for each category of worker covered.

As context to their basic disclosures (see below) companies would report on these inputs in terms of the scope of workers currently included under the disclosures, the benchmark(s) applied, and the priority locations identified, in line with the principles and criteria set out in the model. Where the principles or criteria allow for certain variations, companies would also report on the choices they have made.

The basic disclosures based on these inputs would be as set out in Table 2.

Table 2: Overview of Basic Disclosures for Reporting Standards

The Living Wage Threshold	Estimation of the aggregate wage level at which all workers are paid a living wage. This level is the Threshold that must be met in order to preserve and not erode the human capital.
The Living Wage Deficit	Estimation of the number and proportion of workers paid below a living wage and the extent to which they fall below that level, based on four bands/cohorts: • With separate disclosures for each category of workers covered in the current year's reporting • In aggregate across all countries • Disaggregated for each priority country • As compared to the prior reporting year, in order to show change/progress
Contextual indicators	Disclosures that are increasingly common in existing reporting standards and frameworks, in relation to: • Company policy or commitments with regard to living wages • Workforce composition • Pay ratios within the workforce • Worker voice in determining wages with regard to all categories of worker covered • Company practices to secure living wages with regard to all categories of worker covered

These disclosures will:

- Provide companies with a threshold to aim for, that is unique to them. Although the nominal Living Wage Threshold will evolve, both as living wages increase due to inflation and based on changes in the composition of the workforce and supply chain, the ratio of actual wages to the Living Wage Threshold for those workers below a living wage will provide a more constant sense of how the company is progressing.
- Enable an analysis of the company's Living Wage Deficit and support the development of a coherent strategy to reduce it.
- Enable the company to demonstrate and articulate its progress over time to meet the Living Wage Threshold, year on year; and enable markets, regulators and other stakeholders to

recognize and reward those companies making appropriate progress while pressing others to take action.

3. Additional Data for Decision-Making and Expanded Disclosures

It is becoming increasingly clear to business leaders, investors and policymakers that successful economies are dependent on the value we receive from nature and people. Value accounting seeks to put the value of nature and people at the heart of decision making in business, finance or government, by framing them as 'capitals': natural capital[6], social capital[7], human capital[8] and produced capital[9].

By using this accounting model to estimate certain impacts on well-being of paying workers below a living wage, companies will be able to capture and integrate into decision-making processes, in a consistent and sufficiently simple manner, the value of these costs to society, see Table 3. As mentioned above, there are various ways in which the consequences for wellbeing of low wages could be assessed. We have selected a methodology based on impacts on health for which global data is available today, and which is good enough to inform decision making. It provides an estimate, not an exact calculation, of a company's impacts, and does not reflect the full range of costs to workers and wider society where wages fall below the living wage threshold. However, it provides a measurable and meaningful proxy (while recognizing that actual erosion of human capital will likely be higher), which is key for companies to know where to intervene and to prioritize action.

These estimates can supplement other health-related data and help companies see how action to address living wages can help them meet health-related targets, including under the Sustainable Development Goals. It can also highlight locations where the erosion of human capital resulting from low wages is particularly acute, which can support decisions on where the company should prioritize its efforts to raise wages.

Table 3: Additional Data for Internal Decision Making and Expanded Disclosures	
Erosion of Human Capital	Estimation of the effects on value to society, measured in physical terms (i.e. changes in life expectancy) that result from impacts on the health of workers paid below the living wage.
	Estimation of the effects on value to society, measured in monetary terms (i.e. USD), that result from impacts on the health of workers paid below the living wage.

[6] The stock of renewable and non-renewable natural resources that combine to yield a flow of benefits to people (Natural Capital Protocol 2016)
[7] The networks together with shared norms, values and understanding that facilitate cooperation within and among groups (Social & Human Capital Protocol 2018)
[8] The knowledge, skills, competencies and attributes embodied in individuals that contribute to improved performance and wellbeing (Social & Human Capital Protocol 2018)
[9] The human-made goods and financial assets that are used to produce goods and services consumed by society (Social & Human Capital Protocol 2018)

The model uses the Health Utility of Income[10] approach to assess the impacts of wages on wellbeing, using health as a proxy of wellbeing (see Annex B Part 2 and Annex C). By following this approach, and undertaking a valuation of the impact on worker health, companies can assess the health-related impacts of paying below a living wage on the human capital of workers, by country of operation. This results in an estimated amount by which the stock of human capital is eroded.

As mentioned earlier, these approaches to the valuation of how a business impacts people are still nascent. The concept of the Health Utility of Income (HUI) is used in the model to reflect a central factor in the erosion of human capital from impacts on workers where wages fall below the living wage. It too is an estimate, not an exact calculation of a company's impacts. Nor does it reflect the full range of costs to workers and wider society where wages fall below the living wage threshold. However, it provides a measurable and meaningful proxy (while recognizing that actual value erosion will likely be higher), which is key for companies to know where to intervene and to prioritize progress towards the threshold, as well as how to measure and articulate the value to society that they regenerate as they make progress towards the threshold.

This data will provide companies with visibility of some key consequences of their wage strategy for the people that work for them directly and indirectly, as well as for society, valued in human capital terms. As well as supporting efforts towards addressing inequality through wages, this is also a strong indicator of the business' resilience to deal with unforeseen shocks that may affect workers – the Covid pandemic being a good example.

Annex B sets out in full the calculations for these data points/disclosures, and Annexes C and D provide further background on the Health Utility of Income.

[10] Vionnet et al. 2021. The Health Utility of Income and Taxes

Annex A: Propositions for the Model

This Annex sets out a range of propositions that underpin the scope of, inputs to, and estimates included within the accounting model. Annex B sets out the proposed disclosures that would result – both the basic disclosures that could be included in reporting standards today and the more advanced estimates that can support internal decision-making and form part of expanded disclosures. Each proposition is supported by an explanation. Together with the proposed disclosures in Annex B, these will be the basis for further consultations with stakeholders in early 2022. Following the incorporation of feedback from those discussions, a refined version of the disclosures will be developed for piloting work with companies.

Part 1 of this Annex sets out propositions related to the scope of the model; Part 2 sets out propositions regarding inputs to the model; and Part 3 looks at the model's approach to capturing human capital.

Part 1: Scope of the Model

This section sets out a number of propositions that underpin the scope of the model, namely:

I. The categories of worker to be included
II. The reach of the model to workers in the workforce and first tier supply chain
III. The reflection of progress over time
IV. The aggregation or disaggregation of data by location

Each sub-section includes an explanation of the approach being proposed.

Categories of 'worker'

Proposition 1:

The model addresses the situation of workers with regard to whether they are earning a living wage. It considers four categories of workers, of which the first two – employees and core contractors – are understood to comprise a company's 'workforce':

1. **Employees:** workers ***employed directly in a company's own operations.*** This includes permanent and temporary employees, full-time, part-time and non-guaranteed hour employees. Employees who are not full-time are included on a full-time equivalent (FTE) basis.
2. **Core contractors:** who are ***employed via third parties*** (ie not direct employees), but whose ***work is controlled*** by the company and who perform roles that are the same as or similar to those of employees or otherwise ***engaged in the company's core business***, for example working on production lines in a manufacturing company, providing care in a care facility, delivering meals for a restaurant'.
3. **Non-core contractors:** workers who are ***employed via third parties*** (ie not direct employees), but whose ***workplace is controlled*** by the company and who ***perform services that are not core to the company's business***, for example providing cleaning, catering or security services for their facilities.

4. **First tier supply chain workers:** workers who are ***direct employees or core contractors of suppliers*** with which the reporting entity has a direct contractual relationship (or, in the event it uses a vendor/other intermediary to contract with suppliers, those suppliers with which its vendor/intermediary contracts directly).

Explanation

There is no single authoritative classification for different types of worker in terms of their relationship to a single company. The ILO defines four types of 'non-standard forms of employment' (NSFE), which consist of temporary employment, part-time employment, temporary agency work and other contractual arrangements involving multiple parties, and ambiguous employment relationships.[11] Many living wage initiatives identify three categories of worker, which are broadly defined as:

1. Direct employees
2. Indirect employees engaged in the company's own operations
3. Supply chain workers

The Global Reporting Initiative's (GRI) revised Universal Standards categorize 'employees' for reporting purposes as including full time, part time, permanent, temporary and non-guaranteed hours employees, as does the Workforce Disclosure Initiative[12]. GRI designates a separate category of workers in the workforce 'who are not employees and whose work is controlled by the reporting organization'. Such workers may include 'agency workers, apprentices, contractors, home workers, interns, self-employed persons, sub-contractors, and volunteers.'[13] The company may 'have sole control of the work or share control with one or more organizations (e.g., suppliers, customers, or other business partners, such as in joint ventures).[14]'

The Workforce Disclosure Initiative includes within its definition of a workforce both direct employees and 'non-employee direct operations workers', which include: 'contractors (independent, self-employed), agency workers (e.g. labor agency, recruitment agency workers), franchisee workers, third party on site workers (e.g. subcontracted service workers, third party contract workers).[15]

As the above definitions reflect, contractors, broadly defined, can include those who perform work for the company and whose work or workplace is controlled by the company. That includes workers who may be termed:

(a) **'core contractors'**: people whose work is the same as or similar to that performed by employees or otherwise central to the company's core operations. For example, line workers on a production line who are employed by a third-party employment agency, contractors operating heavy

[11] International Labour Organization (ILO), 2015. Non-standard forms of employment: Reporting for Discussion at the Meeting of Experts on Non-standard Forms of Employment, available a: https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---travail/documents/meetingdocument/wcms_336934.pdf

[12] Workforce Disclosure Initiative (WDI) 2021 Survey guidance Document 3.3, available at: https://api.shareaction.org/resources/reports/2021-WDI-survey-guidance.pdf; and GRI Universal Standards, Guidance to Disclosure 2-7 on Employees

[13] GRI Universal Standards, Guidance to Disclosure 2-8 on Workers who are not employees. Available: https://globalreporting.org/pdf.ashx?id=12358

[14] Ibid

[15] WDI 2021 Survey Guidance, p. 45

machinery on a construction company's worksite, or so-called 'brand promoters' who work in bars or at events promoting a brand's product to potential consumers.

(b) **'non-core contractors'**: people whose work is on a company's worksite, but typically providing a service that is not associated with their business model or core operations. For example, this would include people providing catering services, cleaning services or security services in a company's workplace.

In the initial consultations for this initiative, the project team proposed recognizing three categories of workers:

1. Workers employed directly in own operations
2. Workers engaged in own operations but employed via third parties (contractors)
3. Workers in the supply chain, employed by suppliers (directly or via third parties)

Through the process of consultation, however, it became apparent that it would in practice be preferable to break out the category of contractors into two since:

a. It is likely that companies would extend their efforts to advance living wages to core contractors distinct from, and probably prior to, doing so in relation to non-core contractors, such that bundling the two categories together could blur the line and be unhelpful to the preparers and users of company reporting alike.
b. Core contractors are increasingly recognized as part of a company's 'workforce', properly understood, whereas that is not generally the case for non-core contractors.
c. Wages of core contractors may be directly comparable to wages of direct employees performing the same or similar functions, providing additional insight to the relationship between contract type and wages.
d. It is frequently the case that different functions in the business will make decisions with regard to the hiring of core and non-core contractors.
e. It is generally more challenging to secure wage-related data from the employers of non-core contractors than core contractors, further underlining the likelihood that the two categories would in practice need to be addressed separately in most living wage strategies.

As a result, the accounting model proposed through this paper would ask companies to distinguish in their reporting between these four categories when providing data on progress towards living wages, and recognizes the 'workforce' as including both direct employees and core contractors.

Extending/limiting the scope of the model to employees, contractors and first tier supply chain workers

Proposition 2:

Companies' reporting should, over time, extend to all workers in the following categories:

(a) The company's workforce, understood as its employees and core contractors
(b) Non-core contractors;
(c) Workers at the company's first tier suppliers, including both employees and core contractors

Explanation

In principle, the consideration of living wages could and should extend beyond the first tier of a supply chain. Where workers are on poverty wages at other points in a company's value chain, this represents an impact on the human rights of those workers that is connected to the company's own products or services. As such, this falls within the scope of a company's responsibility to respect human rights under the UN Guiding Principles on Business and Human Rights.[16] And it may often be that the most severe impacts on workers from low wages relate to workers who are more remote in a company's supply chain, making this a potentially 'salient' or 'material' issue for the company, which should be prioritized for action, notwithstanding the greater challenge of effecting change in these more remote situations.[17]

While the importance of companies reporting in narrative terms on these salient or material issues is unchanged, this model focuses on disclosures that can be underpinned by quantitative data. It recognizes that it is already challenging to secure sufficient wage data with regard to workers in the first tier of a company's supply chain, and that doing so at more remote tiers is much more difficult.

The aim of this model is to enable public reporting that both highlights living wage deficits and equips investors and others to reward those companies that show they are making progress in addressing them. Achieving this in companies' direct workforces and first tier supply chain is not only ambitious in itself, but would represent significant progress for millions of workers.

Similar challenges of data access arise in relation to the *non-core* contractors *of suppliers*, for which suppliers themselves are more likely to struggle to gather the wage data needed. Moreover, these workers would not typically fall within the scope of a buying company's responsibility to respect human rights.[18]

While some methodologies look to national wage data to supplement gaps in actual wage data for workers at more remote tiers of the supply chain, this model does not propose to take that approach. Including national wage data can be valid and useful when the purpose of a methodology is to provide a company's managers with a sufficient picture of living wage issues to aid their internal decision-making. This generalized data can indicate where there are likely to be particularly low wages in a supply chain, requiring greater attention through due diligence. However, the primary purpose of this model is to support standardized public reporting of companies' progress towards living wages. This requires that companies be able to demonstrate specifically what wage deficits are associated with their own supply chain, and that investors be able to differentiate between the company that is helping to

[16] See UN Guiding Principle 13(b)

[17] For more on salient human rights issues see https://www.ungpreporting.org/resources/salient-human-rights-issues/.

[18] The responsibility to respect human rights extends to negative human rights impacts that are linked to the company's operations, products or services, whether or not the company has contributed to the harm. Impacts affecting non-core contractors of suppliers are unlikely to be linked to the products or services of the buying company albeit such circumstances may arise, as for example where contracted security staff are hurt in a factory fire or collapse resulting from unsafe premises or practices.

drive progress and the company that is not. That becomes impossible when both apply the same national level wage data.

As a result, this model would be limited, at least in the early years of its application, to the first tier of supply chains, and to their employees and core contractors. It should incentivize companies to secure actual wage data related to these categories of worker at their direct suppliers.

Progress over time

Proposition 3:
Under the model, companies would be able to start reporting on one category of workers and expand the scope from there, but with a presumption that the workforce should be covered as an early priority. In this regard, the following principles would apply to the company's reporting.

If the reporting does not cover a company's total workforce (employees and core contractors) as well as non-core contractors) and all first tier supply chain workers (employees and core contractors), the company should report:

- which of these worker categories are covered in full and which are covered in part in the current year's reporting;
- If the workers covered *do not include all of the company's own employees*, the reason why and the plan to extend reporting to this category of workers in full;
- If the workers covered *include their own employees but not all core contractors*, the plan to extend reporting to core contractors, recognizing that they are also part of the workforce, fully understood;
- If one or more categories of workers are covered *only in certain geographies*, the basis on which those geographies were selected to start reporting;
- A timeline under which the company *plans to extend its reporting to the full scope* of its workforce, non-core contractors and first tier supply chain as defined in the model.

Explanation
Due to the time and resources it takes to gather the data needed, it is unlikely that any company can begin reporting on all the categories of worker addressed in the model at the same time. A sequenced approach will be necessary. Under the global standard of the UN Guiding Principles on Business and Human Rights, where companies cannot address all impacts at the same time, they should prioritize those which are most severe – based on their gravity, how widespread they are and/or how hard they would be to remedy. It is quite possible – sometimes likely – that the largest number of individuals below a living wage, and the greatest gap to living wages will not be in a company's own workforce, but rather in its supply chain. At the same time, if a company does not pay living wages to its own employees it will likely have less credibility in pressing its suppliers to do so.

The distinction between employees and core contractors is an important one in the context of living wages and labor rights in general. Over recent years, there has been an increase in the proportion of

workforces that are not in a traditional employment relationship with the company they work for. While there can be various reasons for such a shift in the form of labor relationships, one driver for businesses to make this move has been the ability to reduce the costs and increase the flexibility of their workforce. These incentives are in part the result of current financial accounting rules that do not recognize a workforce as an asset (despite business leaders frequently describing them as such) but rather as a cost in the P&L account.
This move towards non-employment forms of labor relationship has brought with it a considerable increase in the precariousness of workers' personal situations in terms of the predictability of their income, loss of access to benefits and less access to union representation and collective bargaining. They may also be earning lower wages than direct employees performing similar or comparable work.[19] Research suggests that workers in this situation are also likely to suffer physical and mental health impacts.[20] This externalization of risks onto workers themselves also pushes costs onto society more generally, given the greater need for such workers to have recourse to social safety nets, healthcare systems and so forth. It is therefore important that any initiative that focuses on living wages avoid furthering the incentives for companies to move people into non-employment relationships, and instead build incentives for such moves to be avoided and – where possible – reversed.

Given these considerations, this model proposes that companies should be able to start reporting on living wages with regard to workers in their workforce and progress to cover other categories of worker over time, as they are able to secure access to more data. However, it proposes that there should be an explanation for starting with a category of worker other than employees given the importance of companies demonstrating in their own practices that they are doing what they would ask of third parties, as well as the relative ease of accessing employee wage data. And it proposes that the categories of employee and core contractor should be closely linked, such that there should be a clear and disclosed plan to include core contractors alongside employees in the reporting data.

Similarly, where companies have a large number of suppliers in the first tier of their supply chain, it will take time to gather the data on wages to complete their reporting under this model. The model therefore proposes that companies should be able to report the data they have for certain areas of their supply chain, explain why they have begun with those areas (whether based on geography, commodity or some other factor) and the plans and timeframe for extending their disclosures to the full first tier.

Priority countries

Proposition 4:

The model would ask companies not only to report aggregate data for each category of workers covered in that year's reporting, but to provide key data disaggregated for at least three priority countries in relation to (a) the workforce and (b) first tier supply chain workers. While the same three priority locations would apply to the workforce as a whole, the data for these countries

[19] IZA Policy Paper No. 105: Precarious and Less Well Paid? Wage Differences between Permanent and Fixed-term Contracts across the EU August 2015 António Dias da Silva, Alessandro Turrini
[20] Precarious Employment: Understanding an Emerging Social Determinant of Health; Annual Review of Public Health Vol. 35:229-253 March 2014

would be disaggregated for employees and for core contractors. Priority countries would be identified based on where the impacts associated with wages below the living wage threshold are most severe. This may be based on:

- **the number and proportion of workers falling below a living wage in a given country (see proposed disclosure 5)**
- **the extent of the living wage deficit for workers in a given country (see proposed disclosure 5)**
- **the erosion of human capital, measured in physical terms, resulting from impacts on workers of being paid below the Living Wage in a given country, (see proposed disclosure 9)**
- **the erosion of human capital, measured in monetary terms, resulting from impacts on workers of being paid below the Living Wage in a given country (see proposed disclosure 10).**

Companies should explain the basis for their selection of the three (or more) priority countries for workforce and supply chain disclosures respectively.

Explanation

Companies are likely to need time to extend their reporting to all areas of their workforce and first tier supply chain. It will similarly take time to make improvements towards living wages, particularly in the first tier supply chain. However, it is important that they not simply opt to address living wage deficits where they are least significant and ignore those where the impacts on people are more acute. As noted above, under the UN Guiding Principles, where companies cannot address all impacts at the same time, they should prioritize those that are most severe – based on their gravity, how widespread they are and/or how hard they would be to remedy.

In practice, it may be that some of the most severe impacts regarding low wages lie beyond the first tier of a company's supply chain. However, as explained in section 2B, it is proposed that the scope of this model should be limited to the first tier due to reasons of data clarity in a reporting context. That said, the model also proposes the inclusion of a number of supporting and contextual indicators, one of which addresses high-risk locations beyond the first tier of the supply chain.

Part 2: Inputs to the Model

The accounting model proposed here for use in companies' reporting requires a number of key inputs based on data gathered by the reporting company. This raises key methodological questions related to:

1. Measuring actual wages
2. Gathering wage data, and
3. Selecting and applying living wage benchmarks

There is no one single, clear and indisputable way of either measuring actual wages or measuring what constitutes a living wage. Rather there is a range of acceptable approaches within boundaries

determined by some criteria that are broadly recognized as the basis of credible methodologies. This model therefore takes a principle-based approach with regard to the measurement of these inputs, requiring transparency on specific choices made. The following sets out a series of propositions as to what those principles should be.

Measuring actual wages

Proposition 5:

The model would require that reporting companies apply the following principles when measuring the actual wages of workers for the purposes of disclosure:

1. **Wages should be calculated based on the FTE basic wage[21] of workers within each category covered (employee, core contractor, non-core contractor, first tier supply chain worker) plus any fixed additional payments that are guaranteed and paid to all workers in that category. Overtime and non-guaranteed payments should be excluded.**
2. **In-kind benefits may only be included if the value attributed to them has been assessed to be fair and reasonable. It should not exceed 15% of wages without clear justification. The decision to include such benefits and the methodology used to attribute a value to them should both be explained.[22]**
3. **Wherever possible, workers should be asked to verify the wage data and the valuation of in-kind benefits (if included), either through their trade unions, other representatives or directly e.g. through surveys.**

Explanation

A number of different approaches are currently used by leading living wage initiatives to identify the components to be included in, or excluded from, wages for the purpose of comparing current wages against a living wage. While most approaches follow one or other of two methodologies (developed by Richard and Martha Anker and the Fair Wage Network[23]), there are still a number of differences in how they are applied. Differences may be due to the need to simplify the approach taken, owing to difficulties obtaining data, or may be driven by different views on the fairness or appropriateness of including or excluding particular components of wages.

Overall, there is common ground on excluding overtime payments and any bonuses that are not guaranteed, and including any guaranteed additional payments that go to all workers. A key point of difference, however, arises in relation to the treatment of in-kind payments.

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[21] A Full-Time Equivalent (FTE) wage is a worker's wage converted into a full-time equivalent wage, regardless of the number of actual hours the worker is contracted to work

[22] The methodology typically recognized as attributing a fair and reasonable value to in-kind benefits is that developed by Richard and Martha Anker. See: Anker R and Anker M (2017), Living Wages Around the World Manual for Measurement, available: https://www.elgaronline.com/view/9781786431455/9781786431455.xml

[23] Anker R and Anker M (2017), ibid; and Daniel Vaughan-Whitehead (2010) Fair Wages: Strengthening Corporate Social Responsibility

The ILO Minimum Wage Policy Guide[24] provides useful guidance on options for dealing with in-kind benefits. ILO Convention 95 on Protection of Wages calls for measures to ensure that the value attributed to in-kind benefits is fair and reasonable, bearing in mind that these limit the financial income of workers (and thus have a bearing on the living wage). The guide notes that workers are not free to choose how to spend income that is provided in kind, and the goods or services may be of a type or quality which the employee would not normally buy (that is, workers may not value these benefits at their market value).

In order to minimize the potential for overstating the value of in-kind benefits to workers, the Anker methodology includes detailed guidelines on which benefits to include, how to determine a fair and reasonable value for them, and how to calculate maximum limits for the value of in-kind benefits. Others use the cost to the employer of providing the benefit, the cash-equivalent value or decide not to include in-kind benefits at all.

To address issues of fairness and potential abuse, some countries prohibit the inclusion of in-kind payments as part of the minimum wage, while others fix a specific threshold for payments in kind as a percentage of total remuneration.

If in-kind benefits are to be included in wages for the purpose of measuring gaps to the living wage, these should be limited in type, and informed by appropriate research and calculations as well as worker input to ensure that the value attributed to them is fair and reasonable and that they genuinely reduce out of pocket expenses.[25] They should otherwise not be included.

Gathering wage data

The model would require that reporting companies apply the following principles when they gather wage data for the purposes of disclosure:

Proposition 6:

1. **For employees and core contractors, data should be gathered at the level of individual workers. This should also be done wherever possible for non-core contractors and for first tier supply chain workers.**
2. **In the case of workers employed by third parties, wage data should be sourced directly from employers. Where companies have not yet managed to get data directly from third-party employers, they should report on their progress towards obtaining it.**
3. **Where data cannot yet be effectively gathered at the level of individual workers for non-core contractors and supply chain workers, they may be gathered at one of two levels of reduced specificity:**
    a. **Basic: based on the number of workers below the living wage and the lowest wage paid (see disclosure 5); or**

[24] https://www.ilo.org/global/docs/WCMS_508566/lang--en/index.html

[25] See discussion in Section III, Chapter 16 in Anker R and Anker M. (2017) ibid.

b. **Intermediate: based on the average wage of workers within a job category, and the lowest wage for that category (see disclosure 5).**

Companies should make clear in their reporting which approach is applied for these categories of workers.

Explanation

A company necessarily has access to the exact wages of individual employees in its workforce. It should also know the wages of individual core contractors. It can be more difficult to obtain information on individual workers' wages for non-core contractors and workers in the of supply chain.

As discussed above, it can be valid and helpful for companies' internal purposes to use national wage data to address gaps in the availability of actual wage data for contractors and supply chain workers. However, in the context of a model designed for use in company reporting, such generalized data fails to provide the necessary insight. Since companies with contractors and suppliers in the same areas then use the same wage data, no distinction can be seen between companies that are managing to improve wages among their own contractors and supplier facilities, and those that are not.

Many initiatives that work with companies on living wages in supply chains recommend collecting actual wages for each individual worker to provide clarity on the exact number of workers below a living wage threshold. However, since it may not be possible initially for companies to secure this level of information from all third-party employers, a number of initiatives have developed alternative approaches to obtain a level of wage information in the interim that can offer some insight into both living wage deficits and progress in addressing them.

One such approach involves grouping workers into job categories/types and calculating an average wage for each group. The drawback is that when workers whose remuneration varies significantly are joined into a single job category, averaging these into a single figure loses clarity with regard to wages that fall – or fall furthest – below a living wage. As a result, the true picture of wages below a living wage cannot be seen. In order to limit the negative effects of averaging, one approach has been to limit each job category/type to a certain percentage of the total workforce. However, it appears difficult to determine a generally applicable percentage given the many different ways of classifying jobs in different sectors. Identifying the pay of the lowest paid workers in each category provides an alternative way to compensate for the reduced clarity that comes with aggregating workers into categories. This is therefore reflected in the disaggregated disclosures requested for the priority countries (see disclosure 7).

It is clear that even this level of data gathering can take time and effort. The model therefore proposes a basic-level approach that would involve simply gathering information on the lowest wage paid in a particular location, and the number of workers whose basic wage falls below the applicable living wage benchmark for that location. The resulting highly simplified disclosure – multiplying the lowest wage by the number of workers below the living wage – would skew towards a high estimate of the living wage deficit, but this would also create an incentive to progress towards more specific data-gathering based on an average per job category. Ideally, over time, it will become possible to gather data at the level of

individual workers also for non-core contractors and first tier supply chain workers. Until that is the case, companies would report which approach(es) they are using for these two categories of worker.

Selecting and applying living wage benchmarks

Proposition 7:

The model would require that, for the purposes of disclosure, reporting companies:

1. **Select one or more living wage benchmarks, as necessary to cover all relevant locations for the categories of worker covered in the reporting.**
2. **Ensure that the benchmark(s) selected meet(s) at least the criteria set out in Table A below;**
3. **Disclose the living wage benchmark (s) being used;**
4. **Apply the benchmark on the basis of one full-time wage earner**

TABLE A: CRITERIA FOR LIVING WAGE BENCHMARKS TO BE USED IN THE MODEL	
Collecting data	The benchmark estimates living wage based on data collected and representative of the location of the living wage benchmark
Differences in context	The benchmark is city- or region-specific or at least accounts for urban and rural differences
Cost of living of a typical family	The benchmark measures the cost of living of a typical family in a region (family size is estimated based on regional/national family size data or birth-rate data)
Items of cost of living	The benchmark assesses the cost of living based on requirements that include good nutrition, decent housing, clothing and footwear, education, healthcare, household goods, transportation, etc.
Sufficient net income	The benchmark accounts for statutory deductions from gross income, such as taxes, union fees, etc.
Number of wage earners	The benchmark is based on an assumption of a single wage earner per family, in line with the definition of a living wage.
Worker consultation	The benchmark is based in part on information sought directly from relevant workers with regard to their needs and expenses
Conflict of Interest	The benchmark has no inherent conflicts of interests. Methodologies must have sufficient distance from funding sources to maintain integrity. In addition, individual benchmark results must not be influenced by the funding source

Transparency	The benchmark publishes a clear and consistent methodology for data collection and calculation elements
Inflation estimation	The benchmark updates the estimates yearly for inflation and provides for a fuller revision of the benchmark periodically.

Explanation

Several organizations publish living wage benchmarks, which may be based on a number of different assumptions and result in variations in the figures for the same country or region.

The sustainable trade initiative IDH, has developed a set of criteria for the recognition of methodologies that underlie living wage benchmarks. The proposition above builds on these criteria. It adds a provision for worker consultation and requires that the estimation be based on just one wage earner per family, not a multiple of wage earners.

IDH has so far recognized four methodologies as meeting their criteria, namely WageIndicator's Typical Family Methodology, the Fair Wage Network's Typical Family Methodology, the Full Anker methodology and the Anker Reference Value Methodology. Other living wage benchmarks exist that have not been assessed by IDH, nor published their own assessment as to whether they would meet the IDH criteria, but which may do so in practice.

Even when using a recognized benchmark, choices still need to be made over which living wage figure to compare against. There are two key variables in living wage benchmark methodologies which may lead to notable differences in the eventual calculation of a living wage benchmark. These are family size and the number of assumed wage earners.

A 'standard family' is generally understood as two adults and two children, regardless of the country, whereas the 'typical family' is country-specific and based on national statistical data.

A second key factor is whether to adjust for the number of wage earners. This can have a significant impact on the size of the gap between actual wages and a living wage. A living wage based on a family with more than one working adult is lower than one that does not adjust for additional earners.

The original IDH criteria for recognizing methodologies include a criterion that the methodology should factor in the expected number of working adults in a family. Some methodologies recommend assuming a single wage earner. Methodologies that take into account more than one wage earner base their calculations on national employment data.

An approach based on just one wage earner is in line with the definition of a living wage as the remuneration for a standard work-week that is sufficient to afford a minimum decent standard of living

for a worker and her or his family. It also reflects the fact that companies do not vary the wages they pay to a worker on the basis of whether there is another wage earner in the individual's family.

Allowing more than one wage earner is therefore not reflective of the human right standard, and introduces a significant variable that will undermine comparability in the data reported by companies. The model therefore requires that one wage earner be used in the calculation of living wages for the purposes of reporting.

That said, in a supply chain context, for example, where progress on living wages takes particular time and effort to achieve, a benchmark based on the average number of wage earners in a country can offer a legitimate milestone on the way to meeting the benchmark calculated for one wage earner. Companies may choose to supplement their reporting with an explanation of such intermediate targets and progress against them, though this should not obscure the primary data based on one wage earner.

Part 3: Capturing human capital

Companies are dependent on people – human capital – to create goods and services. But the limitations of current definitions within accounting standards mean that this asset is viewed as a cost and has therefore required us to pursue a model that looks at other forms of value and capitals, beyond financial capital.

While the project does not propose capitalizing the workforce, it seeks to cast light on the pathway of companies towards the living wage threshold, and to highlight the potential costs to society of businesses paying below that threshold. It deliberately borrows from, and builds on, innovations in human capital accounting. This includes using new approaches to estimate and value the consequences for society of paying low wages and bringing this into companies' decision making. This is a more amenable way (for now) of appropriately reflecting the value of the workforce in public reporting disclosures.

Understanding the relationship between living wages and human capital

Proposition 8:

The model should convey the following understandings:

- **The payment of a living wage to all workers represents a 'threshold' that every company should meet or work urgently towards meeting, and which is essential to preserve the value of human capital.**
- **The living wage deficit that exists where workers fall below the threshold of a living wage cannot be off-set, and should not be masked, by valuations of the total stock of human capital that include wages in excess of the living wage, or training, development and other investments in the workforce.**

- **Wages below the living wage result in impacts on workers and costs to society (eg impacts on people's health, pressure on healthcare and social security systems, etc.), quite apart from impacts on business (eg worker turnover, productivity loss).**
- **Assessing these consequences of paying below the living wage provides relevant information for business to better manage their risk and opportunities.**

Explanation:
It is becoming increasingly clear to business leaders, investors and policymakers that successful economies are dependent on the value we receive from nature and people. Yet nature and people are typically excluded from decision making.

Value accounting seeks to put the value of nature and people at the heart of decision making in business, finance or government, by framing them as 'capitals': natural capital[26], social capital[27], human capital[28] and produced capital[29]. For business leaders and investors, understanding the value of impacts and dependencies on the capitals can be a watershed moment. Issues that were previously considered to be immaterial or outside of the scope of their responsibility are now recognized as directly underpinning business success.

Human capital represents a stock of value that exists independent of companies, but on which companies depend - much as natural capital does. While human capital is often expressed in terms of what value companies themselves can realize from their workforce through productivity, skills, capabilities and so forth, human capital is not owned by a company and flows may go in both directions. Just as the skills, motivation and intellectual capabilities that a workforce brings to a company represent one flow in human capital value, so the practices of a company that affect the welfare, opportunities, and the physical and mental health of workers can lead to a counter-flow.

For human capital in particular, the dissonance between the 'workforce-as-asset' rhetoric and the 'workforce-as-cost' accounting rules requires re-evaluation. This may be aided by a more appropriate understanding that while individual workers are not controlled by a company, the workforce in terms of its size, composition and the work it performs, is indeed controlled and therefore capable of being viewed collectively as an asset – one that should not be subject to depreciation or amortization. However, it is unclear whether and how far financial accounting standards will be capable of such revision in the near or medium term.

In many instances to date, models developed to value human capital have focused on enabling companies to assess and articulate the positive value they bring to society by providing jobs, offering

[26] The stock of renewable and non-renewable natural resources that combine to yield a flow of benefits to people (Natural Capital Protocol 2016)
[27] The networks together with shared norms, values and understanding that facilitate cooperation within and among groups (Social & Human Capital Protocol 2018)
[28] The knowledge, skills, competencies and attributes embodied in individuals that contribute to improved performance and wellbeing (Social & Human Capital Protocol 2018)
[29] The human-made goods and financial assets that are used to produce goods and services consumed by society (Social & Human Capital Protocol 2018)

training to workers, improving worker health and safety and supporting worker welfare. The model proposed through this initiative is distinct but complementary. It aims specifically to shine a light on the important and foundational value to society represented in the payment of a living wage, and conversely the erosion of human capital from impacts on workers where wages fall below that level. As such, it takes a particular and somewhat narrow focus, but does so to avoid a pervasive problem of poor wages being lost within a gross wage figure for the workforce as a whole. Other initiatives, such as Harvard Business School's Impact Weighted Accounts Initiative, offer valuable and complementary ways of reflecting the marginal utility of incomes above the living wage, considering income as a driver of welfare. This model focuses on the erosion of human capital that occurs when wages drop below that threshold, with a focus on health-related impacts.

Estimating the erosion of value to society

Proposition 9:

- **Given that the Living Wage is a threshold and wages below the Living Wage impact on workers wellbeing, the model proposes to measure impacts on aspects of wellbeing that result from changes in income.**
- **´Utility of income´ measures should be used to quantify the changes in people's wellbeing resulting from changes in income.**
- **Monetary valuation techniques can then be used to assess those impact values in monetary terms.**
- **Given the current availability of datasets regarding impacts on health:**
    - **Health Utility of Income factors can already be used to assess impacts on workers´ health.**
    - **Information regarding the impact on workers and associated erosion of value to society can thereby be expressed in physical units and in monetary units.**
    - **The total estimated erosion of human capital from wages below the living wage can be estimated by aggregating the results per country**

Explanation:
Changes on wellbeing from wages can be assessed through Utility of Income approaches. These approaches measure the changes on wellbeing resulting from changes on income. Different models exist and users of this Living Wage accounting model can select the one that best fit for purpose. Users should report which approach has been used and key assumptions and data used.

The ***Health Utility of Income (HUI)*** approach developed by Vionnet *et al.* (2021) has been selected in this case as an example to illustrate how these approaches could be applied and interpreted in the context of a Living Wage accounting model. The Health Utility of Income approach measures how changes on income result in changes in human health. This change in health is considered an erosion or impact on the stock of human capital. This approach has been selected for being pragmatic, ready to be applied by business and supported by a publicly global dataset. However, all these approaches have limitations, and the ones of the Health Utility of Income are summarized below and should be considered when interpreting the results.

Example approach: Health Utility of Income and its application in a Living Wage accounting model

The Health Utility of Income allows measurement of the changes in health, through changes in life expectancy. The Health Utility of Income, by country, is built using two main inputs of information:

- **Health gap:** difference in health outcomes, as measured by the gap in life expectancy between highest & lowest education levels, see Annex D for the global dataset.
- **Income gap:** difference in income between those experiencing the health gap. This is measured as four times the living wage.

The HUI factors per country estimate the physical measure of the impact on a worker's health, expressed as a proportion of a Disability Adjusted Life Year (DALY), for a dollar of income. Using this information, users of the accounting model are able to estimate the health impact on workers when they are paid below a living wage i.e. when they miss out on this income. This allows users to measure the change in the stock of human capital when workers are paid below a living wage, by multiplying the Living Wage Deficit (disclosure 5) by the Health Utility of Income factor by country of operations.

This change in the stock is important, but as it is a proportion of a DALY, it can be difficult to interpret and apply directly in decision making. In order to express the erosion of value in units that are easier to interpret, monetary valuation techniques can be used to express the erosion in monetary terms. This is captured in disclosure 10 of the Living Wage accounting model. The model uses the value of a Disability Adjusted Life Year to arrive at an estimate of value eroded expressed in monetary terms (i.e., USD) at the country level.

It is important to note that there are a multitude of ways to measure and value the consequence on health and well-being from low wages. We have selected a methodology that is good enough to inform decision making and for which data exists at a global level such that it can be applied across all countries where workers included in the model may be located. It too is an estimate, not an exact calculation of a company's impacts. Nor does it reflect the full range of costs to workers and wider society where wages fall below the living wage threshold. However, it provides a measurable and meaningful proxy (while recognizing that actual value erosion will likely be higher), which is key for companies to know where to intervene and prioritize their efforts to improve wages.

When using Utility of Income approaches, users should be conscious of the limitations of these models. Future developments and improvements in available data will help to address these limitations. In the case of the Health Utility of Income approach used in this case the main limitations include:

- The Health Utility of Income approach only captures impacts on health, while income can affect other components of wellbeing.
- The dataset used currently for the Health Utility of Income factors only captures impacts on life expectancy. Impacts on the quality of health during life are not yet captured.
- The Health Utility of Income approach assumes that the only driver of changes in life expectancy is income. Other factors, such as the quality of social security systems, could have an influence, which is not yet captured.

Annex B: The Disclosures

As set out in the Overview, the model is defined in two parts:
Specifically:

1. **For the purpose of basic disclosures and reporting standards**:

    - **The model estimates the Living Wage Deficit for any given year:**

        a. The living wage threshold, based on all workers being paid a living wage.

        b. The number and proportion of workers paid below a living wage and by how much below a living wage they are paid.

        c. Year-on-year changes in those numbers, including whether and to what extent they demonstrate progress in moving workers towards and above the living wage threshold.

        5. Contextual indicators that enable the better interpretation of living wage data in terms of company commitments, workforce composition, worker voice, pay ratios, and actions taken to address living wage deficits.

2. **For the purpose of internal decision-making and expanded disclosures**:

    - **The model estimates the consequences of the Living Wage Deficit:**

        - In terms of the effects on value to society that result from impacts on worker health, measured in physical terms (through changes in life expectancy).

        - In terms of the effects on value to society that result from impacts on worker health, valued in monetary terms.

        - Year-on-year changes in those numbers, including whether and to what extent they demonstrate the restoration of value to society through progress towards living wages.

These data would be reported for the company's own workforce (employees and core contractors), non-core contractors (eg cleaning, security catering staff on company premises) and workers in the first-tier supply chain (employees and core contractors), while allowing that it may take time for companies to gather the data to cover the full scope of these workers.

To capture how much below the living wage workers are being paid, the model reflects four cohorts of workers, based on the percentage of the living wage that they earn. The Living Wage Deficit calculation (at least as applied to the company's own workforce – employees and core contractors), takes the mid-point of the living wage in the three top cohorts and multiplies it by the number of workers in each cohort, as shown in Table C. For cohort 4, which represents those workers paid less than 50% of a living wage, 0% of the living wage is applied, rather than a mid-point, on the premise that when workers are paid at this low level the loss of value to society is comparable to a situation where those workers are not employed at all.

Table C: Cohorts below Living Wage proposed for the Accounting Model and the % of the LW recognized for each cohort

Cohorts	% of Living Wage paid	Living Wage Rate for cohort
Cohort 1	Workers who are paid 90% to 99% of the Living Wage	95% of LW
Cohort 2	Workers who are paid 75% to 89% of the Living Wage	82.5% of LW
Cohort 3	Workers who are paid 50% to 74% of the Living Wage	62.5% of LW
Cohort 4	Workers paid less than 50% of the Living Wage	0% of LW

Basic disclosures for inclusion in reporting standards

1. Scope of workers covered	
Data required	**Disclosures**
The categories of workers in relation to which the company is reporting living wage information in the current reporting year.	1a. Which categories of workforce workers (employees and core contractors) are covered in full (i.e. for all locations where they are present) in the company's living wage disclosures and which are covered in part (e.g. only core contractors in certain locations/roles)
	1b. Which categories of first tier supply chain workers (employees and core contractors) are covered in full (i.e. for all locations where they are present) in the company's living wage disclosures and which are covered in part (i.e. or only certain locations)
	1c. *If the workers covered do not include all of the company's own employees*, the reason why and the plan to extend reporting to this category of workers in full.
	1d. *If the workers covered include the company's own employees but not all core contractors*, the reason why, the proportion of core contractors covered, and the plan to extend reporting to all core contractors.
	1e. *If contractors or supply chain workers are covered only in certain geographies*, the basis on which those geographies were selected to start reporting.

	1f. A timeline under which the company plans to extend its reporting to the full scope of its workforce, non-core contractors and workers in the first tier supply chain, as defined in Proposition 1.

2. Benchmarks being applied	
Data required	**Disclosures**
Identify the living wage benchmark or benchmarks that meet the criteria set out in proposition 7 above, and against which wages are assessed.	2a. The living wage benchmark or benchmarks being applied and confirmation that it/they meet(s) the criteria determined for this model.

3. Actual Wages: method applied	
Data required	**Disclosures**
For each category of worker, data on their actual wages in line with the principles and options set out in propositions 5 and 6 above.	***For each category (or all categories) of worker in scope*** *(workforce, non-core contractors, workers in first tier supply chain),* ***across all locations:*** 3a. A statement: - That wages are calculated based on (a) the FTE basic wage of workers and (b) fixed additional payments that are guaranteed and paid to all workers. - Of (a) whether any in-kind or other non-wage benefits have been included in the calculation of wages, (b) the methodology used to attribute a value to them, and (c) in the event that such benefits exceed 15% of wages, an explanation of the rationale.
	3b. The extent to which workers were consulted on the wage data gathered, either through their trade unions or directly eg through surveys.
	3c. For contractors and supply chain workers: *if wage data is not gathered at the level of individual workers, but based on lowest wage alone or on averages by job category,* explain this choice and any plans to secure wage data for individual workers

<table>
<tr><th colspan="2">4. Living Wage Threshold</th></tr>
<tr><th>Data required</th><th>Disclosures</th></tr>
<tr><td>Total number of workers in each category of worker for each benchmark location.</td><td rowspan="2">The living wage threshold, based on all workers being paid a living wage

For each category of worker in scope (employees, core contactors, non-core contractors, workers in first tier supply chain), across all locations:

4a. The number of workers in each living wage location, multiplied by the living wage in their location, converted into USD and aggregated across all locations

$$\mathrm{LWT} = \Sigma(L_l \cdot LW_l)$$

LWT = Living Wage Threshold [USD]
L_l= Number of workers in living wage location l [Workers]
LW_l= Living wage in location l [USD]</td></tr>
<tr><td>Living Wage benchmark for each benchmark location, calculated in line with the criteria set out in Proposition 7 above.</td></tr>
</table>

<table>
<tr><th colspan="2">5. Estimate of the Living Wage Deficit</th></tr>
<tr><th>Data required</th><th>Disclosures</th></tr>
<tr><td rowspan="5">For each category of worker in each living wage benchmark location:
• the number of those workers whose wages fall below the benchmark

For employees and core contractors:
• the number of workers below the benchmark who:
○ earn 90 – 99% or more of the designated living wage
○ earn 75-89% of the designated living wage
○ earn 50-74% of the designated living wage</td><td>The number and proportion of workers paid below a living wage and by how much below a living wage they are paid.

For each category of worker in scope (employees, core contractors, non-core contractors, workers in first tier supply chain), across all locations:</td></tr>
<tr><td>5a. The total number of workers whose wages fall below the living wage benchmark for their location</td></tr>
<tr><td>5b. The percentage of workers whose wages fall below the living wage benchmark for their location (%)</td></tr>
<tr><td>5c-d. The living wage deficit in monetary terms (based on one of the following three methods):</td></tr>
<tr><td>Method 1: For employees and core contractors, and where possible for non-core contractors and first tier supply chain workers:</td></tr>
</table>

○ earn less than 50% of the designated living wage For non-core contractors and first tier supply chain workers, one of: ***a.*** <u>Full:</u> The number of workers in each cohort below the living wage, as for employees and core contractors ***b.*** <u>Intermediate:</u> The number of workers below the living wage benchmark by job category; the gap between the living wage benchmark and the average wage for each category; and the lowest wage for each category ***c.*** <u>Basic:</u> The number of workers below the living wage and the lowest wage.	5c (Method 1) The percentage of workers in each of the four cohorts below a living wage (%)
	5d (Method 1) The number of workers in each cohort below a living wage multiplied by the gap to the Living Wage. aggregated across all cohorts and living wage locations, expressed in USD. The gap to the Living wage is estimated as one minus the percentage of the living wage recognized for the cohort, multiplied by the Living Wage (see table C above): $$LWD = \Sigma(L_l^n \cdot 1 - LWrate_n \cdot LW_l)$$ Where: LWD = *Living Wage Deficit [USD]* L_l^n = *Number of workers in cohort n, in living wage location l [Workers]* $1 - LWrate_n$ = *Percentage of the living wage recognized for the cohort n [%]* LW_l = *Living wage in location l [USD/Worker]*
	Method 2: Where possible for non-core contractors and supply chain workers, if not applying Method 1:
	5c (Method 2) The number of workers below a living wage benchmark in each job type multiplied by the gap between the average wage for that job type and the living wage, aggregated across all job types and locations, expressed in USD: $$\mathrm{LWD} = \Sigma(L_{tl} \cdot (LW_l - AW_{tl}))$$ LWD = *Living Wage Deficit [USD]* L_{tl} = *Number of workers by job type t and in living wage location l of operations [Worker]* LW_l = *Living wage in location l [USD/W*orker*]* AW_{tl} = *Average wage for job type t in living wage location l [USD/Worker]*
	Method 3: For non-core contractors and supply chain workers where Methods 1 or 2 cannot yet be applied:
	5c (Method 3) The number of workers in a living wage location who earn below a living wage, multiplied by the gap between the lowest wage and the living wage for that location, aggregated across all locations, expressed in USD. $$LWD = \Sigma(L_l^n \cdot (LW_l - LOW_l))$$ LWD = *Living Wage Deficit [USD]* L_l^n = *Number of workers in cohort n, in living wage location l [Workers]* LW_l = *Living wage in location l [USD/Worker]*

	LOW_l = *Lowest wage in living wage location l [USD/W*orker*]*

6. Progress in Addressing the Living Wage Deficit	
Data required	**Disclosures**
Results under 5a, 5b, 5c	**Year-on-year changes in reported results for disclosures 5b, 5c and (where relevant, based on the method selected) 5d** ***For each category of worker in scope*** *(workforce, non-core contractors, workers in first tier supply chain),* ***across all locations:***
	6a. The change in the percentage of workers whose wages fall below the living wage for their location, calculated by comparing disclosures 5b for the current reporting year with the same disclosure/calculation for the previous year.
	6b. The change in the living wage deficit for those workers below a living wage (disclosure 5d (for Method 1) or 5c (for Methods 2 or 3) expressed as a percentage increase or decrease.
	For any worker category for which the Living Wage Deficit is calculated on the basis of Method One: 6c. The change in the percentage of workers in each of the four cohorts below a living wage (disclosure 5c for Method 1)

7. Disaggregated Data for Priority countries	
Data required	**Disclosures**
The (at least) three priority countries for reporting living wage data, based on one of the following criteria:	7a. The criteria applied in identifying priority countries
	7b. The priority countries identified for (a) the workforce (employees and contractors) and (b) first tier supply chain workers, with a minimum of three priority countries for each.

• the number and proportion of workers falling below a living wage in a given country (see disclosure 5) • the living wage deficit for workers in a given country (see proposed disclosure 5) • the erosion of human capital, measured in physical terms, resulting from impacts on workers of being paid below the Living Wage in a given country, (see disclosure 9) • the erosion of human capital, measured in monetary terms, resulting from impacts on workers of being paid below the Living Wage in a given country (see disclosure 10).	7c. For each priority country, the following data (in the case of the workforce, disaggregated for employees and core contractors): • The lowest wage in USD • The Living Wage Threshold: Disclosure 4a • The Living Wage Deficit: o Disclosure 5b, o Disclosure 5c and 5d *(Note:5d applies only in the case of employees, contract workers and where Method 1 is applied for supply chain workers.)* • Progress in addressing the Living Wage deficit: o Disclosures 6a, 6b, and (where applicable) 6c

8. Contextual Indicators	
Category	**Disclosures**
Commitments/targets	8a. Provide any public commitment made by the reporting entity with regard to achieving the payment of living wages in its i. own operations and/or ii. its supply chain.
	8b. Provide information regarding any requirements the reporting entity sets for: i. third party employers of its contractors ii. suppliers with regard to payment of living wages
Workforce composition	8c. Provide the percentage of the total number of direct employees and core contractors (aggregated) that are: i. employees ii. core contractors
	8d. Provide the percentage of the reporting entity's i. employees ii. core contractors that are women

	8e. Provide the percentage of the reporting entity's i. employees ii. core contractors that are part-time
	8f If the proportion of i. employees on fixed-term/temporary or non-guaranteed hours employment contracts or ii. core contractors has increased or decreased significantly over the last reporting period, explain why and if the company expects this trend to continue in the future
Pay Equity	8g. Provide the percentage of i. employees that earn below a living wage ii. core contractors that earn below a living wage that are women.
	8h. Provide the ratio of: i. CEO to median worker remuneration ii. CEO to lowest-wage employee remuneration iii. CEO to lowest-wage core contractor remuneration
	8i. Describe whether and how the reporting entity's absenteeism and turnover rates have changed substantially since the last reporting period and explain any significant increase or decrease specific to: i. employees on fixed-term/temporary or non-guaranteed hours employment contracts or ii. core contractors
Worker voice	8j. Provide the percentage of i. direct employees ii. core contractors iii. non-core contractors iv. workers in the reporting entity's first tier supply chain that are covered by collective bargaining agreements.
Root causes	8k. Provide a description of any feedback mechanisms in place to enable i. third party employers of contractors ii. suppliers to report to the reporting entity the impacts of contracting, sourcing and buying practices on their ability to pay a living wage.
	8l. Describe any steps taken to ensure that the reporting entity's contracting, sourcing, purchasing and/or payment practices are not contributing to keeping wages below the living wage for: i. core and non-core contractors ii. first tier supply chain workers

Action	8m. Describe any significant measures, processes or initiatives being implemented by the company, unilaterally or in collaboration with others, to reduce the living wage deficit in relation to the categories of worker covered in the company's reporting, including: • The theory of change for how they will help close the living wage deficit • Any results achieved and their connection with the company's actions
	8n. Identify any points in the company's *full value chain* (by location and/or product/commodity/service) where the payment of wages below a living wage has been identified as a particularly salient risk to workers and their families, and any plans, actions or achievements in reducing those risks.

Estimations for Internal Decision-Making and Expanded Disclosures

9. Estimation of Erosion of human capital (physical units)	
Data required	**Disclosures**
• Living wage deficit for each category of worker in each location • Utility of Income factors for each country (current factors in Annex D)	**Estimate the erosion of human capital (in terms of value to society), that results from impacts on the health of workers paid below the living wage, measured in physical terms,** ***For each category of worker in scope*** *(workforce, non-core contractors, workers in first tier supply chain),* ***in each country:*** • *Multiply the living wage deficit for workers by category and country by the Utility of Income (UI) factor for the country concerned.* • *Aggregate across all countries* $E_x = \Sigma(LWD_{xi} \cdot UI^i)$ Where: E_x*= Erosion of human capital by category of worker x [e.g, if applying the HUI approach, DALYs]* LWD_{xi} *= Living wage deficit for category of worker x in country i [USD]* UI^i *= Utility of Income in country i* *[e.g, if applying the HUI approach, health factor / (4*LW) in DALY/USD – see annexes C and D]*

10. Estimation of Erosion of human capital (monetary units)	
Data required	**Disclosures**
• Erosion of human capital in physical units for each category of worker in each country • *Monetary value of welfare component affected* –The estimate used will depend on the context of the decisions to be made: when companies have operations in more than one country, a global estimate should be used. When companies are taking decision in a specific country and comparing impacts on welfare with other estimates at country level, adjustment to local currency and context (i.e., using Power Purchase Parity) should be made.	**Estimate the erosion of human capital (in terms of value to society), that results from impacts on the health of workers paid below the living wage, measured in monetary terms.** ***For each category of worker in scope*** *(workforce, non-core contractors, workers in first tier supply chain),* ***in each country:*** • Multiply the erosion of human capital in physical units (disclosure 9) for that category of worker and country by the monetary value of the welfare component affected (e.g. if applying the HUI approach, health) for the country • *A*ggregate across all locations $$\mathrm{VE} = \Sigma(E^i \cdot Vh)$$ Where: $VE^{\square}$ = *Value of erosion of human capital [USD]* E^i = *Erosion of human capital in physical units for country i of operations [e.g., if applying the HUI approach, DALYs]* Vh = *Monetary value of welfare component affected [e.g., if applying the HUI approach, USD/DALY]*

11. stimation of Progress in Reducing the Erosion of Human Capital	
Data required	**Disclosures**
• Estimation of change in erosion of human capital in physical units	**Estimate the year-on-year change in the erosion of human capital that results from impacts on the health of workers paid below the living wage** ***For each category of worker in scope*** *(workforce, non-core contractors, workers in first tier supply chain),* ***in each country:*** • *Calculate the year on year change (%) in the erosion of human capital (physical units)*

Annex C: Health Utility of Income (HUI)

Source: Vionnet et al (2021) The Health Utiltity of Income and Taxes.

CAVEAT: *The HUI approach is a general approach to assess the utility of income to people, measured through changes in health. This estimation is based on current available data that have some limitations, but data inputs could improve in the future. Any improvement will be able to be integrated into the HUI estimations.*

The health utility of income (HUI) measures how changes on income result in changes in human health. This change in health is considered an impact.

Current data allows measurement of the changes in **health, through changes in life expectancy**. The Health Utility of Income, by country, is built using two main inputs of information:

- **Health gap** (ΔH^i) difference in health outcomes, as measured by the gap in life expectancy between highest & lowest education levels (DALY)
- **Income gap** (ΔI^i) difference in income between those experiencing the health gap. This is measured as four times the living wage (USD)

$$HUI^i = \frac{\Delta H^i}{\Delta I^i}$$

Where:
HUI^i = *Health Utility of Income in country i* [DALY/USD]
ΔH^i = *health gap due to difference in life expectancy* in country *i* [DALY]
ΔI^i = *income gap between people experiencing the health gap in country i* [USD]

These two inputs are assessed in following way:

Health gap
Current data sources assess the health gap through changes in life expectancy between people at age 30 (ΔH^i)due to the difference in the level of education between those with lowest and those highest education level. Changes in health are measured through a normalized metric called Disability-Adjusted Life Years (DALYs). One DALY is equivalent to one lost year of 'healthy' life. DALYs are calculated as the sum of life expectancy lost, (Years of Life Lost, YLL), and disability for people living with the health condition or its consequences (Years Lost due to Disability, YLD).

$$\Delta H^i = LE^i_{he} - LE^i_{le}$$

Where:
ΔH^i = health gap in country *i* [DALY]
LE^i_{he} = life expectancy in country *i* at age 30 of people with highest education level [DALY]
LE^i_{le} = life expectancy in country *i* at age 30 of people with lowest education level [DALY]

The source of information for the life expectancy gap is the OECD (2018) and Eurostat (2018). A correlation with the Human Development Index has been used to extrapolate data for other countries in the world were primary data does not exist.

As difference in education levels will drive the difference in future income levels, the difference in education levels is considered as a proxy of income levels in the calculation of the Health Utility Income.

The health gap data per country is available on page 32 of Part A - Health Utility of Income. Impact valuation methodology, global assessment and application to businesses. Whitepaper, Valuing Impact. Available at: https://www.valuingnature.ch/post/the-utility-of-income-and-taxes

Income gap

The income gap is the difference in income between those experiencing the health gap. The assumption is that those with the lowest education levels are receiving no income. The highest income band considered for estimations is four times the Living Wage. The reason behind this threshold is that the marginal utility of income decreases when the income levels increase. This means that, for example, one dollar of additional income would have higher positive impacts on well-being when income levels are lower than when income levels are higher. Based on research (Jebb et al. 2018), there is a threshold over which there is no incremental impact from additional income. This happens when income is over four times the Living Wage. Consequently, as changes on health will not happen for incomes over four times the living wage, this threshold is considered for the calculation of income gap within the Health Utility of Income approach.

$$\Delta I^i = 4 \cdot LW^i$$

Where:
ΔI^i = income *gap in* country i [USD]
LW^i = *Living Wage in country* i [USD]

To summarize, the HUI illustrates the changes in life expectancy (expressed as DALYs) due to changes in income in USD

Estimating the erosion of human capital

To estimate the erosion of human capital of paying below a living wage the HUI is multiplied by the gap to the Living Wage. This gives a total impact on a worker's health, expressed as disability adjusted life years.

$$E^i = HUI^i \cdot (W - LW^i)$$

Where:
E^i = *Erosion of human capital in country i of operations [i.e., DALYs]*
HUI^i = *Utility of Income in country i of operations [DALY/USD]*
W^i = *Wage of work [USD/Employee]*
LW_i = *Living wage in country i of operations [USD/Employee]*

This impact on health can then be valued using a number of approaches, such as the monetary valuation of a DALY.

Annex D: Health Utility of Income (HUI) Factors per country

The table below captures health gap factors in DALYs per country as set out in Vionnet, S. et al (2021) The Health Utility of Income and Taxes. These health gap factors need to be divided by 4 times the living wage to arrive at the health utility of income (HUI) in DALYs per worker per year.

Country	**Health gap factor (DALY per year of work)**
Afghanistan	0,823
Albania	0,307
Algeria	0,392
Angola	0,696
Antigua and Barbuda	0,338
Argentina	0,216
Armenia	0,341
Australia	0,115
Austria	0,105
Azerbaijan	0,378
Bahamas, The	0,272
Bangladesh	0,603
Barbados	0,272
Belarus	0,256
Belgium	0,185
Belize	0,450
Benin	0,761
Bhutan	0,563
Bolivia	0,447
Bosnia and Herzegovina	0,334
Botswana	0,416
Brazil	0,361
Brunei Darussalam	0,228
Bulgaria	0,127
Burkina Faso	0,931
Burundi	0,965
Cabo Verde	0,543
Cambodia	0,672
Cameroon	0,729
Canada	0,076
Central African Republic	1,031
Chad	1,029
Chile	0,206
China	0,369
Colombia	0,358
Comoros	0,745
Congo, Dem. Rep.	0,880
Congo, Rep.	0,709
Costa Rica	0,279
Cote d'Ivoire	0,774
Croatia	0,076
Cuba	0,328
Cyprus	0,139
Czech Republic	0,198
Denmark	0,133
Djibouti	0,800
Dominica	0,403
Dominican Republic	0,378
Ecuador	0,372
Egypt, Arab Rep.	0,467
El Salvador	0,529
Equatorial Guinea	0,676
Estonia	0,154
Ethiopia	0,871

Fiji	0,401
Finland	0,137
France	0,105
Gabon	0,474
Gambia, The	0,851
Georgia	0,276
Germany	0,030
Ghana	0,641
Greece	0,093
Grenada	0,336
Guatemala	0,547
Guinea	0,885
Guinea-Bissau	0,880
Guyana	0,512
Haiti	0,825
Honduras	0,600
Hong Kong SAR, China	0,027
Hungary	0,219
Iceland	0,027
India	0,580
Indonesia	0,447
Iran, Islamic Rep.	0,328
Iraq	0,527
Ireland	0,016
Israel	0,105
Italy	0,064
Jamaica	0,418
Japan	0,081
Jordan	0,427
Kazakhstan	0,252
Kenya	0,660
Kiribati	0,607
Korea, Rep.	0,087

Kosovo	0,389
Kyrgyz Republic	0,485
Lao PDR	0,638
Latvia	0,220
Lebanon	0,399
Lesotho	0,794
Liberia	0,880
Lithuania	0,148
Luxembourg	0,087
Macao SAR, China	0,090
Macedonia, FYR	0,345
Madagascar	0,792
Malawi	0,874
Malaysia	0,279
Maldives	0,407
Mali	0,963
Malta	0,125
Marshall Islands	0,472
Mauritania	0,760
Mauritius	0,290
Mexico	0,083
Micronesia, Fed. Sts.	0,625
Moldova	0,389
Mongolia	0,412
Montenegro	0,245
Morocco	0,505
Mozambique	0,923
Myanmar	0,692
Namibia	0,578
Nepal	0,658
Netherlands	0,116
New Zealand	0,100
Nicaragua	0,552

Niger	1,036
Nigeria	0,772
Norway	0,129
Pakistan	0,740
Palau	0,250
Panama	0,270
Papua New Guinea	0,743
Paraguay	0,429
Peru	0,339
Philippines	0,447
Poland	0,209
Portugal	0,093
Puerto Rico	0,216
Qatar	0,210
Romania	0,150
Russian Federation	0,254
Rwanda	0,765
Samoa	0,452
Sao Tome and Principe	0,616
Saudi Arabia	0,199
Senegal	0,821
Serbia	0,287
Seychelles	0,305
Sierra Leone	0,931
Singapore	0,047
Slovak Republic	0,127
Slovenia	0,144
Solomon Islands	0,721
Somalia	1,234
South Africa	0,463
Spain	0,108
Sri Lanka	0,330
St. Kitts and Nevis	0,336

St. Lucia	0,372
St. Vincent and the Grenadines	0,410
Sudan	0,825
Suriname	0,410
Swaziland	0,641
Sweden	0,120
Switzerland	0,016
Syrian Arab Republic	0,721
Taiwan	0,087
Tajikistan	0,538
Tanzania	0,791
Thailand	0,339
Timor-Leste	0,650
Togo	0,816
Tonga	0,434
Trinidad and Tobago	0,305
Tunisia	0,407
Turkey	0,090
Turkmenistan	0,452
Uganda	0,763
Ukraine	0,336
United Arab Emirates	0,134
United Kingdom	0,093
United States	0,125
Uruguay	0,267
Uzbekistan	0,443
Vanuatu	0,645
Venezuela, RB	0,459
Vietnam	0,472
West Bank and Gaza	0,465
Yemen, Rep.	0,898
Zambia	0,690
Zimbabwe	0,714

Annex E: Glossary of key terms

Capitals Approach

When the value of an organization's impacts and dependencies on capital stocks (i.e. natural, human, social and produced capital) us taken into account to inform decision making.[30]

Erosion of human capital

The estimation of a company's depletion of its stock of human capital as a consequence of paying employees below a Living Wage.

Health Utility of Income

The contribution of income to an individual's health (as a proxy of wellbeing) for a given location [definition work in progress; Source: Vionnet et al. 2021]

Human Capital

The knowledge, skills, competencies and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being[31].

Living Wage

The remuneration received for a standard workweek by a worker in a particular place sufficient to afford a decent standard of living for the worker and her or his family.[32]

Social Capital

Networks together with shared norms, values and understanding that facilitate cooperation within and among groups (OECD 2001). [33]

Social & Human Capital Valuation

The process of estimating the relative importance, worth or usefulness of social and human capital to people or society, or to a business in a particular context; valuation may involve qualitative, quantitative or monetary approaches, or a combination of these.[34]

Stock of Capital

A stock of capital is the renewable and non- renewable resources (natural, social, human produced) that combine to yield a flow of benefits to people.[35] Businesses rely on a diverse set of capitals to function effectively – beyond financial capital, businesses also use and rely on social, human and environmental resources. Through their activities, businesses make use of and convert these capitals into outputs that in turn affect the stock of the capitals as well as a business's long-term viability. [36]

Stock of Human Capital (threshold)

The estimation of a company's minimum stock of human capital were all employees paid a Living Wage. A threshold to aim for by companies, and below which costs are externalized to society.

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[30] Capitals Coalition, 2020
[31] Drawn from Keely (2007), page 11, Social and Human Capital Protocol (Capitals Coalition; 2019)
[32] Global Living Wage Coalition
[33] Drawn from the OECD (2001), page 11, Social and Human Capital Protocol (Capitals Coalition; 2019)
[34] Drawn from Page 11, Social and Human Capital Protocol (Capitals Coalition; 2019)
[35] Drawn from p.2 Natural Capital Protocol (Capitals Coalition; 2016)
[36] Drawn from Page 9, Social and Human Capital Protocol (Capitals Coalition; 2019)