A Framework for Comparing and Understanding Net Positive Goals
G. Norris, Updated 1 April 2017

The problem is the amount of greenhouse gases in the atmosphere, which are increasing because of human activities, largely combustion of fossil fuels and land use. Of course we will consider a full spectrum of problems soon, we're just starting with climate change.

The initial attempted solution embodied in the Footprint approach was to call on companies to reduce ***their*** emissions.[1] This approach established *norms*, for reporting, and for reducing.[2] In the words of the WRI/WBCSD Greenhouse Gas Protocol (from page 4 of the Scope 3 standard):
Launched in 1998, the mission of the GHG Protocol is to develop internationally accepted greenhouse gas (GHG) accounting and reporting standards and tools, and to promote their adoption in order to achieve a low emissions economy worldwide.

The Practical task posed by such an approach is to figure out, for each company, which emissions are ***their*** emissions, when companies (like all people and organizations) operate in an interconnected web of relationships, causation, actual influence, and potential influence.

The GHG Protocol's Corporate Standard, first released in 2001 and revised in 2004, started by emphasizing as "Scope 1" those emissions that come directly from activities that a company owns or controls. Noting that a company could reduce Scope 1 emissions by simply switching from on-site generation of electricity to purchasing electricity from another provider, it adds as scope 2 the "indirect" emissions from the generation of purchased energy consumed by the reporting company. The focus of the original Corporate Standard was scopes 1 and 2: it requires that companies account for and report all Scope 1 and 2 emissions. It gave complete flexibility in "whether and how to account for Scope 3 emissions: all other indirect emissions that occur in a company's value chain." (page 4 of Scope 3 standard)

Let's use the term "Immediate Footprint" to refer to the sum of Scopes 1 and 2: the impacts of the activities owned or controlled by the company (Scope 1) plus those from the generation of purchased energy consumed by the company (Scope 2).

---

[1] This was a crucial step. If we had called on all actors to pitch in towards reducing all emissions, we'd have perhaps gone farther in action, and avoided some methodological blind spots and ambiguities/confusions too. But we, particularly in Western cultures, have a more "atomistic" than "relational" view, and we focused on the norm of individual responsibility: clean up your own mess.

[2] Interestingly, "norms" has two meanings, *both* relevant here: standards (as in reporting standard), and mores (pronounced "morays"): "rules of behavior that are considered acceptable in a group or society. People who do not follow these **norms** may be shunned or suffer some kind of consequence. **Norms** change according to the environment or situation and may change or be modified over time." Quote obtained at http://examples.yourdictionary.com/social-norm-examples.html

Figure 1: Blue highlights the scope of attention of the initial Corporate Standard, on its Immediate Footprint: Scopes 1 and 2.

The term "Footprint" is being used to refer to "the mess you make." Perhaps if everyone were working aggressively on reducing their scope 1 and 2 emissions, "their own mess," their own Footprint, we'd achieve our goals of reducing humanity's Footprint. One challenge however is that not everyone participates. Another challenge is that reductions achieved by participants may not be as aggressive as we need (e.g., to stabilize the climate). Science-based targets attempt to address the second of these challenges. They leave the first unaddressed.

Next, there comes a realization: Companies also have at least partial influence, actual and potential, on emissions occurring elsewhere in their value chains. From page 5 of the Scope 3 standard:

As GHG accounting expertise has grown, so has the realization that significant emissions – and associated risks and opportunities – result from value chain activities not captured by scope 1 and scope 2 inventories. Scope 3 emissions can represent the largest source of emissions for companies and present the most significant opportunities to influence GHG reductions and achieve a variety of GHG-related business objectives. Developing a full corporate GHG emissions inventory – incorporating scope 1, scope 2, and scope 3 emissions – enables companies to understand their full emissions impact across the value chain and *focus efforts where they can have the greatest impact.*

The Scope 3 standard simultaneously declares, and responds to the recognition that ***companies share a mix of some responsibility for, and some actual or potential influence over, the emissions occurring across their full value chain.*** A company's "Scope 3 footprint" is a measure of the additional portion of humanity's footprint for which the company has some mix of at least partial responsibility and influence.

Both responsibility and influence operate differently upstream vs. downstream. For upstream, the standard treats all companies equally in terms of their reporting responsibilities. Coverage should be full, although exclusion of non-material emissions sources (small in comparison to the full value chain) are acceptable; they just need to be documented and justified.

For downstream, however, the situation gets much more complicated, and companies are treated differently depending on the sorts of products they produce.

The GHGP Scope 3 standard devotes over 20 pages to sorting out the fact that both the know-ability and the influence that companies have on impacts in the customer chain are variable and depend on product type. [We will explore this topic in more detail later. But staying for now on the mainline of thought…]

Figure 2: Blue highlights the scope of attention of the initial Corporate Standard combined with the Scope 3 standard. Coverage of the customer chain footprint is inconsistent across companies making different types of products, and is generally incomplete for most companies.

It can reasonably be asked: If humanity's emissions are the problem, why not encourage and reward any and all actions that reduce humanity's emissions? Especially if these might be areas where a company can have a greatest impact. Frameworks which define "your mess" as a subset of humanity's mess, and then only focus reporting and action on reductions that you bring about in "your mess", leave you un-motivated, un-accounable, un-aware of, and un-rewarded for pursuing, ways you could make reductions to humanity's mess outside the scope of your mess. Such frameworks also leave out any attention to positive, regenerative actions: benefits you might create which address the footprint-related problem but are not footprint reductions per se.

In short, such "clean up your own mess" (reduce your own footprint) frameworks are ***incomplete to opportunities***, if not to responsibilities. We need frameworks that expand our scope of opportunity.[3]

What types of opportunities might we have to create positive changes beyond the scope of our own value chains? The full scope of opportunity can be summarized and partitioned as in Figure 3. Figure 3a highlights in blue the portions of full opportunity that are addressed by "clean up your own mess" approaches. Figure 3b highlights all possible scopes of action and influence. One goal and benefit of the Handprint-Based Net Positive framework is to encourage and drive action in all spheres of possible action, especially those where a company has maximum potential to bring about positive changes (including reductions to negative impacts).

---

[3] The problems of being incomplete to opportunity are several. By being incomplete to opportunity, they have also been rather depressing, even hopeless. You can't get to zero. Diminishing returns.

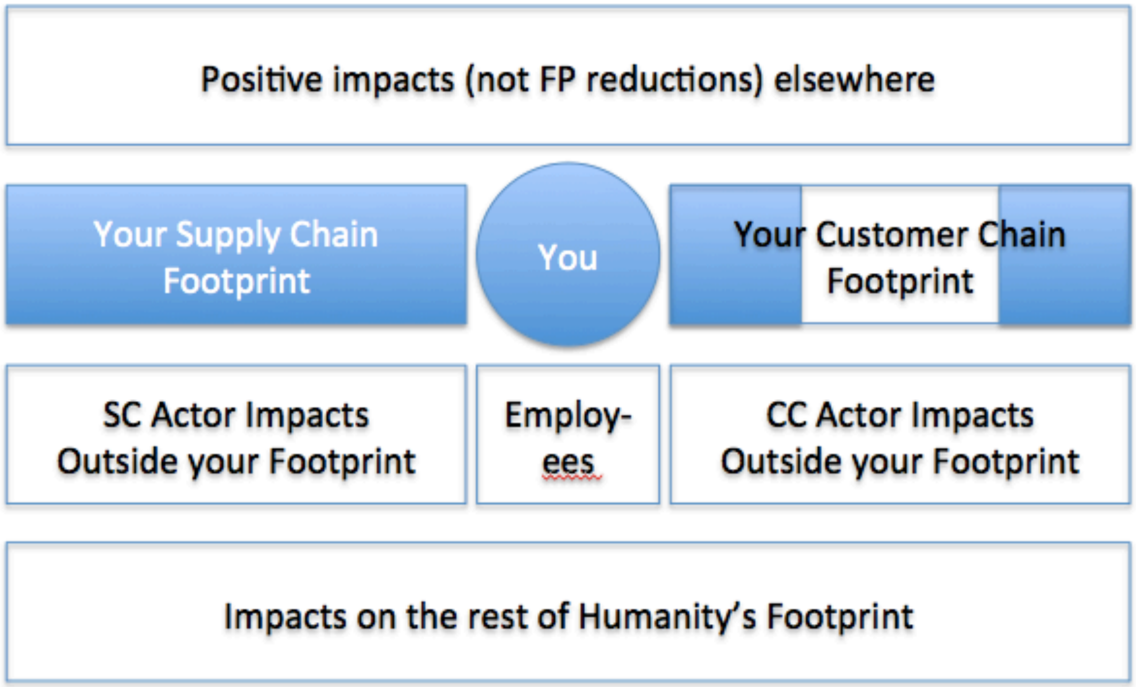

Figure 3a: The scope of possible action for a "Pure Net Positive Change" framework, highlighting those spheres of action addressed by "reduce your footprint" frameworks

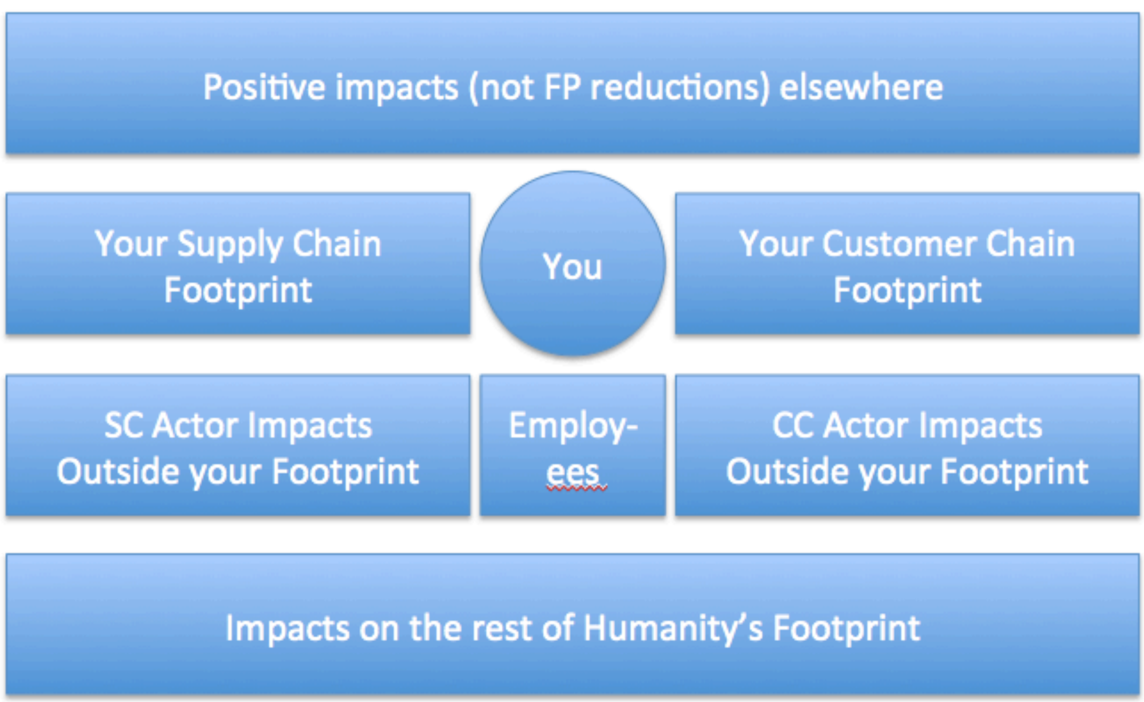

Figure 3b: The scope of possible action for a "Pure Net Positive Change" framework: addressing changes we create, anywhere, in relation to the selected problem.

We could define a fully open framework that counted all impacts equally. In this framework, all clean-up of mess would count equally, no matter "whose" mess it was, and positive benefits would count equally too. Such a Simple Net Positive Change framework would say: ***measure and report all changes you cause to humanity's emissions, and strive to cause the greatest possible net positive change.***

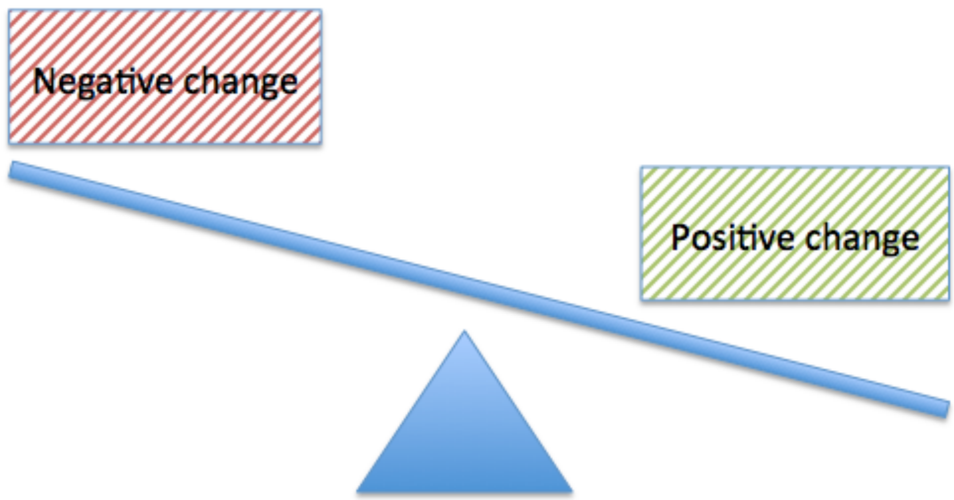

Figure 4: A "Simple Net Positive Change" framework: a framework focused entirely on changes we create, anywhere, in relation to the selected problem.

Using the scope of actions shown in Figure 3, we can re-draw the Simple Net Positive Change framework as shown below.

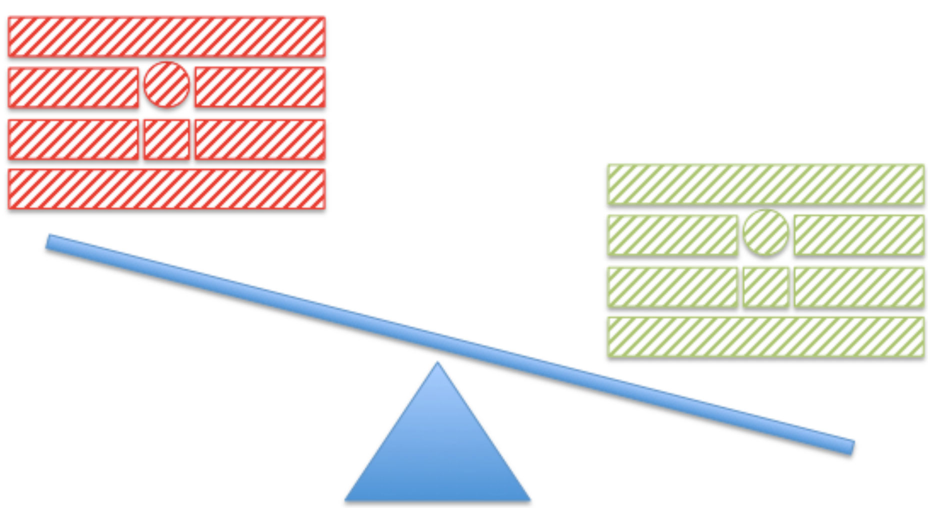

Figure 5: A "Simple Net Positive Change" framework, focused entirely on changes we create, anywhere, in relation to the selected problem. This is also called a "0th Order Net Positive Framework" in that it has a zero Footprint Hurdle which net positive change must exceed.

The Simple Net Positive Change framework as illustrated in Figures 4 and 5 fully opens the scope of opportunity, and sets our sights on the goal of being Net Positive. However, by focusing only on opportunity, it may concern some observers who note that it lacks a certain element of retaining focus on individual responsibility as well. In particular, it fails to focus any *special* attention on our own messes, and on those actors who create large messes, because it fails to require each of us to report on, and be held accountable for, our own messes as part of the project of cleaning up humanity's mess.

We can add special attention to and responsibility for, reducing our own messes, our Footprints, into the Net Positive Change framework by setting the following
General Net Positive Goal:
Create (net) positive change that is greater in magnitude than the mess you are specially responsible for.
Using the terms
"Your Footprint" to refer to "the mess you are specially responsible for," and
"Your Handprint" to refer to the net positive change that you cause,
we express this General Net Positive approach very simply:
Create a Handprint bigger than your Footprint.

As we have seen from the brief review of the GHG Protocol's evolution, the scope of what constitutes a company's "own mess", its Footprint, is a variable thing. So we can differentiate Net Positive Goals in terms of the scope of the mess (the footprint) that they set as the hurdle that the company's Handprint must exceed.

Let's call the Simple Net Positive Change goal shown in Figure 5 a "0^{th} Order Net Positive goal", to reflect the fact that the footprint hurdle is zero: it contains no hurdle for the size of Handprint required before a company can be judged as doing enough to be called "Net Positive." In effect, the 0^{th} Order Net Positive Goal is: Create a (net) positive Handprint; make a net positive change in the world, summed across all domains of influence in which the company causes change. These domains of influence include the company's immediate footprint, its upstream and downstream footprints, and the rest of humanity's footprint, and also the realm of positive impacts, as shown in Figure 3.

As noted above, a desire to incorporate special responsibility for one's own footprint into a Net Positive goal is addressed by adding a footprint-related hurdle to the Net Positive goal. The first logical and credible non-zero Footprint hurdle to apply in a General Net Positive Goal is the company's business as usual (BAU) Immediate Footprint. A company that creates a Handprint greater than its own BAU Immediate Footprint will be "1^{st} Order Net Positive" (Figure 6).

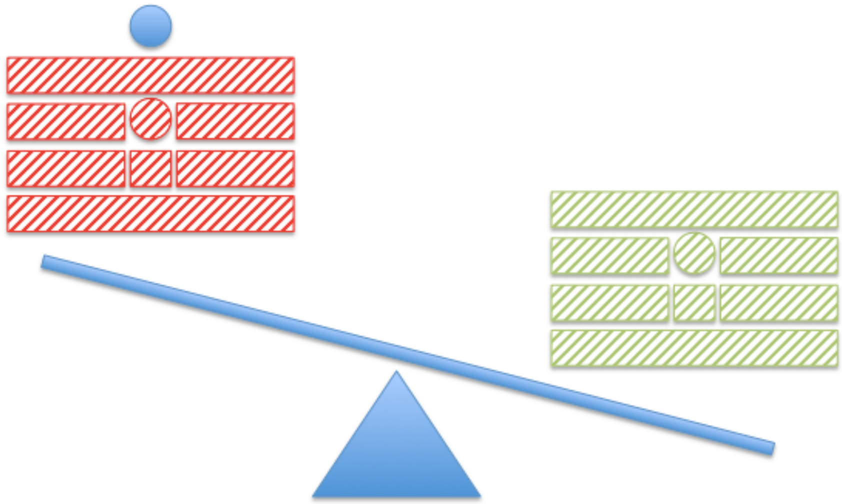

Figure 6: A 1st Order Net Positive Goal, in which Achieving Net Positive means Net Positive Change (Handprint) Exceeds the Company's BAU Immediate Footprint, which is represented by the blue "ball".

The business as usual (BAU) Immediate Footprint is the Footprint that would occur this year if the company responded to this year's demand for its goods and services, with last year's operations and energy use.

Note that if we wished, we could set the hurdle equal to the company's Actual Immediate Footprint in the year of assessment. To do so, however, we would then also need to remove from its Handprint any changes that it made to its Immediate Footprint during this year of assessment, relative to BAU; otherwise we would be double-counting those changes. Using the color purple to indicate the company's actual footprint in the year of assessment, and eliminating from the Handprint any changes to the BAU Immediate Footprint to avoid double-counting of changes, we arrive at the alternative representation of 1st Order Net Positive in Figure 7.

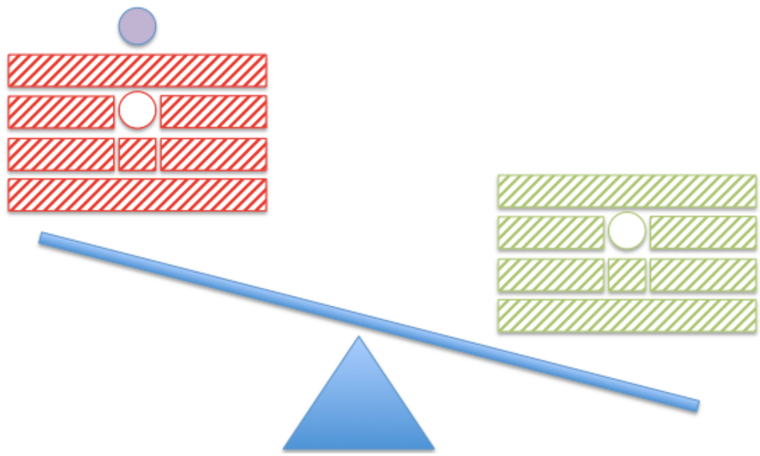

Figure 7: A 1st Order Net Positive Goal, in which Achieving Net Positive means Net Positive Change (Handprint) Exceeds the Company's BAU Immediate Footprint, Re-Expressed as:
Net Positive Change Outside the BAU Immediate Footprint Exceeds the Company's Actual Immediate Footprint in the Year of Assessment

The "Carbon-Neutral" goal as found in programs such as the American College and University Presidents' Climate Commitment (ACUPCC) and the UN's Climate Neutral Now program can be expressing using the language of the 1st Order Net Positive goal. The Carbon-Neutral goal embodied in these programs calls for the steps of "measure, reduce, offset." Generally, these frameworks focus on measurement, reduction, and offsetting of the organization's *immediate* footprint, and in lieu of creating handprints, the purchase of sufficient carbon offsets to achieve neutrality.[4]

Just as footprint reporting evolved from a focus on immediate footprint to include areas of influence and shared responsibility in the value chain, a company can expand the scope and size of the Footprint hurdle that it sets for its Net Positive goal. A logical expansion from 1st Order Net Positive is to add the Footprint of its supply chain to its goal hurdle. This yields the 2nd Order Net Positive Goal shown in Figure 8.

---

[4] See, for example: http://secondnature.org/what-we-do/climate-leadership/ , http://climateneutralnow.org/Pages/Home.aspx , and http://www.nrel.gov/tech_deployment/climate_neutral/definitions.html . We will consider the overlap and differences between handprints and offsets at a later stage in this document.

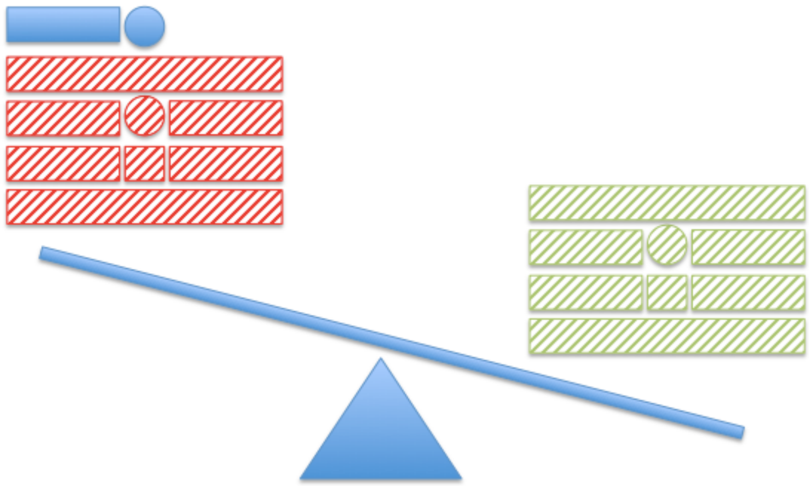

Figure 8: A 2nd Order Net Positive Goal, in which Achieving Net Positive means Net Positive Change (Handprint) Exceeds the Company's BAU Immediate Plus Supply Chain Footprints

The 2nd Order Net Positive Goal can be expressed in terms of Actual Assessment Year Footprint (rather than BAU Footprint) by removing from the Handprint any changes to the BAU Immediate and supply chain Footprints, as shown in Figure 9.

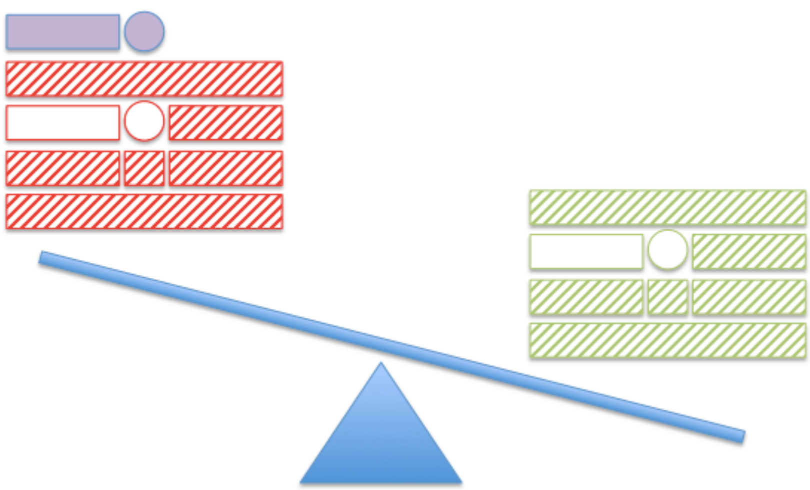

Figure 9: A 2nd Order Net Positive Goal, in which Achieving Net Positive means Net Positive Change (Handprint) Exceeds the Company's BAU Immediate Plus Supply Chain Footprint, Re-Expressed as: Net Positive Change Outside the BAU Immediate Plus Supply Chain Footprint Exceeds the Company's Actual Immediate Plus Supply Chain Footprint in Year of Assessment

The baseline SHINE approach to Net Positive as articulated in the SHINE white papers is a 2nd Order Net Positive Goal.

A company can further expand the scope and size of the Footprint hurdle that it sets for its Net Positive goal. A logical expansion from 2nd Order Net Positive is to add the Footprint of its BAU customer chain to its goal hurdle. This yields the 3rd Order Net Positive Goal shown in Figure 10.

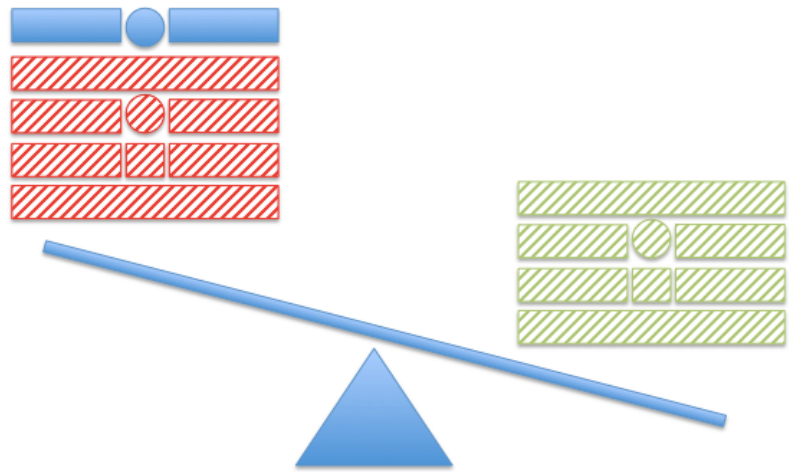

Figure 10: A 3rd Order Net Positive Goal, in which Achieving Net Positive means Net Positive Change (Handprint) Exceeds the Company's BAU Full Value Chain Footprints

The 3rd Order Net Positive Goal can be expressed in terms of Actual Assessment Year Footprint (rather than BAU Footprint) by removing from the Handprint any changes to the BAU value chain Footprints, as shown in Figure 11.

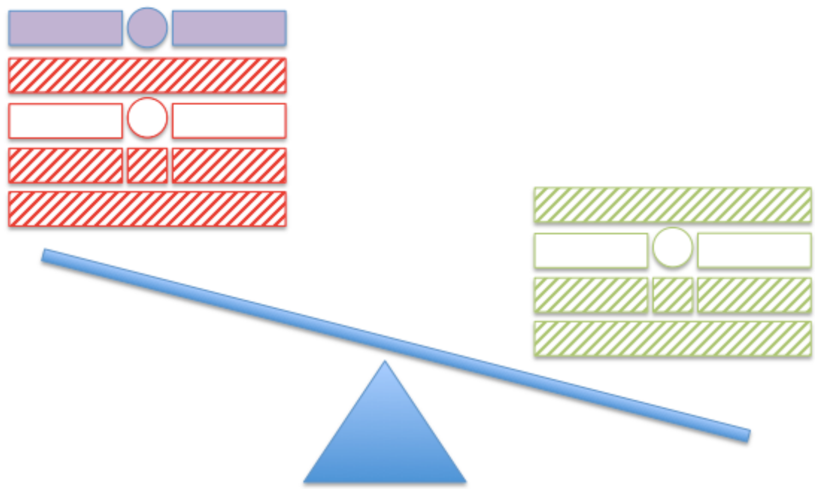

Figure 11: A 3rd Order Net Positive Goal, in which Achieving Net Positive means Net Positive Change (Handprint) Exceeds the Company's BAU Value Chain Footprints Re-Expressed as:
Net Positive Change Outside the BAU Full Value Chain Footprint Exceeds the Company's Actual Full Value Chain Footprint in Year of Assessment

The Net Positive goal approach currently articulated by Levi Strauss and Company is closely related to, or perhaps identical to, a 3rd Order Net Positive Goal. LS&Co sets its footprint hurdle as including the cradle-to-grave footprints of its products. It then defines its handprint as "an action that generates a positive benefit beyond business as usual, industry as usual, and footprint reduction." The Handprint scope used in a 3rd Order Net Positive Goal as expressed in Figure 11 excludes reduction to the company's footprint. We need to discuss what is meant by "beyond industry as usual" to be sure, but as long as it means actions which create change that would not otherwise have happened, in footprints beyond the scope of the company's footprint, then this goal appears to be fully consistent with, and expressible as, a 3rd Order Net Positive Goal. One key for clear understanding is that in goal statements such as the one provided by LS&Co, when excluding "footprint reduction," it is important to state clearly *whose* footprint for which reductions are not countable as Handprints. If the exclusion were meant to refer to all footprints, not just the cradle-to-grave footprint of the company itself, then we would arrive at an approach which is shown graphically as shown in Figure 12.

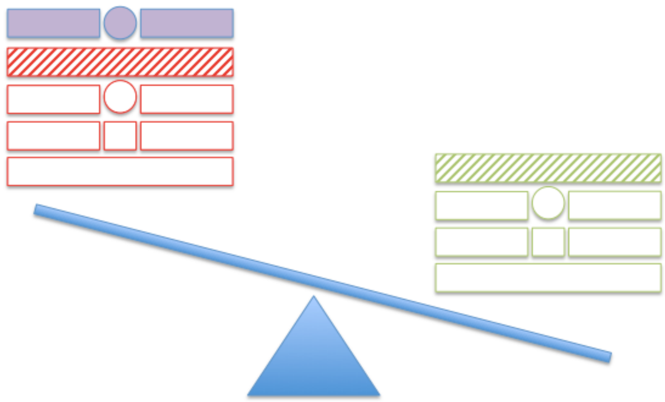

Figure 12: Graphical Depiction of a Net Positive Goal approach which sets a 3rd Order footprint hurdle, and further restricts the scope of handprints to be counted as focusing on positive/regenerative actions, not footprint reductions

Considering "Cherry Picking" Within This Framework

Cherry picking is defined as "selectively choosing the most beneficial items from what is available." In a Net Positive assessment for a company, to cherry pick would be to select a subset of the *beneficial* changes which the company brings about, and include only these changes in the assessment.

In the framework presented here, this would amount to excluding from consideration all of the negative impact changes (the red-hatched impacts in Figures 4-12), and then prioritizing and including only a subset of the beneficial changes (the green-hatched impacts).

If negative change impacts were not possible and real, then prioritizing and including a subset of the beneficial changes would be a practical and even conservative way to proceed. Unfortunately, negative change impacts are real and possible. Companies can for example make modifications to their product designs which make them more likely to be sold, yet which also increase their total life cycle footprint.

Perhaps the field of Net Positive assessment will be able to identify a set of likely-to-be-material pathways of negative impact causation, and enable a company to provide an upper bound estimate on what its negative impacts summed across these pathways is. If this is possible, it might then allow companies to prioritize and assess a subset of its positive impacts, to complete a Net Positive assessment.

Looking Ahead: Considering The Field of Potential Positive Impacts to Include in Net Positive Assessments

The framework presented here refers to two kinds of impacts:

- Footprints: both BAU and actual; and
- Handprints: changes caused by the company, both positive and negative, relative to BAU, including footprint changes and regenerative impacts, all measured in footprint units.

In our next document and discussion we need to explore the broad category of positive impacts in more detail, in at least two ways. First, we will examine Handprints as defined above in more depth. Questions to answer will include:

- What does it mean to *cause* a change, and how do we identify causation?
- How do we allocate or share credit for the impacts among the companies or agents who cause impacts?
- How do we treat time in assessing Handprints?

We can identify at least four degrees of influence, some of which include full or partial causation:

- Direct cause: The company is a direct cause of the event. It would not have happened without action by the company, and by all other collaborators who also co-caused the event.
- Indirect cause: The company is a direct cause of an event which in turn is a direct or indirect cause of the event.
- Contributing influence: The company's actions were one of the factors that possibly collectively caused the event to occur. The event might have happened without action by the company, but then again it possibly may not have.
- Enablement: Another entity causes a handprint through actions which use the company's products as an input.

In addition to the impacts of actions that cause changes, we can identify at least three types of "existence impacts" – consequences of the *existence* of the company and its products, relative to hypothetical scenarios where the company and its products did not exist. Such existence impacts include:

- Footprints of the products: burdens of the company's products' life cycles, relative to their non-existence without replacement.
- Prevented vanish impacts: benefits of the company's products' life cycles, relative to their non-existence without replacement.
- Prevented replacement impacts: impacts of the company's products' life cycles, relative to their non-existence with replacement by most likely alternatives.

These considerations will be considered within the framework for understanding and comparing Net Positive goals.

Relating the Framework to the Multi-Impact-Category Context, and Assuring Alignment with the Net Positive Principles

Net Positive assessment and reporting is done one impact category at a time. Footprints and Handprints in one impact category do not compensate for, or mix with, footprints and Handprints in another impact category. At the same time, Net Positive is meant to stimulate and drive improvement across the full range of humanity's footprints. And, within the current draft of the Net Positive Principles, the pillar of Materiality calls on companies to address the full set of footprint impact categories that are determined to be material for the company.

We consider the full set of four NP Pillars below. First, let's look at how the framework presented so far can be used to address the multi-impact nature and context of Net Positive.

First, we note that each of the balances or "seesaws" in Figures 4-12 pertain to a single impact category. We need a separate comparison, assessment, balance or seesaw for each impact category under consideration. For example, in the figure below, we consider three impact categories for an organization: Climate, Water, and Wellbeing. In the figure it appears that the organization has achieved Net Positive in relation to Climate and Wellbeing but not yet Water.

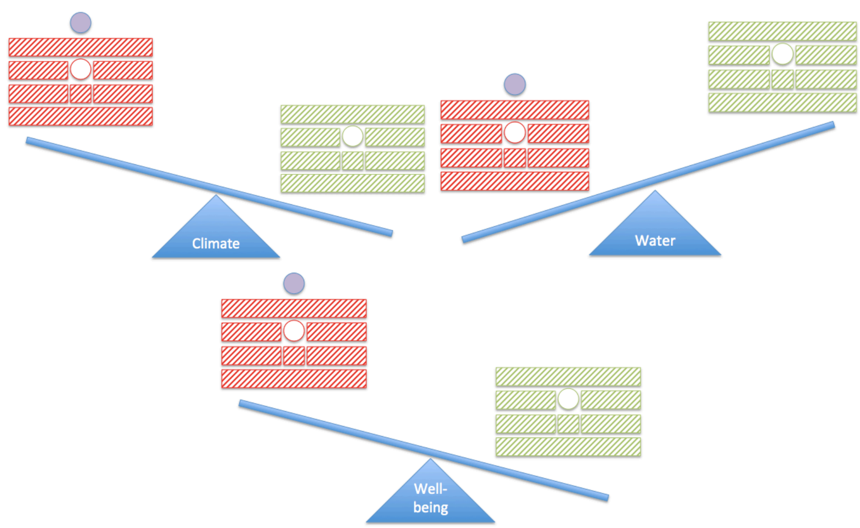

Figure 13: 1st Order Net Positive Assessment or performance in relation to 3 separate impact categories

Next we turn to the question of which impact categories can, and which impact categories must, be part of Net Positive goals and communications; we do this with the aid of the Net Positive Principles.

The March draft of the Net Positive Principles refers to four pillars for Net Positive. These are expressed as follows.

Material: Focusing on what matters most
Net Positive strategies focus on those social and environmental issues most impacted by a business and its value chain, as identified by internal and external stakeholders. Positive impact on one material issue must not compensate for, or create negative impact on,[5] another.

Regenerative: Creating positive self-replicating cycles in nature and society
Net Positive revitalizes the natural world, strengthens social communities, and improves individual well-being. Net Positive does not cause irreversible damage to the environment, society, or individuals.

Systemic: Influencing change beyond an organization's four walls
Net Positive catalyzes change to improve practices across entire social and environmental systems with the recognition that just addressing a single organisation's behaviour would not significantly change outcomes to society and the environment.

Transparent: Sharing progress honestly
Net Positive requires actions, progress, and measurement that are clear, credible, and easily accessible in communications. Attribution of positive and negative impacts must be measurable and demonstrable.

The materiality pillar states that NP must address "those social and environmental issues most impacted by a business and its value chain, as identified by internal and external stakeholders."

The Framework has clarified the fact that Net Positive goals in general address both positive and negative impacts – both Handprints and Footprints – both opportunities and responsibilities. Historically, sustainability has focused on a

[5] I would personally point out, at this time, that the requirement that "positive impact on one material issue must not … create negative impact on another" is probably neither a realistic nor desirable limitation to impose. While it is fortunately true that many handprinting actions provide co-benefits in several impact categories, this is not always the case. For example, the provision of clean water to a community may require some energy input that is not without a carbon or health footprint across the supply chain of the project. Net Positive across all material impact categories will generally call for a portfolio of handprinting actions. It seems important to set requirements for reporting about such "footprints of handprinting actions," and perhaps also to set limits on them, to address ethical or distributional issues for example. But requiring "no" negative impact on other material issues for each handprinting action might be overly restrictive, preventing the creation of powerful and ethically sound handprint action portfolios.

company's responsibility to reduce its footprints. And so material impacts have tended to be material footprint impact categories. This does not go away in Net Positive, but it is *augmented* by consideration of opportunities as well.

So it is helpful to define material responsibilities and material opportunities, in a way consistent with the language taken from the NP Principles.

Material Responsibilities, Material Footprints: Those social and environmental issues most impacted by the business and its value chain.

Material Opportunities, Material Handprint Potential: Those social and environmental issues on which the business has its greatest opportunity or potential to create positive change.

Materiality assessment in the context of Net Positive should include assessments of both responsibilities and opportunities. Given the material responsibility imperative, it seems that a Net Positive approach for a company *must* include goals, reporting and progress on at least all of its material responsibilities. It would then be *encouraged* to include as many of its material opportunities as possible as well. Net Positive reporting might also optionally include other impact categories beyond those identified as material responsibilities and material opportunities.

Next, let's take a moment to consider the issue of what might be called "unacceptable impacts" that has been present in several versions of the Net Positive Principles to date. It is currently addressed under the Regenerative pillar, as: "Net Positive does not cause irreversible damage to the environment, society, or individuals."

Building on (and perhaps stretching too far) the analogy of a seesaw for each of the impact category net positive assessments, we could say that the full Net Positive assessment takes place on a "playground" containing multiple seesaws. The requirement of material responsibilities says that there must be a seesaw present for each of the company's material responsibilities. Now, the issue of "unacceptable impacts" basically says that, in addition to the pursuit of net Positive impact for of the material responsibility seesaws, there are certain forms of impact on or off these seesaws that must not be caused by the company. Working within the playground analogy, the company must also report or transparently cite the "playground rules" to which all its impacts and activities adhere.

Next, the "Systemic" pillar within the Principles appears to be completely in harmony with the expanded comprehensiveness of spheres of impact called-for by evolving from the scope in Figure 3a to that of Figure 3b. And the "Transparent" pillar tells us how we must assess and report both Footprints and Handprints.