



## Net Positive Methodology Summary

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### **Notes on this Document**

This document is intended to provide summary guidance on methodology for assessing “net positive” impacts for an organization, including assessment of footprints, handprints, and static contribution analysis.

This document was developed through the Net Positive Project. The Net Positive Project is facilitated by the following organizations. Interested parties are encouraged to contact the listed individuals

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- Forum for the Future ([Z.LeGrand@forumforthefuture.org](mailto:Z.LeGrand@forumforthefuture.org))
- Greg Norris of the Sustainability and Health Initiative for Net Positive Enterprise (SHINE), an initiative at the Massachusetts Institute of Technology and the Harvard T.H. Chan School of Public Health ([gnorris@mit.edu](mailto:gnorris@mit.edu))

This document is not intended as a standard, certification, or basis for net positive claims.

This document reflects the latest version as of January 2019. The document is subject to revision as the work of the group and its participants continues, and as the field evolves.

### **Footprints, Handprints, and Contributions**

- **Footprints:** The footprints of an actor (whether a person, organization, or group of such actors) are the impacts – generally or traditionally negative – of the activities that are directly or indirectly used by the actor to sustain itself during a year. For some impact categories including greenhouse gas emissions, international standards and consensus methods have been developed to define what should be included in the scope of activities contributing to an organization’s footprint, and how reporting of these footprints should be done. Net Positive assessment is meant to work compatibly with existing methods and standards for footprint assessment.
- **Handprints** are changes (in footprint-related impacts) with respect to business as usual, outside the scope of the actor’s footprint. Business as usual (BAU) for Net Positive assessment is defined as: operating in next year’s economy with this year’s products and processes.

There are two ways to create handprints:

- Be a cause of reductions in some other actors’ footprint relative to BAU
- Create positive impacts which are measurable in footprint units

- While handprints are about change, there is also an important role in the pursuit of Net Positive for **Static Contribution Analysis**, which assesses and quantifies the **contributions** that a company's products are already bringing, *within* business as usual. There are two main perspectives for static contribution analysis, both useful:
  - Contributions of a company's existing products relative to those products vanishing without replacement; and
  - Contributions of a company's existing products relative to those products being replaced by the most likely alternative.

The basic approach to static contribution analysis is to compare the cradle-to-grave life cycle footprints of the company's existing products relative to those of the chosen baseline: vanishing or replacement. In addition to quantifying contributions, static contribution analysis can also highlight promising business-positive ways to create handprints. A company that makes products whose contribution relative to vanishing exceeds the footprint of creating the product can create handprints by increasing demand for such products, or by innovating to further improve its relative contributions. A company that makes products whose contribution relative to replacement by its most likely alternative exceeds the footprint of creating the product can create handprints by increasing their market share for these products.

### **Pursuit of Net Positive**

The concept of Net Positive is simple: put back more than you take out.

One challenge is that, for a given impact category, there are different alternatives for what can count as "what you take out" and different alternatives for what can count as "what you put back." We address each in this section. Another challenge with implementing this straightforward Net Positive concept is that for some impact categories, the boundaries or contexts within which you take out and put back truly matter, such that a balance is called-for on a more local rather than simply global basis. We address this topic in the final section of this paper.

In all cases, "what you take out" is your footprint. Our Net Positive Maturity Model identifies three different, increasingly comprehensive and ambitious, scopes for what we call the "footprint hurdle" – the scope of footprint that an organization seeks to surpass with its positive impacts, with targeting of the most comprehensive scope being labeled "Net Positive Practice." In the Maturity Model, in the section relating to the Regenerative principle, Level 2 or Good Practice is described as "makes and accounts for organizational handprint that is larger than direct operational footprint." Level 3, Best Practice, is "Makes and accounts for organizational handprint that is larger than cradle to gate footprint." And Level 4, Net Positive Practice, is "Makes and accounts for organizational handprint that is larger than cradle to grave footprint, including any and all additional organizational impacts."

What should count as “what you put back”? We have raised two possibilities in this document: handprints (changes outside of the actor’s footprint, relative to BAU) and contributions (impacts relative to vanishing or replacement). The bottom line is that both handprints and contributions are beneficial and should be increased, maximized, and given context by comparison with respect to the company’s footprint.

When we compare handprints to footprints as addressed in the Maturity Model, we are assessing whether the sum of the changes that an organization brings about in a year are not only positive, but larger than “the cost of the organization’s presence” as measured by one of its footprint hurdles. This is consistent with the Net Positive principle of being **regenerative**, bringing about transformative change to business as usual, with the goals that humanity lives within planetary limits and the sustainable development goals (SDGs) are met.

The Net Positive Project suggests that the pursuit of Net Positive calls on organizations to:

- Continually reduce their footprints, on all material footprint impact categories
- Continually increase their static contributions, relative to vanishing and/or replacement<sup>1</sup>, and put these contributions into context by comparing them with their chosen footprint hurdle, impact-category-by-impact category, for at least all material footprint impact categories; and
- Continually create and ideally increase their annual handprints, putting them into context by comparing them to their chosen footprint hurdle, impact-category-by-impact category, for at least all material footprint impact categories

When comparing handprints to footprints, and when comparing static contributions to footprints, the footprints and handprints and contributions should relate to the same period of time, which may be annual or multi-year.

### **Shared Responsibility and Shared Credit**

- Footprints include the principle of **shared responsibility**, which means that many actors share responsibility for the same unit of pollution. We use shared responsibility to show all actors who have co-caused a unit of pollution that they have done so, and to encourage them to pursue actions that could reduce these negative impacts. An implication of shared responsibility is that when we assess the footprint of a *group* of actors, we just need to avoid double-counting, by counting each unit of pollution in their shared footprints only once.
- Handprinting takes a logically consistent approach, adopting the principle of **shared credit**, which means that the actors who have co-caused a positive change all share equal and full credit for the impacts of this change in their handprint. We use shared credit to encourage actors to pursue collaborative actions that create positive impacts, and to avoid arbitrary and complex allocation of credit among collaborators. An implication of shared credit is that when we assess the handprint of a *group* of actors, we just need to avoid double-counting, by counting each unit of positive impact in their shared handprint only once.
- Static contribution analysis makes use of, and compares, the cradle-to-grave footprints of a company's products versus the chosen baseline. So static contribution analysis employs the principle of **shared responsibility**. Because static contribution analysis does not address causation of changes, it does not appear to involve the principle of shared credit.

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<sup>1</sup> Contributions can be assessed with respect to either vanishing or replacement; the choice of one or the other must be explained, justified, and clearly documented.

## Timescales

- When an action leads to changes that will accrue over time, such as over the life cycle of products that the action affects, organizations can adopt one of the following:<sup>2</sup>
  - **Action-year accounting:** assigning future impacts to the year of the action that caused them; or
  - **Impact-year accounting:** assigning future impacts to the year in which they occur.
- Innovations (which are relevant for handprint creation) generally affect **multiple years** of sales for an impacted product. The number of years of sales impacted by the innovation is called the Innovation-Relevant Time Horizon (IRTH). IRTDs vary by product category, and reflect the currently typical number of years between major product redesigns within a product category. Specification of the IRTD should take place in a transparent way, and analysts should strive for, and move towards, consistency in the specification of the IRTD for a given product category.

## Considering the “Impact Shed” of Impacts

For some impact categories, notably climate change, depletion of the stratospheric ozone layer, and possibly also the depletion of globally traded commodity resources such as fossil fuels, the location or context of the handprints and footprint are not material. An emission of a greenhouse gas has the same impact on climate change regardless of where it takes place.

For many other impact categories, however, the context of the impact *is* of material concern. The materiality of context can arise for one or more reasons:

- The context can determine the expected severity of the impact. For example, the expected human health consequences of an air pollution release depend in part on the population density downwind of the release.
- Local or regional contexts may have carrying capacities in relation to the impact. An example would be a region’s fishery ecosystem. Another example would be local rates of precipitation and freshwater resource recharge.
- Local or regional contexts may have set targets in relation to the impact, possibly addressing carrying capacity considerations.
- Impacts may affect different populations, raising distributional/ethical/justice issues.

Context-dependent severity of expected impact can be addressed with context-dependent “characterization factors” as employed in methods of Life Cycle Impact Assessment (LCIA).

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<sup>2</sup> The selection of either project-year accounting or impact-year accounting should be explained, justified, and clearly documented.

Current practice in LCIA is to sum the context-dependent characterization results across a system, and to compare the systems on the basis of aggregated results.

Context-dependent carrying capacity issues, context-dependent targets, and distributional issues all pose challenges to the idea of aggregating positive and negative impacts across global value chains and life cycles. For impact categories that raise one or more of these issues, it is advisable to assess, report, and compare impacts within specific regions and or populations, which we may refer to as “impact sheds.” As an example, water footprints and handprints may be assessed, reported, and compared within a watershed. Human health footprints and handprints may be assessed, reported, and compared within a given population. Biodiversity-related footprints and handprints may be assessed, reported, and compared within a given eco-region.

For context-dependent categories of impact that involve carrying capacity issues, region-specific targets, or specific populations affected, the boundaries of the category-relevant impact shed should be transparently defined and explained. In such cases, estimates of footprints and handprints should be assessed, reported, and compared at the level of the impact shed.

## Net Positive Project Participants

Since its inception, the NPP has benefited from participation and support by the following companies:



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