

# Higg FEM 4.0: Impact to Scores by Section

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## Introduction

With the transition to Higg FEM 4.0 starting January 1, 2024, members and users alike are experiencing a major shift with the scores of Higg FEM: these scores are not comparable between the 3.0 and 4.0 versions. Scores are undergoing a reset in this transition year, and a re-baselining of scores and expectations is necessary.

Over the course of the past four years (Calendar Year 2019 to 2022), verified Higg FEM modules have been used by over 100 member brands and retailers to inform their supplier sustainability performance. Some of these brands relied on fully verified scores, or other scoring artifacts such as level scores, to represent environmental performance on their supplier scorecards.

In addition, thousands of manufacturing facilities have relied on verified Higg FEM assessments to support internal investment on improvement actions and communicating their performance to external parties.

The major shifts in scoring and the scope of verification will affect how manufacturers, brands, and retailers utilize verified Higg FEM outcomes. Cascale has prepared this analysis. In preparation of this document, Cascale conducted structured consultations with member brands and manufacturers to take them through the approach, gather feedback, and inform an action plan on addressing the challenge of such a comprehensive environmental assessment.

## Background & Context: Understanding FEM Scores

### 1. What are FEM scores and what is their purpose?

Higg FEM offers a variety of scoring outputs for facilities and their stakeholders to understand their performance. It includes a Total FEM Score, Section Scores, and Level achievement. The Higg FEM scoring is designed to drive behavior change. This means scoring is mainly assigned to questions that drive actions, decisions, and practices that lead to better environmental sustainability outcomes.

### 2. How are they calculated?

The Higg FEM scores each impact area, i.e. section, equally. Each section consists of 100 points. A total Higg FEM score is based on a possibility of 100 points, so each section score is worth an equal portion (14.3%) of the total points assigned to the total Higg FEM score.

Higg FEM questions span three levels for each impact area. Levels are not equally weighted. Higg FEM weighs Level 2 higher than the other levels because the questions in this level are focused on driving key performance improvement measures such as setting targets and tracking reductions.

- Level 1 is worth 25% out of the 100 total section points. (Unless the applicability questions stop you at Level 1, then the Level 1 is worth 100% of the 100 total section points.)
- Level 2 is worth 50% out of the 100 total section points
- Level 3 is worth 25% out of the 100 total section points

The above score distribution is the same as in FEM 3.0. The difference between FEM 3.0 and FEM 4.0 is that at least one or more questions are being scored in each level in Higg FEM 4.0 where this may not be the case in Higg FEM 3.0 (for example, there were no scored questions in Level 3 of the Energy section in FEM 3.0, making the score distribution for that section 50% in Level 1 and 50% in Level 2).

## Evolution of Higg FEM Scores: Insights from the 4.0 Update

### 1. Overview of score changes

Higg FEM 4.0 is meant to rebaseline the industry environmental performance at the facility. Higg FEM 4.0 has introduced a number of changes to the assessment that should be viewed as a reset on score expectations, meaning it was a necessary re-baselining linked specifically to the following updates:

- Expanded the environmental issues covered by the assessment, thereby adding new areas not previously covered nor scored.
  - Example: Added a series of Groundwater Management questions<sup>1</sup> and GHG Scope 3 which were previously not scored.
- Specified questions that were too general are split into more detailed questions, each with their own point allocations.
- Revamped applicability function to allow only relevant questions to be answered depending on their operations and processes.
- FEM 4.0 also aligns with key industry standards, including the GHG Protocol, Science-Based Targets initiative, and ZDHC Roadmap to Zero

Higg FEM 3.0 has been available for six reporting years with limited changes to the content and expectation. Year on Year comparability of scores is an important feature and value of the Higg FEM tool, which was available for the last six reporting years. We recognize that FEM 2023 is a break of that comparability, but this re-baselining was necessary to ensure the tool maintains relevance in the evolving landscape of sustainability performance. We are committed to maintaining Year on Year comparability of this version for at least an equivalent period of time as for Higg FEM 3.0.

Given these reasons, it should be expected that total FEM 4.0 scores could be very different from FEM 3.0 for the same facility. Note that this document focuses on

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<sup>1</sup> A detailed level of content changes from FEM 3.0 to FEM 4.0 is available on the [howtohigg](#) website.

section scores only, and not the overall total FEM score, as we recently identified a calculation discrepancy in the total score calculation in April 2024 and are expecting all Higg FEM 4.0 total scores to be revised on the platform by May 20, 2024.

**Important disclaimer:**

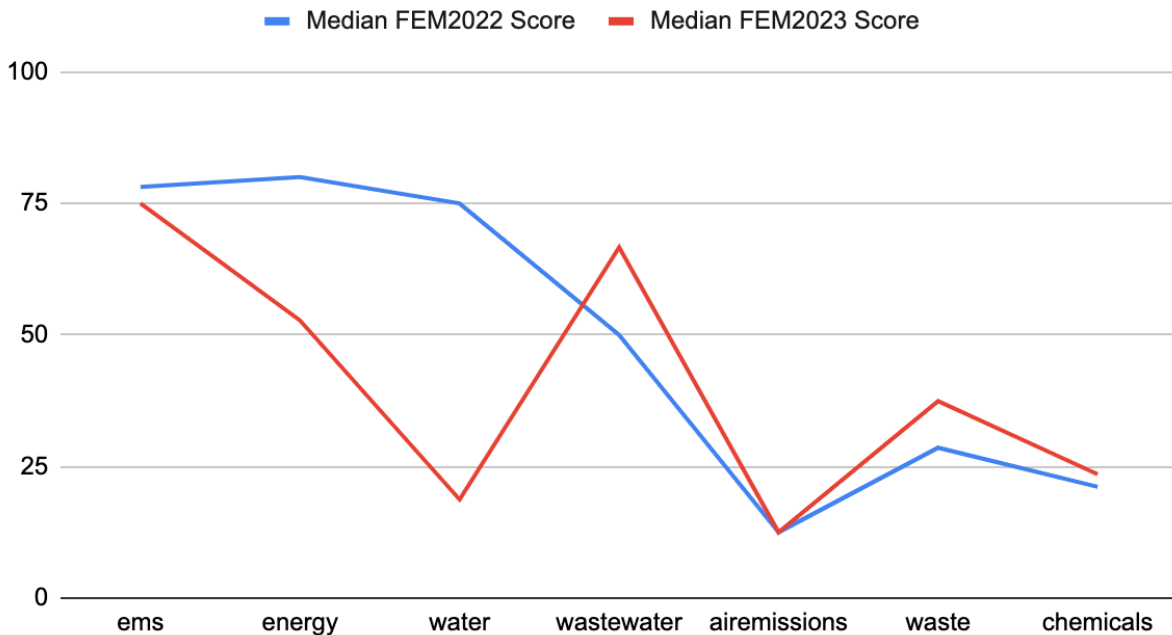
***This score assessment is inevitably biased for the following reasons:***

- ***We are looking at facilities having posted their module within the first few months of the cadence, introducing a selection bias towards facilities with more experience in completing FEM as they are posting quite early.***
- ***With the narrowed scope of core verification in 2024 of Levels 2 and 3, there is no validation of the accuracy of those responses this year. Increases may need to be tempered with this consideration.***

## **2. Detailed review of score changes by section from 3.0 to 4.0**

Due to the major update to the question set, the FEM Section scores can be quite different in FEM 4.0 compared to the FEM 3.0 for any given facility. We have performed a detailed analysis of the score breakdown by each impact section of the Higg FEM amongst the 5200+ posted FEM modules in the first three months of FEM 2023 cadence, and summarized the results in the chart below in the form of the median score difference.

## Median Score Difference between FEM 2022 and FEM 2023



*Source: 5200+ posted modules in the first three months of FEM 2023 adoption, compared to their FEM 2022 score*

We further elaborate below on the root causes for the score differences of each FEM impact section.

**EMS:** The median score has dropped by 3 points in the section score, with the majority of facilities falling between a 20 point drop and a 20 point increase. Scores in this section are quite consistent given there were only limited new questions added in FEM 4.0.

**Energy:** The median score has dropped by 28 points in this section, with the majority of facilities being between a 56 point drop and an 8 point increase.

The main reason behind the general score drop in the Energy Section is that in FEM 3.0, Level 3 questions on Scope 3 GHG emission tracking and SBTi enrollment were **not** scored, meaning that Level 1 and Level 2 each accounted for 50% of the section score in FEM 3.0 (rather than the 25% / 50% / 25% score distribution described in the

scoring methodology for all other sections). In FEM 4.0, Level 3 questions in the Energy section are scored, re-aligning this section with the scoring methodology of all other sections.

As a result, facilities that did not perform well in Level 2 and Level 3 in FEM 3.0 will now be losing a maximum of 25 points from Level 3 and at least a few points from Level 2, which accounts for 50% of the total module score, while easier questions in Level 1 now only account for 25% of total, half of what facilities would have received in FEM 3.0 Level 1.

**Water:** The median score has dropped by 56 points in the Water section. 20% of facilities recorded between a 1.6 points drop and 2.5 points increase, while another 17% recorded a 80–84 point drop, with the rest of facilities between a 59 point drop and 5 point drop.

The main reasons for the score drop in the Water Section is the newly added questions and the question restructuring in FEM 4.0.

- One new question was added in Level 1, which is Question 7 *“Does your facility have a process to monitor the water supply network in your facility for leaks?”*. Half of the posted modules so far have not met this new requirement, leading them to be restricted to Level 1, and not able to achieve scores in Level 2 and 3 in the Water Section.
  - We expect facilities will quickly evolve to address this leak monitoring issue given the large amount of points that can be gained.
  - If this hypothesis turns out to be true, then we should see a notable increase in water scores next year, linked to a desirable improvement in water management practices across the industry.
- Another question that could result in lower score is Question 13 *“Has your facility implemented a water balance or another analysis to evaluate and trace water intake against usage and output?”*. This question was moved from Level 3 in FEM 3.0 to Level 2 in FEM 4.0, so facilities that achieved this in FEM 3.0 are only achieving this in Level 2, and are not able to achieve scores in Level 3 with the other leading practices, if they have not implemented those new leading practices in FEM 4.0.

**Wastewater:** The median score in the Wastewater section has increased by 17 points, with the majority of facilities being between a 34 point drop and a 52 point increase.

Given the large number of content changes and new questions added in Wastewater, facilities seem to be doing pretty well and have consistent scores in the Wastewater section. Many new questions added relate to the ZDHC Wastewater Guideline and ZDHC Wastewater Sludge Guideline. It seems that many facilities can positively answer those questions if they have enrolled in the ZDHC Wastewater scheme.

Additionally, the improvement in scoring is also due to the restructuring of some questions. A few Wastewater questions were split into several questions to better track performance and drive positive behavior. For example, in FEM 3.0, facilities that fall into the “Treat Domestic Wastewater using Septic system” applicability category only needed to answer one question that involves at least two different requirements to achieve a full point of that question. In FEM 4.0, this question was split into two different questions, rewarding facilities separately, so if they are only able to achieve one requirement but not the other, they can still receive points instead of 0 for the entire Wastewater section.

**Air Emissions:** In this section, there is no difference in the median score change between FEM 2022 and FEM 2023, with the majority of facilities being between a 22 point drop and a 16 point increase. Performance is quite consistent given we have entirely revamped the Air Emissions in FEM 4.0 including adding new questions and removing non-relevant questions.

**Waste:** The median score has increased by 9 points in this section, with the majority of facilities being between a 17 point drop and a 34 point increase. Performance is quite consistent from last year, as we did not add many new requirements in this section. The major content change in this section was question restructuring. We have split questions from one large question to multiple questions to allow proper

performance tracking and drive more systematic behavior changes, hence improving the reward system.

**Chemicals:** The median score has increased by 2 points in this section, with the majority of facilities being between a 20 point drop and a 14 point increase.

In FEM 4.0, in addition to adding new questions that align with ZDHC Guidelines, we have done major question restructuring in the Chemicals section, including realignment of applicabilities. For example, we split the MRSL and RSL questions into two questions in FEM 4.0, instead of one single question in FEM 3.0. This allows better data collection, performance tracking and equal reward. Facilities that may not be able to achieve the same question in FEM 3.0 will now have an opportunity to either achieve one or both questions score depending on their circumstances. It also allows these questions to be asked and scored with proper applicability, thus minimizing unnecessary penalization of score to facilities that may never be able to achieve because of their circumstances. Besides, this result is based on the 5200+ posted modules so far, with 65% of them completed by Final Product Assembler, which very likely fall under the “Minimal Chemical Use” category, thus only a smaller set of questions are applicable to them in the Chemicals section.

## Conclusion

All FEM users should expect this year to be a re-baselining of FEM scores, and therefore a reset of expectations on what score a given facility should achieve.

In summary:

- **Energy and Water sections:** most facilities are experiencing a very large drop in their scores (median drop of 28–56 points), generally due to the higher bar for performance in these two sections introduced with FEM 4.0.
- **Wastewater and Waste sections:** most facilities see a small increase in scores (median increase of 9–17 points), as the restructuring of the questions has allowed for most facilities to gain a few more points.



- **EMS and Chemicals sections:** most facilities see a relatively small impact to their score (median drop of 2-3 points). Scores are consistent in the EMS section given there were only limited new questions added in FEM 4.0. For the Chemicals section, there were new questions that align with ZDHC Guidelines, and we did a major question restructuring. This allows facilities a better opportunity in FEM 4.0 to achieve one or both section scores, and allows questions to be asked and scored with proper applicability.
- **Air section:** the median score did not change from FEM 2022 to FEM 4.0 (2023). Performance is consistent given we have entirely revamped the Air Emissions in FEM 4.0 including adding new questions and removing non-relevant questions.

**Disclaimer:** *this guidance is applicable to the individual section scores, not the total score. We identified a calculation discrepancy in the total score calculation in April 2024 and are expecting all total scores to be revised on the platform by May 20, 2024.*