

Higg Facility Environmental Module (FEM) 4.0 Draft Content

June 15, 2022

The purpose of this document is for Higg FEM users to start understanding the next version of the Higg FEM (“Higg FEM 4.0”) which will officially be released on the Higg platform in November 2023.

Please note that the content in this document is based on a draft version of the FEM 4.0. The SAC is currently undergoing a content review process with multiple stakeholders to ensure the next version of Higg FEM properly aligns with industry needs. Therefore, the final version of the Higg FEM 4.0 may differ from what is described in this document.

Background on Higg FEM 4.0

Between 2018 and 2021, the SAC received a significant amount of feedback regarding the Higg FEM 3.0, including content questions, guidance, scoring, applicability, user interface, etc. The SAC has committed that each Higg FEM version will last for 3-5 cadences/years; therefore, it was not possible for SAC to make the changes that could have addressed the feedback received in the past few years.

As we are approaching the fifth year of the FEM 3.0, it is time to develop FEM 4.0 to address the feedback received and further enhance the FEM to align with the most recent industry standards.

Starting in mid-2020, the SAC began working with many SAC members, including brands, retailers, manufacturers, service providers, and other international organizations on FEM 4.0. This work has included reviewing tool feedback, the FEM framework, FEM scoring methodology, FEM question content, and much more. This work has been a collaboration between all partners.

What changes should we expect in FEM 4.0?

FEM 4.0 is a major update compared to the current version of the tool. Key updates we are looking at in FEM 4.0:

1. In FEM 3.0, Facility Type and Facility Process are based on the selection from the Industry Sector question. This only works if the facility is producing a finished and assembled product. However, a facility making a material (e.g. leather) or a component (e.g. zipper) could be making these for multiple industry sectors and the facility often either misses checking the appropriate checkbox, or completes it inaccurately. These types of facilities often need to alter their responses to the Industry Sector question in FEM 3.0 to ensure the appropriate facility process is displayed for them.

To address this issue, Facility Type and Facility Process will no longer be based on the selection from Industry Sector in FEM 4.0. Instead, the facility will first select Facility Type. This allows for differentiation in the follow-up questions, thus capturing the most accurate data and allowing the facility to complete the facility profile based on their type of facility. In addition, Product Categories and Product List may not apply to all facilities. Depending on what facility type(s) the

facility has selected, either Product Category or Material will then display, followed by the selection of the appropriate facility process.

2. Annual volume will be reported by Facility Type. This has a direct impact on facilities that have vertical processes. This means a facility that manufactures final finished products and fabric in the same facility will be reporting their annual volume based on how many final finished products they produced annually and how much fabric (in kg) they produced annually. The annual volume unit will also be standardized depending on the facility type for better benchmarking and future normalization. Additional options on reporting annual volume and unit of measure will be available.
3. Energy consumption and water consumption will be reported by Facility Type. Again, this has a direct impact on facilities that have vertical processes. This means, a facility that manufactures final finished products and fabric in the same facility will need to track and report their energy and water consumption data separately. This will enhance the calculation and identification of energy and/or water intensive processes within the facility and its processes.
4. In FEM 3.0, the entire FEM will score **zero points** if the facility doesn't have a valid operating license. In FEM 4.0, we are going to implement additional rules to ensure compliance with licenses and permits. This means, the entire FEM will score **zero points** in multiple scenarios. For example, if an environmental permit is required, but a facility is not able to provide it, or for some reason, a facility is not able to meet the local requirement to obtain such permit, the entire FEM will score **zero points** even if they have a valid operating license.
5. There will be some automatic rules to calculate scoring on how a facility is meeting their energy/water/waste resource targets. In FEM 3.0, the questions and scoring did not always reflect actual facility performance. For example, it was difficult to provide scoring to facilities that had already done a great deal of work to reduce their impacts and therefore had smaller reduction targets. By linking baseline, target, and achievement performance of the impact area (Energy, Water, Waste) with scoring in FEM 4.0, this may help to resolve this issue.
6. We have added groundwater and soil contamination questions in FEM 4.0 to start assessing a facility's management in these areas.
7. We have added questions regarding the Renewable Electricity Certificate (REC) and its management. Including this set of data will help to calculate the GHG emission at the individual facility level more accurately.
8. In the Energy section, we have added questions regarding coal phase-out, fossil fuel phase-out, increased use of renewable energy, and Science-Based Targets in Level 2 or Level 3.
9. In the Water section, we have added a few questions on how a facility manages the use of groundwater, including knowing the sustainable yield of the groundwater source, tracking, etc. Some countries may not allow groundwater, while some may depend on it as a single source of water in their facility. As such, we want to ensure that a facility using groundwater manages and uses it responsibly, without jeopardizing the environment and the community.

10. We are fixing the applicability pathway in the Wastewater section. For example, in FEM 3.0, if a facility has industrial wastewater treated onsite and domestic wastewater treated using septic, the facility does not need to answer any questions on septic, which is inaccurate. In FEM 4.0, we will include questions on septic for this type of facility.
11. In the Wastewater section, we have added a new set of questions regarding wastewater sludge management. This has followed from the ZDHC Wastewater Sludge guideline.
12. In the Air section, we have added a new applicability pathway referring to MMCF (man-made cellulose fibers). If a facility is making MMCF, then the facility will answer a specific set of questions.
13. We have revamped the Air section as this section was known to be difficult based on feedback. We have moved questions around between Level 1, Level 2, and Level 3. Additionally, we have included a new set of questions based on the ZDHC Air Position Paper.
14. In the Waste section, we have separated hazardous waste management and non-hazardous waste management. We ask questions related to the circular system for production waste. We also have redefined the waste disposal pathway based on the known industry-wide definition.
15. In the Chemicals section, we have added a new applicability pathway on Spot Cleaner to make the questions more relevant to this type of facility. We worked with ZDHC to align our content and guidance in the Chemical section. We have also moved questions between levels.

From now until July 30, 2022, the draft content of Higg FEM 4.0 is undergoing a review process and may change. SAC members have access to the draft content and have the opportunity to review and provide constructive feedback before the SAC finalizes the content. Final details of the updated content will be publicly available in December 2022 when the SAC publishes the Higg FEM 4.0 Technical Paper.

How can you get involved in the review process?

If you are an SAC member, please login to the member portal to gain access to the content and feedback submission.

If you are not a SAC member, we encourage you to reach out to your partners who are SAC members and they can submit feedback on your behalf.

All feedback is due on July 30, 2022 to ensure the Higg FEM 4.0 Technical Paper can be published in December 2022.