



LEED/Sustainability Committee

Summary of Key Activities from 2022 - 2025

2022

Task Group was formed in Spring 2022. The initial discussion topic was recyclability of building insulation materials. In North America, only all-PE structures can be approved as recyclable for flexible packaging. The NA recycling guidelines are set by the Association of Plastics Recyclers: <https://plasticsrecycling.org/pe-film-design-guidance>.

We then moved onto LEED certification: <https://www.usgbc.org/leed> The main topics were VOC's and carbon footprint / embodied carbon / Life Cycle Analysis. WAP consultant was brought in during the October meeting to give a presentation on Sustainability, with a focus on how they support LCA calculations.

We also discussed the need for sharing more information about the benefits of RI/RB products in energy savings, which contribute to their sustainability.

2023

During our January meeting, we finalized the RIMA Sustainability Statement, which is posted on our website: <https://rimainternational.org/technical/sustainability/>

Factory gate LCA data was collected for several raw materials by Task Group members over the course of the year. Here is a summary of our findings. Sources and references can be found in the original minutes.

Foil: 7.0 – 12.0 kg-CO₂-eq/kg foil

Metallized PET film with top-coat: 4.8 kg-CO₂-eq/kg facer

LDPE: 1.927 kg-CO₂-eq/kg LDPE

We were unable to get a standardized LCA of RI/RB manufacturer's process-related carbon emissions.

Jan presented on behalf of RIMA and the Task Group at the Global Insulation Conference in Chicago in November 2023. Her presentation was well received.

Dr. Miller presented at the RESNET conference in fall 2023, and submitted an abstract to ASTM. These can be found on the RIMA website.

2024

It was confirmed that low VOC products are preferred for LEED certified jobs.

We discussed advancements happening in new, lower cost, low E met PE facer products, that could be cost competitive with met PET facers but offer a fully PE reflective insulation product. Good tension controls on RI laminators are a must for met PE facers, so they don't get stretched.

We discussed the importance of simulators like RESNET and ATTICSIM in developing models that show the technical heat flow resistance benefits of RI/RB products. Dr. Miller, Dr. Yarborough and Dr. Saber have all



worked on or are currently working on these simulations. It takes time to build these models and have them accepted by industry standards groups, builders & architects. Dr. Miller was invited by the Task Group to be a guest speaker at the October 2024 RIMA meeting. Jan was also invited by the Task Group to present at the same meeting on LEED v5 updates, which will be implemented by US GBC in 2025. Both presentations were highly informative and well received.

2025

There was a request made at the fall 2024 meeting for the Task Group to put together a step-by-step guideline on how RIMA members can apply to get their products LEED certified. Jan took the lead on this, with input from the rest of the group, and gave a presentation on this at the spring meeting. It included useful tips and accredited test labs to use for third party verification of the following:

- Low VOC's
- Environmental Product Declaration
- Health Product Declaration
- Life Cycle Assessment
- Recycled Content

In addition to her presentation, Jan submitted a white paper with these details. Both are posted on the RIMA website.

At the spring meeting, the Task Group was dissolved.