HFES Sustainability Technical Group File link:

https://docs.google.com/document/d/1c4nsSWOH3QmLypXfBZBJPYBMP9KN0qBk/edit?usp=sharing&ouid=107791814737161234365&rtpof=true&sd=true

Monday, January 8, 2024 at noon Eastern time

Pre-meeting agenda version at bottom.

Join Zoom Meeting link...

Chair: David Rempel. Meeting Cqqlqwwww.lwww0w01qqatalyst: Dan Gottesman

- 1. Introductions of new members
- 2. Please join the Sustainability TG https://mv.hfes.org/subscription/join-technical-group
- 3. New bidding process for Annual HFES meeting presentations (Susan K)
 - a. process includes rep from each TG voting the sessions proposed by other TGs that they see as relevant to their TG as well.
- 4. Webinars:
 - a. Next Webinar: January 10 noon Eastern: Sustainable Aerospace Together Boeing's Sustainability Strategy, Joel Hood and Chris Reid. (Chris)
 - Registration: https://www.hfes.org/Events/Upcoming-Meetings-and-Activities
 - b. Registration for the webinars (Dan)
 https://learn.hfes.org/products/hfes-sustainability-tg-webinar-sustainable-aerospace-together-boeings-sustainability-strategy
 - c. Other possible Webinar topics
 - 1. GHG emissions per product.
 - 2. Building HVAC usability...
 - 3. Other?
- 5. 2024 HFES Annual Meeting (Andrew)
 - a. Annual Meeting TG Mixer Partner TG
 - b. Annual Business Meeting (David R)
 - c. Circularity (Product Design TG / Amrita M, Dan O)
 - d. Sustainable Supply Chains (Product Design TG / Rehka)
 - e. Human roles in recycling: success and limitations (Dan O, Sara R, Augustine A)
 - f. Sustainability in HF Education (Education TG / Gretchen M, Nancy B)
 - g. AI/automation on humans and energy (Human AI Robot TG / Joe M, Mary O)
 - h. Design of EV infrastructure (Surface Transport TG / Andrew, David, Gretchen) January 12
 - i. Sustainability of Ground Water and Human (Environmental Design TG)
 - j. Sustainable Transportation in Cities (Environmental Design TG / Sara R)
 - k. Sustainability in Health Care (Health Care TG / Susan K, Mary O)
 - 1. Getting to Net Zero (Industry Partners, Macro ergonomics TG) Keynote
- 6. updated version 2024 annual meeting plans with Andrew's notes:
 - a. Annual Meeting TG Mixer Partner TG
 - b. Annual Business Meeting (David R)
 - c. Circularity (Product Design TG / Amrita M, Dan O) Kathryn Tippey, program chair for PD TG, keen to pursue at least 2 proposals. Kathryn tippey@gmail.com; hanzhang@google.com
 - d. Sustainable Supply Chains (Product Design TG / Rehka) Kathryn Tippey, program chair for PD TG, keen to pursue at least 2 proposals. Kathryn tippey@gmail.com; hanzhang@google.com Possibly integrate supply changes with circularity or recycling.

- e. Human roles in recycling: success and limitations (Dan O, Sara R, Augustine A) Kathryn Tippey, program chair for PD TG, keen to pursue at least 2 proposals. Kathryn tippey@gmail.com; hanzhang@google.com
- f. Sustainability in HF Education (Education TG / Gretchen M, Nancy B) No response from Education TG
- g. Al/automation on humans and energy (Human AI Robot TG / Joe M, Mary O) Joseph Lyons, program chair for HART TG, indicated that they are keen to discuss, joseph.lyons.6@us.af.mil
- h. Design of EV infrastructure (Surface Transport TG / Andrew, David, Gretchen) Justin Mason, program chair of the ST TG, is meeting with David and myself, January 12. iustin-mason@uiowa.edu
- i. Sustainability of Ground Water and Human (Environmental Design TG) No response from ED TG
- j. Sustainable Transportation in Cities (Environmental Design TG / Sara R) Justin Mason, program chair of the ST TG, indicated that their TG is more keen to discuss the EV infrastructure proposal on January 12. justin-mason@uiowa.edu
- k. Sustainability in Health Care (Health Care TG / Susan K, Mary O) Megan Gregory and Vickie Nguyen, program chair and program chair-elect for HC TG, have not got back to me yet. Another request has been sent. megan.gregory@ufl.edu; vickie.nguyen@gmail.com
- I. Getting to Net Zero (Industry Partners, Macro ergonomics TG) Keynote Macroergonomics TG (co-sponsor) speak to Hanna Barton; Dan Odell with some Microsoft links; Boeing Net Zero (Joel joel.d.hood@boeing.com and Chris)
- m. Macroergonomics TG, Hanna Barton, keen to co-sponsor a session/event –
- n. Environmental Design TG, Clive D'Souza and Claudia Mont-Alvao, keen to co-sponsor a session/event, happy to talk
- 7. Potpourri Share or Ask / Ideas and requests
 - a. Applied Ergo Pre-Con (Dan) "Integrating Ergonomics and Human Factors for Sustainability Impact" https://www.iise.org/AEC/details.aspx?id=6962
 - b. Exoskeleton in solar panel install & JerryRig Good news Video https://www.youtube.com/watch?v=b9DYk7c1Uk8 Exo image may be more of publicity shot than a real live application according to Chris who has seen this exo in other publicity shots.
 - c. Presentations to other TGs -- Andrew and David and Dan G. (and others) will pursue.
- 8. Next meeting February 12, 2024, noon Eastern

Meeting summary from Fathom (formatted and liked version further below)

Introductions and meeting overview @ 0:00

The meeting began with introductions from new attendees Joel and Jill. David outlined the agenda which included discussing the HFES annual meeting submission process changes, collaborating with other TGs, an upcoming sustainability TG webinar, and planning content for the annual meeting.

HFES annual meeting submission process changes @ 6:02

Susan provided an overview of the new submission process for the HFES annual meeting which features individual boxes for objectives, approach, findings and takeaways rather than a single abstract. Program chairs will bid on submissions based on keywords to increase co-sponsored sessions between TGs.

Collaborating with other TGs for HFES annual meeting @ 15:10

Andrew shared a document outlining proposals for collaboration between the sustainability TG and other groups. Follow ups are needed with TGs on automation, healthcare, education and environmental design. The Surface Transportation TG is not interested in an EV infrastructure proposal.

Upcoming sustainability TG webinar @ 18:52

Chris and Joel invited feedback on their upcoming webinar about Boeing's path to net zero which will include a quantitative decarbonization tool. Human factors topics like usability and systems interaction were suggested. The webinar aims to provide industry and TG perspective.

Planning content for HFES annual meeting @ 25:30

Ideas proposed included panels on recycling, circularity and sustainable supply chains with the Product Design TG. Getting a keynote on definitions and approaches to net zero was discussed. Andrew is pursuing collaboration proposals with other interested TGs.

Potential topics for collaboration with Product Design TG @ 37:00

Amrita suggested a panel on achieved 100% circularity in packaging could tie together topics of recycling, product design and circularity. Supply chain impacts many stages but manufacturing and transportation were noted as key. European regulations on packaging were cited as an area of potential discussion.

Potential for exoskeleton use in solar panel installation @ 52:39

Dan sparked discussion by sharing a photo of an exoskeleton assisting solar panel installation. Safety concerns were raised about using exoskeletons on roofs. Further research is needed to identify suitable exoskeleton models for various tasks like mitigating fatigue. The photo's exoskeleton was deemed non-functional.

View Recording & Summary

HFES Sustainability TG - 2nd Mondays

January 08, 2024 • 61 mins • View Recording & Summary

The following summary and action items were generated by Al



Introductions and meeting overview @ 0:00

The meeting began with introductions from new attendees Joel and Jill. David outlined the agenda which included discussing the HFES annual meeting submission process changes, collaborating with other TGs, an upcoming sustainability TG webinar, and planning content for the annual meeting.

HFES annual meeting submission process changes @ 6:02

Susan provided an overview of the new submission process for the HFES annual meeting which features individual boxes for objectives, approach, findings and takeaways rather than a single abstract. Program chairs will bid on submissions based on keywords to increase co-sponsored sessions between TGs.

Collaborating with other TGs for HFES annual meeting @ 15:10

Andrew shared a document outlining proposals for collaboration between the sustainability TG and other groups. Follow ups are needed with TGs on automation, healthcare, education and environmental design. The Surface Transportation TG is not interested in an EV infrastructure proposal.

Upcoming sustainability TG webinar @ 18:52

Chris and Joel invited feedback on their upcoming webinar about Boeing's path to net zero which will include a quantitative decarbonization tool. Human factors topics like usability and systems interaction were suggested. The webinar aims to provide industry and TG perspective.

Planning content for HFES annual meeting @ 25:30

Ideas proposed included panels on recycling, circularity and sustainable supply chains with the Product Design TG. Getting a keynote on definitions and approaches to net zero was discussed. Andrew is pursuing collaboration proposals with other interested TGs.

Potential topics for collaboration with Product Design TG @ 37:00

Amrita suggested a panel on achieved 100% circularity in packaging could tie together topics of recycling, product design and circularity. Supply chain impacts many stages but manufacturing and transportation were noted as key. European regulations on packaging were cited as an area of potential discussion.

Potential for exoskeleton use in solar panel installation @ 52:39

Dan sparked discussion by sharing a photo of an exoskeleton assisting solar panel installation. Safety concerns were raised about using exoskeletons on roofs. Further research is needed to identify suitable exoskeleton models for various tasks like mitigating fatigue. The photo's exoskeleton was deemed non-functional.

View Recording & Summary

Pre-meeting version

HFES Sustainability Technical Group File link:

 $\frac{https://docs.google.com/document/d/1c4nsSWOH3QmLypXfBZBJPYBMP9KN0qBk/edit?usp=sharing\&ouid=107791814737161234365\&rtpof=true\&sd=true$

Monday, January 8, 2024 at noon Eastern time

Join Zoom Meeting link...

Chair: David Rempel. Meeting Catalyst: Dan Gottesman

- 9. Introductions of new members
- 10. Please join the Sustainability TG https://my.hfes.org/subscription/join-technical-group
- 11. New bidding process for Annual HFES meeting presentations (Susan K)
- 12. Webinars:
 - a. Next Webinar: January 10 noon Eastern: Sustainable Aerospace Together Boeing's Sustainability Strategy, Joel Hood and Chris Reid. (Chris)
 Registration: https://www.hfes.org/Events/Upcoming-Meetings-and-Activities
 - b. Registration for the webinars (Dan)
 - c. Other possible Webinar topics
 - 1. GHG emissions per product.
 - 2. Building HVAC usability...
 - 3. Other?
- 13. 2024 HFES Annual Meeting (Andrew)
 - a. Annual Meeting TG Mixer Partner TG
 - b. Annual Business Meeting (David R)
 - c. Circularity (Product Design TG / Amrita M, Dan O)
 - d. Sustainable Supply Chains (Product Design TG / Rehka)
 - e. Human roles in recycling: success and limitations (Dan O, Sara R, Augustine A)
 - f. Sustainability in HF Education (Education TG / Gretchen M, Nancy B)
 - g. AI/automation on humans and energy (Human AI Robot TG / Joe M, Mary O)
 - h. Design of EV infrastructure (Surface Transport TG / Andrew, David, Gretchen) January 12
 - i. Sustainability of Ground Water and Human (Environmental Design TG)
 - j. Sustainable Transportation in Cities (Environmental Design TG / Sara R)
 - k. Sustainability in Health Care (Health Care TG / Susan K, Mary O)
 - 1. Getting to Net Zero (Industry Partners, Macro ergonomics TG) Keynote
- 14. Potpourri Share or Ask / Ideas and requests
 - a. Applied Ergo Pre-Con (Dan) "Integrating Ergonomics and Human Factors for Sustainability Impact" https://www.iise.org/AEC/details.aspx?id=6962
 - b. Exoskeleton in solar panel install & JerryRig Good news Video https://www.voutube.com/watch?v=b9DYk7c1Uk8
 - c. Presentations to other TGs ???
- 15. Next meeting February 12, 2024, noon Eastern