D6.9 Industrial Board Meeting Report 2

WP6

Lead Partner: TNO

Partner Contributors: all

Dissemination Level: Public

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Federal Department of Economic Affairs, Education and Research EAER
State Secretariat for Education, Research and Innovation SERI

Project Acronym	MC2.0
Project Title	Mass customization 2.0 for Integrated PV
Grant Agreement n°	101096139
Call	HORIZON-CL5-2022-D3-01
Topic	HORIZON-CL5-2022-D3-01-03 Advanced manufacturing of Integrated PV
Starting Date	1 January 2023
Duration	38 months

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Document history

Version	Date	Comments
0.1	2024-05-31	First draft version
1.0	2024-06-12	Final version approved by reviewer VDL. Ready for upload to HE-portal after final check.

Table of Contents

Abbreviations and Acronyms

[BIPV] – Building Integrated Photovoltaics
[BOM] – Bill of Material
[IB] – Industrial Board
[IPV] – Integrated PV
[MC] – Mass Customization
[MC2.0]– Mass Customization 2.0
[VIPV] – Vehicle Integrated PV

1 Introduction

The goal of the Industrial Board (IB) of our project MC2.0 is to provide feedback from the market on the latest results of the project. That includes confidential results which are only shared within the consortium. For the IB to perform their work, they need to know some of these confidential results. And therefor each IB-member has signed an NDA with the project coordinator (acting on behalf of the full consortium).

From the very first moment of the kick-off meeting of the IB, it was requested by the majority of the IB-members to have more meetings than planned in the project plan. This was found no problem by the MC2.0-partners. On the contrary, this is appreciated much! Because the more interaction between the IB and the project, the faster market uptake of MC2.0 semi-fabricates and MC2.0 IPV-products can take place.

For completeness we show the list of IB-members in the next chapter.

Thereafter, this Deliverable (D6.9 Industrial Board Meeting Report 2) covers two IB-meetings:

- IB-update M12 of 2024-01-31
- IB-update M15 of 2024-04-23

Public versions of these meetings have been included in this report.

Finally this report concludes with planned follow-up actions and meetings.

2 List of Industrial Board members

- Adrian Berger from Swiss Association of Architects and Engineers, SIA (CH)
- Bauke Geuzebroek from Knauf (DE)
- Björn Rau from BIPV Alliance (DE)
- Christof Erban, renowned expert of European standard EN 50583 “photovoltaics in buildings”
- Daniel Elber from Manni Group (IT)
- Frank Huijnen from Yparex (NL)
- Frédéric Clauss from Solaxess (CH)
- Frederik Gort from Swiss Solar Association (CH)
- Goele Kerckhofs from Embuild Limburg (BE)
- Hubert Fechner from Technology Platform PV, TPPV (AT)
- John Relou from Rockpanel (NL)
- Juras Ulbikas from MetSolar (LTH)
- Piero Bernabe from Progress Facades (IT)
- Ruud Derks from BIPV-Nederland (NL)
- Simon Boddaert from CSTB (FR)
- Stefan Dewallef from SolTech (BE)
- Steven Lannoo from Netwerk Architecten Vlaanderen (BE)
- Wolfgang Passlack from Unilin (NL)

3 Meeting report IB-M12 meeting 31st January 2024

Meeting participants (in random order):

Roland Valckenborg, Frederik Gort, Frédéric Clauss, Goele Kerckhofs, Andreas Haller, Adrian Berger, Marc Koetse, Wolfgang Passlack, Paolo Corti (on behalf of Francesco Frontini), Bauke Geuzebroek, John Relou, Peter Toonssen, Juras Ulbikas, Rocco Traini, Alessandra Bellutti (Manni Tech), Simon Boddaert, Björn Rau, Stefan Dewallef, Nienke Riezebos

Chair: Roland Valckenborg (TNO)

Agenda

- Introducing new IB-members and members that were not present at the KoM [Roland, TNO]
- Update on the technical progress [Marc Koetse, TNO]
- Q&A with the IB [David Moser, moderator]
- Wrap-up & closure

Technical & Project Update (public part)

- WP1: finished, design and requirement documents have been submitted.
- WP2: automated pilot line. Ongoing, WP finish date M36. WP2 consists of 7 sub tasks.
- WP3: Economy and Market. Market archetypes will be included in new BIPV status report next year.
- WP4: Renovation Wave. WP just started, therefore no progress updates available yet.
- WP5: Sustainability. T5.4 Circularity index: an abstract on this topic has been submitted for the upcoming EU-PVSEC.

Q&A with the IB

This part of the meeting we discussed:

- Certification
- Fire-safety
- Color of semi-fabricate and IPV-product (and related aesthetic aspects)
- Fixation of semi-fabricate in the IPV-product
- Electrical properties and connection to the total PV-system

4 Meeting report IB-M15 meeting 23rd April 2024

Meeting participants (in random order):

John Relou, Ruud Derks, Marc Koetse, Arnaud Morlier, David Moser, Adrian Berger, Andreas Haller, Francesco Frontini, Wolfgang Passlack, Simona Villa, Bauke Geuzebroek, Atse Louwen, Rocco Traini, Simon Boddaert, Paolo Corti, Björn Rau, L. Plessing (TPPV), Roland Valckenborg

Chair: David Moser (EURAC)

Agenda

1. Technical Update on Mass Customization [Marc Koetse, TNO]
2. Very brief Project Update [slides from Roland Valckenborg, TNO]
3. BIPV Contest [Paolo Corti, SUPSI]
4. Fire-safety of semi-fabricates [David Moser guides the discussion]
5. Any other business
6. Wrap-up & closure

Technical & Project Update (public part)

- We are at month 15 (from a total project duration of 38 months).
- All deliverables have been submitted according to plan.
- Most deliverables are a report. These public deliverables are available for download at mc2dot0.eu/reports, as shown in Figure 1.

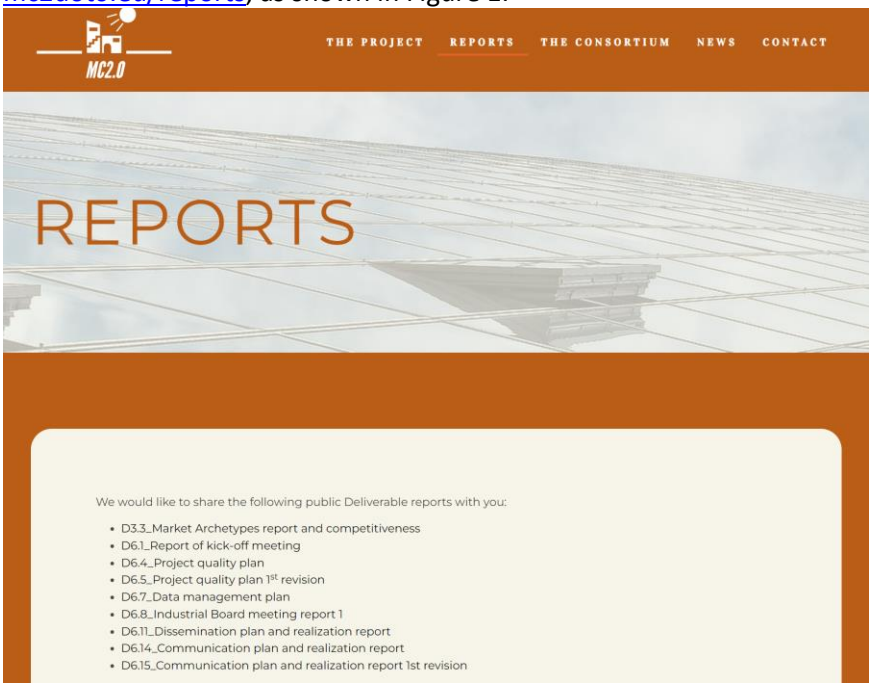

Figure 1: Screenshot of www.mc2dot0.eu/reports

- A video of the pilot MC-line can be seen from this page: https://www.tno.nl/en/sustainable/renewable-electricity/solar-modules-mass-customization/affordable-tailor-made-solar-energy/ (duration: 2 minutes, language: Dutch)
- Dissemination activity: EU Solar Strategy day, in Brussels, dd. 21st February 2024 was a success. Take-away message: 'Mass customization will bring back PV Industry to Europe'

BIPV Contest

Paolo Corti of SUPSI presented the initiation of this contest in which students and young architects are invited to design a small building with MC2.0 semi-fabricates at the building skin. In fact the competition is open to everybody, and the guidelines are composed in such a way that we hope to receive a lot of very creative (non-standard) contributions!

More information can be found via the news item on our website: https://mc2dot0.eu/join-our-contest-solar-design-for-public-co-working-spaces/

Or directly: https://solarchitecture.ch/contest-solar-design-for-public-co-working-spaces/

At that link one can find the guidelines and the registration form.

Fire-safety of semi-fabricates

Based on the input and discussion started in the previous IB-meeting, the MC2.0-partners would like to understand in more detail on which specific aspects there could be a potential fire-safety issue.

Discussed was:

- Is the risk related to material properties of the semi-fabricates? If yes, what would be good material modifications or add-ons for MC2.0 to incorporate in the research.
- Is the risk related to the fire-safety measurements methodology that is prescribed by the norms of the EU member states? If yes, are these methods proven to be realistic, according to you?
- The questions resulted in a lively discussion which underlined the knowledge of the IB members on this topic. We would like to benefit from this with a continued discussion.

Any other business and closure

The meeting was closed after announcement of the next IB-meeting and MC2.0 booth at the BAU trade fair in January 2025. More details are shared in the next chapter.

5 follow-up actions and meetings

- The technical discussions related to fire-safety are continued within WP4. IB-members with valuable expertise on this topic are invited to a special meeting of the task within WP4 that deals with certification (of both semi-fabricates as well as with IPV-products).

- 2024-07-08: M18-update: in the week after the M18-General Assembly the M18 IB-meeting will be held online.

- 2024-10-03: M21-update, in between the M18 and M24 is also a digital meeting

- 2025-01-25 13:00-17:00 (Thursday afternoon): the IB is invited for an in-person meeting at the famous BAU Trade Fair in Messe München. This Trade Fair claims to be the largest of the world, and for sure is very large. The MC2.0-project will be present with a booth that shows a small mock-up with the IPV-products showcased. The interaction between the project partners, Industrial Board partners, and the many visitors and exhibitors at this fair is expected to give some future collaborations, and even sales opportunities.

- July 2025: no specific date planned yet, an online meeting on the status of second year results.

- End 2025 or latest Febr. 2026: no specific date planned yet, the final results of the project will be presented.