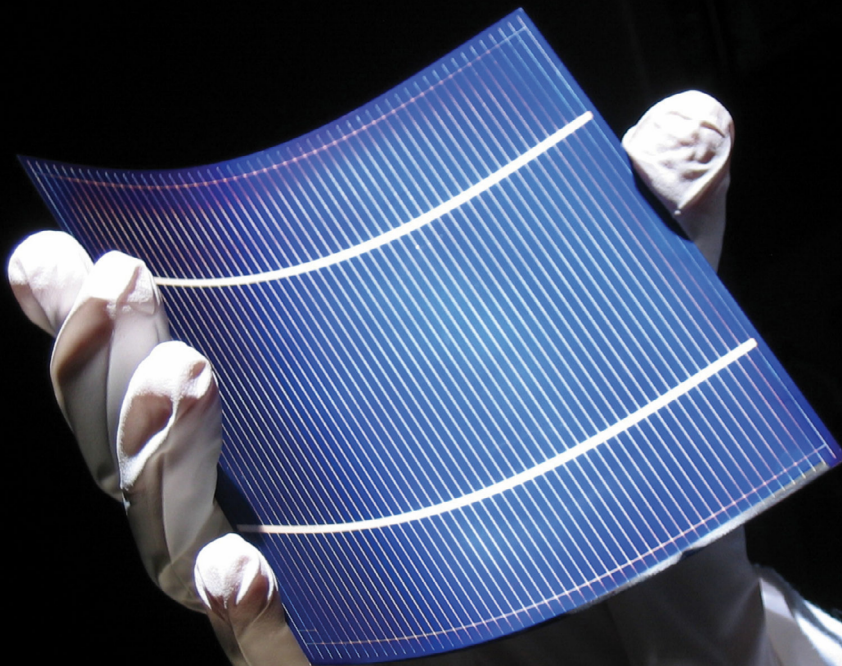


■ ESMC
■ Quarterly Recap 2 2023



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Significant developments have taken place during spring with regard to the European industrial policies, our organisations and the global landscape. In this communication, we look back at the second quarter of 2023.



Words from our Secretary -General

A lot has happened on multiple levels at ESMC during spring. Most notably, the efforts within the European Solar PV Industry Alliance (ESIA) have reached a new level of intensity, underscoring the critical nature of the topics being discussed for all stakeholders involved, and following lifted State aid rules we have seen member states announce planned support for PV manufacturing.

To strengthen our inter-organisational communication, we have introduced a quarterly recap, in which we summarize ESMC's activities, any important updates from our members, and information about any upcoming events.

Please, see this communiqué as an invitation to interact with ESMC Secretariat and Board and influence our further work.

If you have any additions to the recap, or if you want an invitation to any of our Working Groups, feel free to contact me at:

Dr. Johan Lindahl
lindahl@esmc.solar

During the past few months, efforts have been made across different regions to strengthen the European domestic value chains for photovoltaics. There has been a noticeable rise in protectionist measures and discussions in the USA and China. Of particular concern to our members is China's plan to prohibit the export of wafer production equipment, which poses a significant threat to the reindustrialization of the European PV industry.

Fortunately, policymakers in Europe have finally acknowledged the strategic significance of our industry, although the sense of urgency may not be fully grasped. To quantify the level of dependence, our recent trade flow analysis reveals a European trade imbalance of €25 billion in 2022 alone. On a positive note, the European Union has taken steps to address these challenges.

Earlier this year, the European Commission made exceptions to the State aid rules, allowing for national direct funding through the Temporary Crisis and Transition Framework (TCTF). Furthermore, supportive provisions have been incorporated into the drafted Net-Zero Industry Act (NZIA), and financing opportunities are available through EU funds via the REPowerEU. Some EU Member States have already announced that they will use this window of opportunity to support domestic PV manufacturing projects.

At ESMC, we have actively engaged in these topics and are glad to see the progress.

Concurrently, OPEX Support remains a critical issue, as subsidised electricity prices and potential tax rebates are vital to level the playing field with our members' international competitors. Without these measures and suitable market entry incentives, achieving fairness and competitiveness will be challenging.

Regarding our organisational activities, right before this quarter started, we had a successful General Assembly Meeting, offering valuable opportunities for strategic discussions and crucial decision-making for our organisation. Following that, we gathered in Berlin for a collective dinner and attended the PV Celltech conference. We also participated in InterSolar, which of course provided excellent networking opportunities, allowing us to connect with all of you, establish new connections, present ESIA results and monitor industry progress. As always, our Biergarten event was a highlight of our trip, and I, along with my secretariat, hope you enjoyed it as well.

Lastly, I am thrilled to announce that our organisation continues to grow steadily, attracting several esteemed and proficient companies and research centers.

New Working Group:

Forced labour and a socially sustainable PV supply chain

ESMC is deeply concerned about the use of forced labor in certain regions of the solar PV supply chain, where unacceptable working conditions prevail. As stated many times before, we [firmly condemn](#) forced labour and actively work to combat it. Therefore, ESMC wholeheartedly supports the EU's initiative to introduce legislation that would prohibit products made with forced labor ([COM 2022/453](#)). Alongside the [EU Corporate Sustainability Due Diligence Directive](#), we anticipate that this proposed ban will serve as an effective tool in addressing products manufactured under such circumstances.

To enhance the coordination of our efforts in this area, ESMC established

a Working Group on *Forced labor and a socially sustainable PV supply chain* in May 2023. This dedicated group aims to better align strategies and actions to ensure a PV supply chain that is free from forced labor and promotes social sustainability. Please [contact us](#) if you want to join the Working Group.

Adding to our internal working groups, we have actively engaged in meetings with the [Coalition to End Forced Labor in the Uyghur Region](#) and [Anti-Slavery International](#). These meetings serve as valuable platforms for aligning our efforts and staying updated on the progress being made in this crucial field. By collaborating with these organizations, we strive to enhance our knowledge and exchange best practices.

Intersolar Europe München 2023

We of course attended [Intersolar](#) Europe 2023 in München, where we had several interactions with you all, with possible new members and other stakeholders. The conference left us with a mix of emotions. On one hand, we felt a pressing sense of urgency due to the challenging market conditions caused by the recent price drop of modules from Chinese manufacturers, which pose difficulties for our members in terms of competitiveness. However, we were encouraged by the energy at the fair and the commitment of the industry. It is now crucial to translate this commitment to the national governments in each Member State and to put effective support in place. We are confident that our members, with their strength and innovative offerings, will help rise to the occasion.

In addition to the conference and the exhibition, we had the pleasure of organising a Biergarten Event in München, which was attended by around 60 colleagues from our member companies and other friends. We extend our gratitude to all who joined us and contributed to making the evening a memorable one.

○ Munich June 14th 2023.

Supply chain session at the ESIA Forum II: Solar Manufacturing in Europe: *How To Make It Happen Competitively* at Intersolar in Munich. Our Policy Director Žygimantas Vaičiūnas is leading the session and is joined by Christoph Podewils (Meyer Burger), Jörg Ebel (IBC Solar), Christian Westermeier (Wacker Chemie), Jennifer Karle (DG Grow), Krzysztof Ignaciuk (Innoenergy) and Javier Sanz (InnoEnergy) on stage.

Interested in learning more about PV social sustainability?

In May, we organized a *Sustainability coffee break* to provide ESMC members with an introduction to our work against forced labor and our efforts to enhance the social sustainability of the PV supply chain. Our Sustainability Policy Director Jens Holm discussed the current status quo and shared relevant links:

1. [ESMC Statement Against Forced Labour](#)
2. [European Commission: on Banning Products Made with Forced Labor](#)
3. [Draft Report from the Committees INTA and IMCO in the European Parliament](#)
4. ["In Broad Daylight"](#)
5. [Information about the U.S. Legislation on Forced Labor, "The Uyghur Forced Labor Prevention Act"](#)



A special welcome
to our new
members joining
in Q2-2023!



Changes to the ESMC Board

In light of the recent acquisition of our member company Evolar by First Solar, Kathrin Theelen will no longer be able to serve on our Board according to the statutes of ESMC as First Solar headquarters are outside of Europe. We express our heartfelt gratitude to Kathrin for her invaluable contributions during her tenure and extend our best wishes to Evolar/First Solar for their future endeavors. They will remain associated members of ESMC.

During our most recent board meeting held in Munich in June, it was in line with the obligation in the statutes decided by the Board to offer the vacant seat in the board to Christoph Podewils from Meyer Burger, who has accepted the offer. We extend our warmest welcome to Mr. Podewils, who will occupy the vacant seat until the next General Assembly Meeting. We look forward to his insights and contributions of Meyer Burger to the ESMC Board.

New EPEAT Label

A brand-new global certification of low-carbon embedded modules has been launched. This significant achievement was made possible by the non-profit organization [Global Electronics Council](#), with funding from the [Ultra Low-Carbon Solar Alliance](#) (ULCSA). ESMC has actively participated in this initiative alongside other key stakeholders. In this milestone development, the Council has successfully integrated a set of criteria within the [Electronic Product Environmental Assessment Tool](#) (EPEAT) to effectively evaluate and label the climate impact of PV module manufacturing. This certification will serve as a vital resource for companies and individuals dedicated to reducing their carbon footprint and fostering sustainability in the PV industry.

ESMC strongly encourages the European Commission to consider adopting this methodology as the foundation for establishing CO₂ footprint criteria in the Ecodesign regulation. Not only is this approach robust and reliable, but it will also streamline the process for our members. We are glad to see that two out of the three [first manufacturers](#) that are pursuing EPEAT Ecolabel in 2023 are members of ESMC



Global Electronics Council Announces

INITIATIVE TO
ADVANCE DECARBONIZATION OF
SOLAR PANEL PRODUCTION

Report from our Policy Director Žygimantas Vaičiūnas

In March, the European Commission took a significant step by adopting the [Temporary Crisis and Transition Framework](#) (TCTF) to provide support opportunities for Net-Zero industries. ESMC has actively engaged in discussions with the European Commission in the lead-up to the adoption of this framework.

In May, ESMC [published a clarification](#) regarding the time limit of the TCTF framework since it has unfortunately been widely misinterpreted. It is crucial to clarify that while one of the key conditions for the aid is that it should be granted by 31 December 2025, this date marks the final deadline for the EU Member States to inform the European Commission about the specific aid framework they have decided upon. However, the actual aid payments, including support for CAPEX expenditures, tax advantages, loans, and state guarantees, do not have a defined time limit. This information has been confirmed by the European Commission directly to ESMC. We are continuously working on extending the possibilities for the EU Member States to empower the TCTF framework by the concrete financial support for the PV manufacturing industry.

ESMC strongly encourages EU Member States and European PV manufacturing companies to promptly secure financial support through the TCTF and REPowerEU chapters of the revised national [Recovery and Resilience Plans](#) of the EU Member States. This presents a fast and operational financing opportunity for the European PV manufacturing industry. The €20 billion REPowerEU financial envelope could serve as a financing scheme to develop competitive PV manufacturing capacities across Europe.

ESMC has been actively engaged in communication with the national governments of the European countries to raise awareness of the opportunities that have emerged. So far, Spain have completed a call for €1 billion dedicated to net-zero industries, Germany seeks proposals for 10 GW of PV manufacturing, including a minimum annual production capacity of 2 GW of high-efficient low carbon modules, and the Netherlands allocates €412 million through the National Growth Fund for the PV program SolarNL, which aims at large-scale production of circular solar cells and solar panels in the Netherlands. Furthermore, Norway have announced that PV will be included in the national “grønt industriløft” — Green Industrial promotion. Through this program, Norway will facilitate a faster development of net-zero-industry projects with a framework of approximately NOK 60 billion by 2025. In addition, we also have positive signals from other Member States. Furthermore, Norway have announced that PV will be included in the national “grønt industriløft” — Green Industrial promotion. Through this program, Norway will facilitate a faster development of net-zero-industry projects with a framework of approximately NOK 60 billion by 2025.

In addition, we also have positive signals on potential financing for PV manufacturing from some other Member States. At the beginning this financial opportunity has not attracted a lot of attention of the EU Member States, but now it seems that more and more European countries understands the essence of the need to support PV manufacturing through REPowerEU chapters in revised RRP – the position on which ESMC have been standing strongly and constantly



The European Solar PV Industry Alliance (ESIA)

Our monthly ESMC Member ESIA meeting provides a platform for all our members, whether they are actively involved in the ESIA or not, to stay informed about the ongoing ESIA process. If you haven't received invitations to these meetings, please [reach out to us](#). Over the past few months, significant progress has been made, with various proposals taking shape within the four working groups: Supply chain (managed by ESMC), Finance, Non-pricing conditions, and Skills.

The interim results of these efforts were presented at Intersolar in mid-June at the PV-Forum, and you can find the presentations linked [here](#). These updates reflect the dynamic nature of our work and provide insights into the advancements made thus far, while the

Feedback to the Ecodesign regulation

ESMC generally supports the introduction of sustainability policies for PV modules, inverters and systems, particularly the proposal for the mandatory policies of Ecodesign and Energy Labelling, coupled with the voluntary Green Public Procurement. If designed well, these policies will promote sustainability and contribute to the EU Green Deal, 'Fit for 55', RePowerEU and the EU Solar Energy Strategy.

In April, ESMC took the initiative to provide [further Feedback](#) to the European Commission in response to the ongoing development process. Our focus within this development is aimed to prevent greenwashing and ensure an accurate representation of the conditions under which PV hardware is manufactured.

The Net Zero Industry Act (NZIA)

The NZIA holds great potential for the growth and sustainability of our clean tech industries in Europe.

The NZIA seeks to establish regulations that facilitate market access for strategic industries, including solar PV, through supportive policies and expedited permitting processes. Recognizing the significance of this act, ESMC has actively contributed to its development by providing feedback through several meetings and a comprehensive [consultation response](#). By advocating for the needs and interests of our members, ESMC aims to shape regulations that foster a conducive environment for clean tech industries to thrive and the NZIA is an important document that contributes to this vision.

New market reports

ESMC Trade flow analysis

In June, we launched the [latest version](#) of our annual trade flow analysis. This analysis provides valuable insights into the dominant flows of PV cells and modules by breaking them down into monetary value streams between the main markets. The results of our analysis clearly indicate that Europe is facing a significant trade deficit, with a notable difference between our extra-European imports and exports amounting to €25 billion for 2022 alone.

By strategically redirecting these trade flows towards European PV manufacturing, Europe would have the potential to create numerous green jobs, stimulate economic growth, enhance resilience, and generate substantial tax revenues. By shifting our focus to bolstering the European PV manufacturing industry, we can retain more value within our own region.

Our analysis provides quantifiable data on the trade flows within the 10 largest PV markets in Europe, offering a more detailed understanding of the current situation. Armed with this knowledge, we can make informed decisions and implement effective strategies to foster growth and competitiveness in the European PV sector.

BIPV Value chain breakdown

In late 2022, we established the Integrated PV Working Group. Since its inception, ESMC has been supervising a project at Chalmers University in Gothenburg, Sweden. This project, led by [Gerardo López Pinto Y Velasco](#) and [Fredrik Özaras](#), analysed the dependencies, challenges, and distinctive characteristics of the European Building-Integrated Photovoltaics (BIPV) sector.

The primary objective of this project was to address key questions concerning the European BIPV industry. These questions include understanding the structure of the European BIPV value chain, assessing the level of import dependency on countries outside of Europe, identifying the industry-wide challenges that hinder the widespread adoption of BIPV within Europe, and proposing effective measures to overcome these challenges. Furthermore, the project examines the existing policies that impact the European BIPV industry and explores potential adaptations that could better support European producers of BIPV.

The final [report](#) from their research was released in June and was presented to the ESMC Working Group.

Upcoming Events

ESMC takes pride in recommending and collaborating with the most relevant conferences for our members, as well as planning internal events. Find below two events planned for autumn.



Webinar on forced labour in the PV sector

One outcome of the newly formed Working Group on Forced Labor and a socially sustainable PV supply chain is an upcoming webinar on the topic. While the specific date is still pending, it is expected to take place in mid-September.

We have already prepared a preliminary agenda that promises an engaging and informative session. The topics will include the Uyghur forced labour and its links to global solar supply chains, how China became the world’s number one supplier of polysilicon and the human price we pay for it, the EU draft regulation on forced labour, how it will align with other legislation and how it can be amended for the better and the US Uyghur Forced Labour Prevention Act.

Keep an eye out for the invitation in your inboxes and [contact](#) our Sustainability Policy Director Jens Holm if you have any questions.



EU PVSEC

The European Photovoltaic Solar Energy Conference and Exhibition (EU PVSEC) is an esteemed annual event that brings together more than 1.500 researchers, industry experts, and policy-makers from around the world to present and discuss the latest advancements in photovoltaic technology. This year, the event will take place from 18 – 22 September in Lisbon, Portugal.

As the countdown begins for the EU PVSEC 2023, solar companies and organisations have a compelling opportunity to exhibit their products and services and gain numerous benefits in a rapidly expanding renewable energy market.

EU PVSEC offers unparalleled networking opportunities, showcases technological breakthroughs, strengthens market presence, provides access to international markets and promotes knowledge transfer. It serves as a meeting point for key players in the solar industry, providing direct access to experts, potential cooperation partners and market insights. Exhibitors can showcase their cutting-edge innovations to a diverse audience, which increases their visibility and attracts customers, investors and partners.

ESMC has had a fruitful collaboration with EU PVSEC for years, and 2023 is no exception. Similar to the WCPEC conference last autumn, ESMC offers our members to join us in a joint booth to a reduced price. [Contact us](#) for more information.

We are happy to offer all ESMC members a 10 % discounted price¹ when booking a conference booth. See the [Exhibition & Sponsorship Brochure](#) for more information.

[Go to the EU PVSEC EVENT PAGE.](#)

¹ Cannot be combined with other discounts

Official Meetings in Q2

Date	Topic	Contact	Title
3 Apr	ESIA Supply Chain Working Group Meeting	Several industry and R&D representatives	
11 Apr	ESIA Finance Working Group Meeting	Several industry and R&D representatives	
13 Apr	ESIA Skills Working Group Meeting	Several industry and R&D representatives	
20 Apr	Net Zero Industry Act: Call & Questionnaires on permitting + access to markets provisions	Mark Van-Stipout Daniel Gerber	Deputy Head of Unit, DG Energy Policy Officer DG Grow: Green and Circular Economy
25 Apr	ESIA Skills Working Group Meeting	Several industry and R&D representatives	
26 Apr	ESIA Finance Working Group Meeting	Several industry and R&D representatives	
27 Apr	TCTF, IPCEI, GBER, ESIA, RR, REPowerEU and General support issues for PV manufacturing	Thomas Woolfson Demos Spatharis Michael Karl Pieber Max Lienemeyer Daniel Gerber Philippe Redondo Jennifer Karle Yolanda Garcia Mezquita Diana Barglazan Carlos Maravall-Rodriguez Nuno Eca Andras Hujber	Member of the Cabinet, M.Vestager Head of Unit DG Comp: State aid IPCEI, Environment and Innovation Policy Officer DG Comp: State aid IPCEI, Environment and Innovation Head of Unit DG Comp: State aid IPCEI, Environment and Innovation Policy Officer DG GROW:Green and Circular Economy Policy Officer, DG GROW Policy Officer DG GROW: Green and Circular Economy Head of Unit DG Energy: Relations with the Member States and the Neighbourhood Policy Officer DG Energy: Relations with the Member States and the Neighbourhood Policy Officer DG Energy: Relations with the Member States and the Neighbourhood Policy Officer DG Energy: Relations with the Member States and the Neighbourhood Policy Officer DG Energy: Relations with the Member States and the Neighbourhood
27 Apr	ESIA Non-Financing Conditions Working Group Meeting	Several industry and R&D representatives	
28 Apr	Draft regulation to ban products made with forced labour	Jennifer Karle Lennart Grundberg Raluca ipate	Policy officer DG Grow: Green and Circular Economy Policy Officer DG Grow: Market surveillance for products Policy Officer DG Grow: SME support and international aspects
9 May	Draft regulation to ban products made with forced labour	Jorge Felix Cardoso Charles Kerivel	Assistant to MEP Maria Marques Assistant to MEP Raphael Glucksmann

Official Meetings in Q2

Date	Topic	Contact	Title
12 May	Potential for PV-IPCEI leadership	Arno Gattinger	Austrian federal Ministry of Climate Action
		Christine Promok	Austrian federal Ministry of Climate Action
		Perez-Delgado Victor	Austrian federal Ministry of Climate Action
		Hubert Fechner	Chairman of TPPV
16 May	ESIA Supply Chain Working Group Meeting	Several industry and R&D representatives	
16 May	ESIA Skills Working Group Meeting	Several industry and R&D representatives	
17 May	TCTF, RRP revision by inclusion of RE-PowerEU chapters	Ümit Duman	Business Development Manager, Invest NL
		Robert Briggeman Koen Besteman	Consultant, Ronald Berger Consultant, Ronald Berger
22 May	ESIA Non-Financing Conditions Working Group Meeting	Several industry and R&D representatives	
26 May	Forced labour and the PV manufacturing industry	Anna Carle	Assistant to MEP Jörgen Warborn
7 Jun	ESIA Non-Financing Conditions Working Group Meeting	Several industry and R&D representatives	
12 Jun	ESIA Steering Committee	Jennifer Karle	Policy Officer, DG GROW: Green and Circular Economy
		Szilvia Szekely	Case Handler, DG COMP
		Diego Pavia	CEO at InnoEnergy
		Javier Sanz	Thematic Leader Renewable Energies, InnoEnergy
		Baptiste Buet	EU Business Unit Director, InnoEnergy
		Dries Acke	Director at SolarPower Europe
		Carmen Correas Lopez	Policy Advisor at SolarPower Europe
14 Jun	ESIA Non-Financing Conditions Working Group Meeting	Several industry and R&D representatives	
15 Jun	ESIA Supply Chain Working Group Meeting	Several industry and R&D representatives	
20 Jun	ESIA Steering Committee	Jennifer Karle	Policy Officer, DG GROW: Green and Circular Economy
		Szilvia Szekely	Case Handler, DG COMP
		Diego Pavia	CEO at InnoEnergy
		Javier Sanz	Thematic Leader Renewable Energies, InnoEnergy
		Baptiste Buet	EU Business Unit Director, InnoEnergy
		Dries Acke	Director at SolarPower Europe
		Carmen Correas Lopez	Policy Advisor at SolarPower Europe

Official Meetings in Q2

Date	Topic	Contact	Title
21 Jun	Spanish support for PV manufacturing - elaboration of TCTF and RRP support for the industry	Víctor Marcos Morell Carlos Montoya Rasero	Director de Energías Renovables y Mercado Eléctrico Officer
29 Jun	ESIA Finance Working Group Meeting	Several industry and R&D representatives	
30 Jun	ESIA Supply Chain Working Group Meeting	Several industry and R&D representatives	

Official Presentations in Q2

Date	Conference	Organiser	ESCM Representative
12 Apr	PV Market Insights 2023	EXCO, Korea Photovoltaic Society	Johan Lindahl
20 Apr	Virtual Sustainable PV Policy Webinar	ESMC	Jens Holm
10 May	Solar + Storage España	PV Magazine	Žygimantas Vaičiūnas
10 May	PV Innovation - Assuring Europe's Energy Independent Future with Photovoltaics	ETIP-PV	Johan Lindahl
11 May	VIPERLAB First Public event	Viperlab	Johan Lindahl
16 Jun	ESIA Forum at Intersolar	European Solar PV Industry Alliance (ESIA)	Žygimantas Vaičiūnas



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