

Chair: Ming Xu
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Yale SCHOOL OF FORESTRY & ENVIRONMENTAL STUDIES



ISIE ANNUAL REPORT



2024

▲ International Society
▼ for Industrial Ecology

OUR MISSION

The International Society for Industrial Ecology promotes industrial ecology as a way of finding innovative solutions to complicated environmental problems, and facilitates communication among scientists, engineers, policymakers, managers and advocates who are interested in better integrating environmental concerns with economic activities. The mission of the ISIE is to promote the use of industrial ecology in research, education, policy, community development, and industrial practices.

▲ International Society

▼ for Industrial Ecology

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PRESIDENT'S REPORT



**MING
XU**
PRESIDENT

As I reflect on the past year and my tenure as President, I am filled with a profound sense of gratitude and optimism. The Society has continued to make remarkable strides in advancing industrial ecology as a field of research, practice, and policy engagement, all while fostering a dynamic and inclusive global community. As my term as President soon comes to a close, I am honored to share this final report.

In 2024, ISIE demonstrated resilience and growth in multiple areas. Our membership remained strong, with individuals from over 50 countries contributing to a vibrant exchange of knowledge and ideas. While there were regional fluctuations in membership, we saw promising growth in Asia, which bodes well for our upcoming biennial conference in Singapore. Efforts to expand engagement in underrepresented regions, such as South Asia and Sub-Saharan Africa, remain a priority as we continue working towards a more geographically diverse and equitable Society.

Financially, ISIE is on stable footing. Through a combination of membership dues, donations, and conference revenues, the Society has been

able to support critical initiatives, including scholarships for early-career researchers and the enhancement of our digital presence. Our ability to maintain a strong reserve balance ensures that ISIE can sustain its core activities while exploring new opportunities to support our members.

One of the most exciting developments of the past year was the continued expansion of our educational and outreach efforts. The Education Committee successfully launched a textbook grant program aimed at supporting educators in developing countries, and we are seeing increasing interest in industrial ecology courses worldwide.

In 2024, ISIE's events provided invaluable opportunities for knowledge exchange, collaboration, and the advancement of industrial ecology across diverse global contexts. In August, I attended the Joint ISIE Socio-Economic Metabolism and Asia-Pacific Conference held in Peking University, just across the street from where I work. It was a well organized and attended conference with many familiar faces and new friends.

The International Industrial Ecology Day was held online in November. It was initially conceived as a response to the pandemic, and now has evolved into a critical annual event that broadens the reach of our field. Although the Gordon Research Conference (GRC) is technically not an ISIE event, we use it as a main venue for our members to meet and exchange the newest research. I had the privilege to chair the 2024 GRC and it was a lot of fun.

Our flagship publication, the Journal of Industrial Ecology, continues to thrive. The journal has greatly improved its decision-making speed, increased article submissions, and maintained its reputation as a leading source of high-impact research. The introduction of thematic special issues and a renewed focus on circular economy, sustainability assessment, and industrial symbiosis reflect the journal's commitment to advancing knowledge in our field. Furthermore, ISIE's growing presence on social media has enhanced our ability to disseminate research, connect members, and engage a wider audience.

At the heart of ISIE's success is its community. The dedication of our members, from seasoned scholars to early-career researchers, is what makes this Society so special. The various sections of ISIE—ranging from life cycle sustainability assessment to socio-economic metabolism—continue to foster collaboration and drive forward critical research and policy discussions. The Students Section, in particular, has been instrumental in mentoring the next generation of industrial ecologists, ensuring that our field remains vibrant and forward-thinking.

Looking ahead, ISIE is well-positioned to expand its influence and impact. The 2025 biennial conference in Singapore promises to be a landmark event, bringing together industrial ecology experts from around the world. Efforts to strengthen partnerships with industry, policymakers, and funding organizations will be essential in translating our research into real-world solutions. Additionally, continued investment in digital tools and online platforms will enhance accessibility and engagement for our global membership.

As I prepare to step down as President at the end of April, I want to express my deepest appreciation to the executive team, the ISIE Board, our dedicated committees, and our engaged membership. Leading this Society has been a tremendous honor, and I am confident that ISIE's future is brighter under the leadership of Arnold Tukker. I look forward to seeing the next chapter of ISIE unfold and to remaining an active member of this incredible community. Thank you for your support, collaboration, and commitment to advancing industrial ecology. Together, we are shaping a more sustainable and resilient world.

MEMBERSHIP REPORT



**SIMRON
SINGH**
SECRETARY

The society membership at the end of 2024 was 1,192 members, slightly higher as compared to the end of 2023. At the time of writing this report (March 2025), some members had not renewed their annual membership, and so our numbers now stand at 802, almost 200 short of what it was a year before (see Table 1).

	2022	2023	2024	2025
Student	303	309	505	411
Regular membership	357	290	359	303
Young Professional	71	65	108	76
Courtesy membership	8	13	18	12
Total	739	677	990	802

Table 1: Comparison of ISIE membership at the beginning of years 2022, 2023, 2024 and 2025

Where is Our Membership?

Our members come from across 50+ countries, from all regions of the world (Figure 1). In the past year, there has been a slight growth in membership in Asia, mostly in south-east Asia, from 261 to 269. On the other hand, the decline is mostly seen in Europe (from 460 to 322) and North America (from 210 to 165) (Table 2).

Region	Members 2023	Members 2024
Asia	261	269
North America	210	165
Europe	460	322
Australia and New Zealand	21	21
Latin America and the Caribbean	22	15
Sub-Saharan Africa	16	10
	990	802

Table 2: Membership across regions in 2023 and 2024

Accordingly, the % share of members across regions also changed: Europe from 47% to 40%, Australia and New Zealand from 2% to 3%, Asia from 26% to 33, and Sub-Saharan Africa from 2% to 1%. The share of other regions remained constant: North America at 21%, and Latin America and the Caribbean at 2%. Within Asia, China continues to have the highest number of members. Asia still remains the second-ranked global region (after Europe) in terms of representation in the ISIE Society (Figure 2).



Figure 1: ISIE membership map across world regions

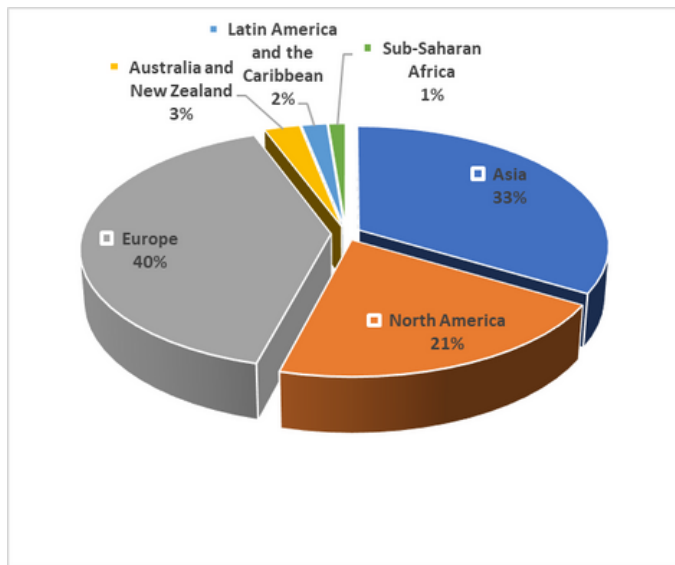


Figure 2: ISIE membership by percentage across global regions in March 2024

ISIE membership is likely to significantly increase in the months leading up to the forthcoming biannual conference in Singapore in July 2025. This from the fact that members pay a lower registration fee resulting in a net benefit in conference attendance costs. It is also expected this increase will be higher in Asia-Pacific, as Singapore will attract participants from the region. To compare previous trends, in 2022 when the Leiden conference took place, membership had grown significantly in Europe with a share of 47% of total ISIE members. Currently, the society is making efforts to increase membership and engagement in lesser active regions, primarily South Asia and Sub-Saharan Africa.

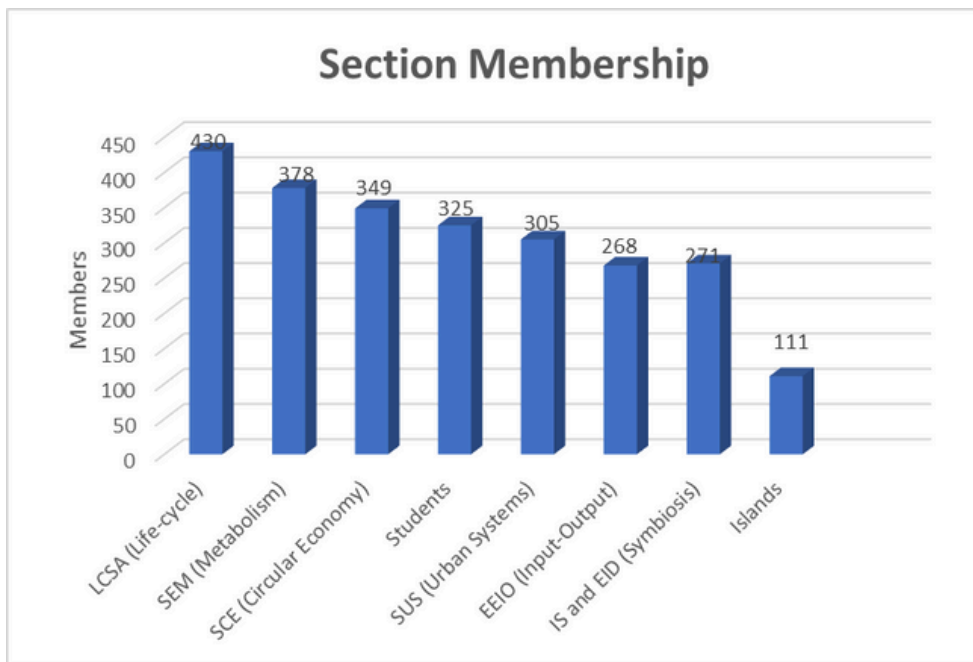
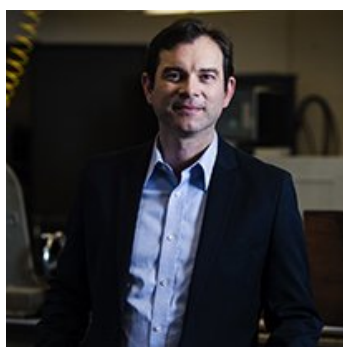


Figure 3 Membership across the sections in March 2025

Members Involved in Sections

The decline in ISIE membership in early 2024 also translated in a decline in members across all Sections (Figure 3). The LCSA section from 512 to 430; the SEM from 435 to 378; SCE from 363 to 349; students from 381 to 325; SUS from 381 to 305; EEIO from 338 to 268; Ind. Symbiosis from 307 to 271; and Islands from 137 to 111. The sum of membership across all Sections appears to be 2,437. This suggests that, on average, an ISIE member is involved in two to three Sections, highlighting the diverse range of interests and expertise of the society's membership.

FINANCIAL REPORT



**MATTHEW
ECKELMAN**
TREASURER

As the ISIE continues to grow in size, we have been able also to grow our support of members, through funded member proposals, scholarships, and prizes. We continue to have a strong financial position, with more than a year of operating expenses in cash in case of a major downturn. There were no major changes to the structure or magnitude of expenses for this fiscal year 2024 compared to what was budgeted.

The ISIE budget encompasses both the operations of the society as well as the JIE. The ISIE is based in the Netherlands and conducts budgeting in euros, whereas the JIE conducts budgeting in US dollars. Starting in 2022, the ISIE has held two cash accounts, in euros and in dollars, and through 2023 paid expenses from whichever account holds the fewest fees. This arrangement saved some money but was complex from an accounting perspective. So, starting in FY24, we separated accounts so that all ISIE transactions are in euros and all JIE transactions are in dollars. In order to clearly compare budgets with expenditures across currencies, we also separated the balance sheet by currency going back to 2022 so that both currencies are shown.

Income: The Society generally has four sources of revenue: membership dues; donations; interest; and net proceeds from biennial conferences. We offer only two-year memberships, and membership dues tend to be higher in years when there is an ISIE biennial conference. In 2024, an off-conference year, total membership amounted to €31,274 (before credit card fees), more than €3,000 greater than was budgeted and a 7% increase from the prior off-conference year of 2022, thanks to strong membership growth especially among students.

In addition to normal donations that some members add onto their membership dues, there were two special donations in 2024. First, Tom Graedel provided a generous matching gift equal to donations from other members, which amounted to more than €1,800. (So please thank Tom if you see him!) Second, INSEAD, where our late friend and industrial ecology pioneer Bob Ayres was based for decades, made a generous donation in his honor to support a new JIE prize, endowing it with €7,500 in 2024 (converted to \$7,647 in the JIE balance sheet). An additional €7,500 will go to support memorial sessions at the upcoming conference in Singapore.

Finally, interest rates in 2024 were high enough to spin off interest income from our cash accounts, amounting to €2,351 and \$1,848.

Staff Expenses: There are two main paid positions within the ISIE: the Administrative and Outreach Manager running the secretariat, and the Executive Director. In 2024, these remunerations were slightly less than half of overall ISIE expenses. The contracts for both positions were extended through to 2025, which is reflected in our budget - we are very grateful to have Irena and Ned continue their dedicated work on behalf of the Society. In addition, the Secretary and the Treasurer receive annual remuneration of €2,500 each.

General Expenses: Apart from staff, our operating expenses are lean by design, with a 2024 budget of approximately €5,500. Actual general expenses for the year were even lower than expected, totalling only €2,545, plus banking fees of €241 and \$147. Because of the complete separation of ISIE and JIE accounting and the resulting need to do more currency conversation, these fees were ~3 times those from 2023 but are still quite modest. Credit card fees totaled nearly €1,000 but are simply a reality of needing to process online transactions through Stripe, our payments processor, given are globally distributed membership.

Staff Travel: The ISIE supported travel for the Executive Director and the Admin and Outreach Manager to attend the GRC meeting in Switzerland, which amounted to €4,277.

Scholarships and Awards: The ISIE spent slightly more than €15,000 to support scholarships for non-US young scholars to attend the GRC meeting in Switzerland in 2024, while US young scholars were supported by a \$50,000 grant from the US National Science Foundation (not part of our balance sheet). In addition, the ISIE provided €2,780 for student awards at the GRC, IE Day, and SEM meetings in 2024. for the student poster competition.

Apart from staff remuneration, support of our students is by far the largest component of the Society's expenditures. The 2025 budget includes an even more generous scholarship funding of €17,000 to support attendance of the Singapore conference.

Projects and Initiatives: While several past approved member proposals are still ongoing, no expenses were paid out in 2024. One membership proposal by Shweta Singh on events and organizing around a potential IE group in India was approved by the board and funded for €3,000.

Journal of Industrial Ecology: As in the past several years, the JIE operated at with a modest surplus in 2024, with \$83,379 in expenses against \$113,375 in income from our publisher, Wiley. The 2025 budget submitted by the JIE will cover expenses for all editorial services as well as promotional activities and travel planned to the Singapore conference. Thus, the 2025 budget of \$98,101 is about \$15,000 higher than in actual expenditures in 2024 but is the JIE is still expected to run a small surplus.

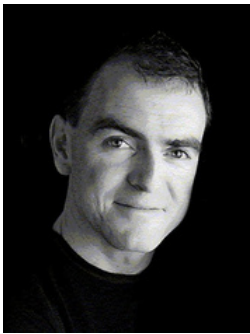
Reserves: Accounting for income and expenses for activities that took place in 2023 in paid in 2024, as well as budgeted in 2024 and paid early in 2025, end-of-year reserves were €144,648 for ISIE operations and \$89,366 for JIE operations. This is a very comfortable cash position and we can afford to increase our ISIE budget to include even more student and member support and run a modest deficit over the next few years.

It has been a pleasure to be part of the ISIE Executive team for the past three years and I am glad to be able to hand over the position under healthy financial circumstances!

ISIE 2025 Proposed Budget

A	G	H	I	J	K	L	M	N	O
		2023		2024		2024		2025	
		Actual		Budgeted		Actual		Proposed	
	USD	EUR	USD	EUR	USD	EUR	USD	EUR	USD
Income									
Memberships		€ 43.314,48		€ 28.000,00		€ 31.273,92		€ 40.000,00	
Donations		€ 450,00		€ 2.000,00	\$ -	€ 4.622,41	\$ 7.647,08	€ 3.000,00	
Conference Income		€ 60.000,00		€ -		€ -		€ 30.000,00	
Journal of Industrial Ecology Income	\$ 108.672,00		\$ 99.474,92		\$ 109.475,00		\$ 113.375,40		\$ 106.245,00
Journal of Industrial Ecology Net Tran	\$ -		\$ -		\$ -		\$ -		
Bank Interest	\$ -	€ 1.586,68	\$ 1.876,37	€ 3.000,00		€ 2.350,96	\$ 1.847,60	€ 2.000,00	\$ 1.500,00
Total income	\$ 108.672,00	€ 105.351,16	\$ 101.351,29	€ 33.000,00	\$ 109.475,00	€ 38.247,29	\$ 122.870,08	€ 75.000,00	\$ 107.745,00
Expenses									
Remunerations									
Administrative Services		€ (19.400,00)		€ (19.200,00)		€ (19.995,00)		€ (20.580,00)	
Executive Director	\$ (13.200,00)		\$ (13.200,00)		\$ (13.800,00)	€ (12.837,14)		€ (13.800,00)	
Secretary Remuneration		€ (2.500,00)		€ (2.500,00)		€ (2.500,00)		€ (2.500,00)	
Treasurer Remuneration		€ -	\$ (2.764,00)	€ (2.500,00)		€ (2.500,00)		€ (2.500,00)	
General expenses									
Accounting Software		€ -		€ (320,17)		€ (320,17)		€ (200,00)	
Credit card fees (Stripe)		€ (1.192,23)		€ (757,37)		€ (984,56)		€ (1.259,27)	
Banking Fees (Wise)	\$ (50,00)	€ (94,16)	\$ (36,68)	€ (220,00)		€ (241,30)	\$ (146,91)	€ (500,00)	\$ (150,00)
Website Management		€ (2.509,00)	\$ (109,71)	€ (3.000,00)		€ (1.240,51)		€ (1.000,00)	
Legal		€ (923,50)		€ (1.200,00)		€ -		€ (300,00)	
Other Admin costs		€ -		€ -		€ -		€ -	
Travel									
Executive Director and Assistant		€ (1.297,00)	\$ (2.528,28)	€ (5.000,00)		€ (4.276,70)		€ (5.000,00)	
Scholarships and Awards									
Conference Scholarships		€ (14.039,03)		€ (10.000,00)		€ (15.616,99)		€ (17.000,00)	
Student Awards		€ (1.000,00)		€ (1.000,00)		€ (2.779,63)		€ (2.500,00)	
Laudise Prize		€ (869,89)	\$ (514,28)	€ -		€ -		€ (850,00)	
Projects and Initiatives									
Member and Board Proposals		€ (13.154,50)	\$ -	€ (15.000,00)		€ (3.000,00)		€ (12.000,00)	
Journal of Industrial Ecology	\$ (102.001,00)	€ (9.890,90)	\$ (106.185,37)		\$ (95.788,00)		\$ (83.232,38)		\$ (98.101,00)
JIE EIC	\$ (30.000,00)	€ (9.201,69)	\$ (19.987,62)		\$ (30.000,00)		\$ (30.000,00)		\$ (30.000,00)
JIE Managing Editor	\$ (40.851,00)		\$ (40.851,00)		\$ (41.668,00)		\$ (42.665,45)		\$ (42.501,00)
JIE Wiley Payments	\$ (10.000,00)		\$ (17.000,00)		\$ (10.000,00)		\$ (9.500,00)		\$ (10.000,00)
JIE Promotion	\$ (10.000,00)				\$ (5.000,00)				\$ (5.000,00)
JIE Travel	\$ (5.000,00)		\$ (5.759,11)		\$ (5.000,00)		\$ -		\$ (9.000,00)
JIE Endowed Prizes (Graedel and Ay	\$ (750,00)	€ (689,21)			\$ (1.500,00)		\$ (737,62)		\$ (1.500,00)
JIE Carry-over Income Refund	\$ -		\$ (17.500,00)	€ -	\$ -		\$ -		\$ -
JIE Legal	\$ (2.500,00)		\$ (5.071,66)		\$ (2.500,00)		\$ -		\$ -
JIE Other Admin costs	\$ (2.900,00)		\$ (15,98)		\$ (120,00)		\$ (329,31)		\$ (100,00)
Total expenses	\$ (115.251,00)	€ (66.870,21)	\$ (125.338,32)	€ (60.697,54)	\$ (109.588,00)	€ (66.292,00)	\$ (83.379,29)	€ (79.989,27)	\$ (98.251,00)
Net income	\$ (6.579,00)	€ 38.480,95	\$ (23.987,03)	€ (27.697,54)	\$ (113,00)	€ (28.044,71)	\$ 39.490,79	€ (4.989,27)	\$ 9.494,00
Start-of-year reserves	\$ 64.368,36	\$ 138.350,90	\$ 64.368,36	€ 176.831,85	\$ 40.381,33	€ 176.831,85	\$ 40.381,33	€ 148.787,14	\$ 79.872,12
End-of-year reserves	\$ 57.789,36	€ 176.831,85	\$ 40.381,33	€ 149.134,31	\$ 40.268,33	€ 148.787,14	\$ 79.872,12	€ 143.797,87	\$ 89.366,12

FINANCE COMMITTEE REPORT



TIM BAYNES

FINANCE
COMMITTEE

After corresponding with the Treasurer and reviewing the 2024 accounts and financial statements for the Annual Report, the Finance Committee has no significant concerns regarding the 2024 actual figures presented, nor the 2025 forward budget.

From a pure financial point of view, it is commendable that actual End-of-year reserves have increased by about \$US10,000 since 2023 in a non-conference year (and a cumulative gain in reserves of about \$US26,000 since 2022). In the Comments below we discuss some specific drivers of this, and for the overall Net results.

From an operational perspective, however, this may be a contraindicator that the Society is accomplishing its aims. More money was spent on Conference Scholarships and Student Awards but less on prizes and much less on Member and Board proposals than budgeted.

Maintaining a healthy reserve is good for financial resilience and this should be balanced by seeking effective ways to spend on important activities and initiatives of the Society.

We thank the outgoing Treasurer, Matt Eckelman, for his service and attention to the recommendations of the Finance Committee.



JIASHUO LI

FINANCE
COMMITTEE

Comments on ISIE 2024 Financial Tables

The Finance Committee have reviewed the ISIE's Financial tables for 2024 in comparison with budgets submitted in the preceding Treasurer's report at the AGM 2024. (Note that tables were presented in separate accounts for \$US and EUR transactions, and here we have used an average exchange rate of €1 = \$US1.06 so as to refer to results in a single currency, \$US where we can).

1. Of the Total income of \$163,412 in 2024, about 6% of this was Net income after subtracting Total expenses. Total income was down by approximately \$US50,000 from 2023 but more than 10% greater than anticipated for 2024 as a non-conference year. The Net income result is proportionally similar to that for 2023.
2. Total expenses were reduced by about \$US43,000 from 2023 and largely explained by \$US7500 less payments to Wiley, and the absence of further payments to the JIE Carry-over Income Refund (\$US17,500 in 2023).
3. \$US10,000 also appears to have been saved/unspent from budgeted JIE expenses on Promotion and Travel compared to actual 2024 expenses.

4. In a previous report, we posed the question whether Donations would be worth a separate line item. One of the endearing results of 2024 is a substantial increase in donations (more than 25 fold on 2023) and far exceeding the budgeted income from this item. This has also contributed significantly (>7%) to the greater-than-budgeted Total income. To all who have donated and those who have encouraged donations, the Society acknowledges this support with much gratitude.

5. Referring to earlier commentary on Member and Board Proposals expenses from previous years' Finance reports, we are possibly seeing fluctuations in enthusiasm for this activity. €3,000 was actually spent in 2024 compared to the budgeted €15,000 and the actual €13,000 expense for 2023. The latter may be affected by activity expenses from 2022, which appear nominally to be zero but may have been delayed to appear in the 2023 accounts.

6. In the Treasurer's notes to us, there was an exchange rate adjustment made for payments to the Executive Director that are recorded in EUR as actuals. Two things occur to the Finance Committee:

a. we are unsure why the actuals for a \$US expense are recorded in Euro, and

b. where budgets are vulnerable to changes in exchange rates, it will require yet more diligence to ensure that expected expenses are dedicated to specific currencies i.e. avoiding transaction costs and uncertainties.

Other small changes and sundry notes about the accounts are made here:

7. The expense of the Executive Director in the 2024 Budget appears as a positive value when it should be negatively valued.

8. The absence of funds for, or the awarding of, the Laudise prize is conspicuous.

9. The presentation of financial results is usually separated into Profit and Loss (or "Income Statement") and the current Balance Sheet.

All information was provided in one Excel table. Given that the Society has few assets, a separate Balance sheet is perhaps unnecessary, but this is common practice.

Comments on ISIE 2025 Projected Budget

1. For the ISIE 2025 proposed budget (and 2026 projection), it seems that the projected income from the Journal of Industrial Ecology is decreasing despite the actual 2022 and 2024 results. Is there a long-term trend here? This affects Total Income.

2. The preceding conference year of 2023 had a budgeted and actual income of €60,000, whereas the expectation for 2025 is half that at €30,000. We are unsure of the cause for this modesty and expect it may underestimate the proposed Total income for 2025 (including another €30,000 would bring the proposed income closer to that of the previous biennial conference year: 2023)

3. There is a ~40% reduction in the projected 2026 expense budget for Administrative Services, and we'd recommend the Board check this does not represent diminished capacity at ISIE at a time when the Society could well be expanding.

4. Previously we have asked the Treasurer to consider ways to smooth out fluctuations in budgeted funding for Conference Scholarships and Student Awards across biennial conference and non-conference years, through varying cash reserves rather than reducing/increasing these expense items. This appears to be proven in consistent actual expenses of 2023-2024 and in the budget for 2025.

5. It is noted that the items discussed in 4. above are generally increasing (budgeted and actual) and it would be good to see more formal calculations of proposed funding for these items in relation to an increasing total student population of ISIE (and its geographical distribution), and in the context of the increased (unspent) Total reserves.

DEVELOPMENT BOARD REPORT

ISIE Development Board 2024 Annual Activity Report

The ISIE Development Board during 2024 focused on (1) finalizing banking procedures such that monetary contributions to ISIE by ISIE members in the European Union and perhaps by others (corporations, charitable foundations, etc.), (2) assisting the education committee under Lynette Cheah's direction to continue development of a program to provide industrial ecology textbooks to faculty and students in developing countries and (3) developing programs that could assist in bringing industrial ecology ideas and principles to students in secondary schools in Europe and North America.

The general thrust of these programs is to increase voluntary cash donations to ISIE so that headquarters staff development, ISIE student member support, and ISIE membership growth is monetarily supported to the extent that the needs and initiatives of ISIE are not significantly constrained or rendered ineffective.

An example of the value that can be generated by appropriate funding is an initiative proposed by the ISIE Student organization termed "A platform for sustainability literacy and research dissemination". It is currently in the process of full implementation by Max Koslowski, a graduate student at the Norwegian Institute of Science and Technology and his colleagues from the ISIE student chapter. This effort has been supported by modest funding from the Development Board.

Another initiative promoted by the Development Board was an offer to match monetary contributions to ISIE during the latter part of year 2024. As it turned out, sixteen members responded to this initiative by donating a total of 1865 Euros. For perspective, €1865 is probably sufficient to enable an ISIE student or young faculty member to attend the bicentennial conference in Singapore. While contributions of this order are clearly not of a level that will immediately make a huge difference for the Society, the effort indicates that a donation-matching program should be continued if a donor or donors can be identified. With time, such initiatives may result in regular and significant support for ISIE beyond what might otherwise have been the case.

Thomas Graedel, Chair
ISIE Development Board

Operational Development Plan (February 4, 2024)

ISIE Development Board

Objectives of This Operational Plan: This operational plan is presented to describe the actual and intended activities of the ISIE Development Board in support of activities related to the International Society for Industrial Ecology as the Society addresses local and global challenges related to the acquisition and use of material resources, industrial activities in support of climate change mitigation, sustainable consumption, urban planning, and related activities related to human development on a changing planet.

General Comment on Anticipated Specific Plans for the ISIE Foundation: The following plans relate to activities in active discussion by the Foundation in support of the Objectives presented below. These activities are not presented in order of preference, and all are viewed as potentially desirable activities in the next five to ten-year period.

Funding Opportunity Number 1: Support for Student and Junior Faculty to Attend the 2025 ISIE International Conference in Singapore

Project Coordinators: Koichi Kanaoka (Yale University) and Kamila Krych (Norwegian University of Science and Technology)

The goal of this activity is to make it possible for students and junior faculty, especially those from developing countries, to attend and participate in the next biennial meeting of the society. Some 800-1000 participants attend a typical meeting, but few are from developing countries due to financial constraints. Providing funding for about fifty such participants would assist them in their efforts as well as expand the reach of ISIE into regions of the world where ISIE's scientific approaches could be of great benefit.

The anticipated budget for such a program is as follows:

Travel per person - € 2000

Lodging per person - € 1000

Meeting registration - € 1000

Total per person - € 4000

Budget for the support of fifty attendees:
€ 200,000

Funding Opportunity Number 2: Providing Industrial Ecology Textbooks to Faculty and Students in Developing Countries

Project Coordinator: Lynette Cheah (Singapore University of Technology and Design)

The goal of this activity is to provide industrial ecology textbooks for students and junior faculty, especially those from developing countries, in support of industrial ecology instruction where textbook funds are low. Providing textbook funding has the potential to expand the reach of ISIE into regions of the world where ISIE's scientific approaches could be of great benefit. The budget for setting up this program and beginning to provide textbooks to those interested is € 10,000

Funding Activity Number 3: Support for two Student Positions to Research, Organize, and Plan for Administration of Pre-College Programs in Industrial Ecology and Global Change

Project Coordinators: Stephen Levine (Tufts University), Alissa Kendall (University of California Davis), and Roland Clift (University of Victoria, Canada)

The goal of this activity is to support two industrial ecology graduate students to research, organize, and work with local and perhaps regional pre-college and community

college instructors to bring industrial ecology and global change perspectives to students interested in industrial ecology, global change, and related topics.

Two students working part-time for a nine-month period are budgeted at € 2,000/month, or a total of € 36,000/yr. In anticipation that this effort might be extended to work with those in countries outside the initial test audiences, a three-year effort would cost € 36,000.

Funding Opportunity Number 4: Developing a Platform for Sustainability Literacy and Research Dissemination

Project Coordinator: Max Koslowski (Norwegian University of Science and Technology)

The goal of this activity is to provide support for the development of an informational platform on global change and methods for analysis and understanding related to sustainability. The goal is to provide a platform that would communicate industrial ecology goals and methods to the general public: a “wikipedia of industrial ecology”. Setting up the online platform is estimated to cost € 4,000.

Funding Opportunity Number 5: Developing an Industrial Ecology Methods Crash Course

Project Coordinator: Shiva Zargar (University of British Columbia)

The goal of this activity is to develop and implement an online “crash course” focusing on industrial ecology methods (LCA, MFA, TEA, etc.). The goal would be to communicate industrial ecology approaches to institutions, organizations, and industries who would benefit from such a focused platform. The cost to develop such a program is estimated to be € 6,000.

Funding Opportunity Number 6: Support for a staff position as ISIE Director of Development

Project Coordinator: Ned Gordon (ISIE)
The goal of this activity is to provide support for a

new full-time ISIE staff position to develop and implement plans for fund-raising and dissemination in support of the activities and intentions of the ISIE. The salary and benefits of such a position are estimated to be € 75,000 per year. A stretch goal is to endow this position for five years:

€ 375,000

Funding Opportunity Number 7: Support for Development of a Summer School in Industrial Ecology

Project Coordinator: Thomas Graedel
The goal of this activity is to develop and implement a two-week summer school for selected graduate students and faculty to learn about the latest advances and methodologies in industrial ecology. This effort would be modeled after summer schools currently held in specialties such as chemistry and biology. At each school the faculty would consist of world leaders (volunteers) in state-of-the-art industrial ecology, plus two staff members to administer the program and its details. The program would require a three-year period of development. The estimated cost per year is:

Support for travel and lodging for three faculty instructors and two program staff

Travel: € 3,000/person, Lodging: € 2,000/person, Salary (staff only, two months preparations and two weeks on site at € 5,000/month): € 40,000

Support for travel and lodging for twenty-five attendees:

Travel: 25 attendees at € 3,000/person = € 75,000, Lodging: € 50,000/person = € 125,000

Total for three summer schools:

Instructors and staff € 495,000

(This development plan was developed by Thomas Graedel (ISIE Development Board) and Ned Gordon (ISIE Executive Director) on February 4, 2024)

NOMINATING COMMITTEE REPORT



XIAO LI
MEMBER



PETER BERRILL
MEMBER



LEIPOLD SINA
MEMBER



**STEFANO
CUCURACHI**
MEMBER



REID LIFSET
MEMBER



**DOMINIK
WIEDERHOFER**
MEMBER



STEFANIE HELLWEG
IMMEDIATE PAST-PRESIDENT

Selection Process of Candidates

Process of Candidate Selection – To ensure a sufficient number of qualified candidates for the five available positions—President-elect, Secretary, Treasurer, Board Member, and Nominating Committee Member—the nominating committee reviewed nominations from both committee members and the broader ISIE membership. Over 50 candidates from various regions, age groups, and research areas were considered and contacted across multiple rounds of work. Ultimately, 17 candidates have confirmed their participation in the election. This process was conducted in adherence to ISIE's bylaws and housekeeping rules, with the support of the ISIE executive team. Our efforts were guided by the goal of achieving gender balance and representing the diversity of ISIE membership across geographical regions, age groups, and academic and professional interests. Among the final candidates, there are 8 women and 9 men, distributed across different regions: Europe (4), North America (6), Asia (6), and Oceania (1), covering a variety of industrial ecology subfields. We sincerely

List of Final Selected Candidates for ISIE roles

Candidate	Position	Geographical Location/Gender/Position
Gara Villalba Méndez	President-elect	Spain/Female/Professor
Wei-Qiang Chen	President-elect	China/Male/Professor
Keisuke Nansai	President-elect	Japan/Male/Professor
Yuan Yao	Secretary	USA/Female/Associate Professor
Shauhrat S. Chopra	Secretary	Hong Kong, China/Male/Associate Professor
Fenggji You	Secretary	USA/Male/Professor
Shweta Singh	Secretary	USA/Female/Associate Professor
Alessio Miatto	Treasurer	Australia/Male/Senior Research Scientist
Benjamin Goldstein	Treasurer	USA/Male/Assistant Professor
Zhi Cao	Treasurer	China/Male/Professor
Chika Aoki-Suzuki	Board Member	Japan/Female/ Senior researcher
Cristina Madrid Lopez	Board Member	Spain/Female/ Research Director
Diana Ivanova	Board Member	UK/Female/Lecturer
Tomer Fishman	Board Member	Netherlands/Male/Assistant Professor
Hua Cai	Nominating Committee Member	USA/Female/Associate Professor
Jonathan Krones	Nominating Committee Member	USA/Male/Associate Professor
Kangkang Tong	Nominating Committee Member	China/Female/Associate Professor

Final Results and Announcement of Election Results

Result Announced – March 15, 2025 via email

POSITION	ISIE MEMBER
President-elect	Wei-Qiang Chen
Secretary	Yuan Yao
Vice-secretary	Shweta Singh
Treasurer	Alessio Miatto
Vice-treasurer	Zhi Cao
Board member	Tomer Fishman
Board member	Cristina Madrid Lopez
Nominating Committee Member	Hua Cai
Nominating Committee Member	Jonathan Krones

Total number of Voters – 336

Election report from website is attached for the breakdown of votes for each candidate.

Issues with Election Process during 2025 Election

- Some nominees raised questions about the responsibilities outlined in the ISIE bylaws, the benefits they might gain from serving, or expressed interest in communicating with current officers. The Nominating Committee responded to these inquiries and helped connect them with the current officers.
- During the process of inviting and confirming nominees' willingness to run, some nominees declined the invitation. Through dynamic strategies, division of tasks, and collective effort, the Nominating Committee ultimately ensured a sufficient pool of candidates who met the relevant criteria and maintained gender, regional, and other forms of balance.

Future Elections and Suggested Improvement in Election Process

- When multiple positions need to be filled and a considerable number of candidates must be nominated, it is important to plan carefully and allow sufficient time. Attention should also be paid to the qualifications of the nominees.
- When identifying potential nominees, if possible, consider those who have been nominated before, have expressed willingness to run, but have not yet been elected, in order to respect their desire to serve ISIE.
- Encourage, mobilize, and promptly remind ISIE members to vote, thereby increasing voter turnout.

CAREER COMMITTEE REPORT



QINSHI TU
CO-CHAIR



**JOANA
BASTOS**
CO-CHAIR



**GLENN
AGUILAR-
HERNANDEZ**
CO-CHAIR



**ELIZABETH
WACHS**
CO-CHAIR

We helped to implement “Middle of the month jobs-only newsletter”. The motivation was that job postings often expire before the monthly newsletter was out. This new mechanism will increase the visibility of job postings before they expire.

We also collaborated with ISIE Student Chapter and International Symposium on Sustainable Systems and Technology (ISSST) to host a “Job application package review” event. We connected job applicants (seeking faculty, industry, or public sector positions) with volunteer reviewers (faculty, industry professionals, or researchers) to strengthen their applications. Applicants provided a brief career description and up to three questions for reviewers. The program had two stages: (1) Initial Review, where reviewers were matched by domain expertise will provide annotated feedback on application materials within a month, and (2) Virtual Feedback, where the reviewer and applicant will have a 30-minute one-on-one discussion to go over the feedback and broader career perspectives. We facilitated 8 packages reviews in this first offering.

In 2025, we aim to work more closely with ISIE Student Chapter to facilitate more student-led career events, and to explore potential venues/channels for mentoring activities. We also welcome more ISIE members to join our events and share your perspectives.

EDUCATION COMMITTEE REPORT



Lynette Cheah (Chair)
University of the
Sunshine Coast, Australia



Stijn Van Ewijk
University College London,
UK



Ramzy Kahhat
Pontifical Catholic University
of Peru



Reed Miller
University of Maine, USA



Heather M. Logan
Technical University of
Denmark



Tamar Makov
Ben-Gurion University
of the Negev, Israel

The ISIE Education Committee was formed in early 2024 with the simple mission of advancing education initiatives for the society. Here is a report on our activities last year:

1. Explored teaching and learning needs

The first thing we did as a committee was to solicit inputs from ISIE members to identify their teaching and learning needs. These inputs provided valuable insights into the areas where members require additional support and resources. We sensed a keen interest in mutual exchange of teaching experiences and teaching materials. In developing countries, educators spoke about the need to raise awareness of IE, including case studies and success stories of implementation. Access to teaching materials and textbooks, ideally in local languages, would be helpful. These findings will guide our future initiatives and programs to better serve the community.

2. Textbook grant program

With encouragement from the ISIE Development Board, we planned a textbook grant program aimed at providing textbooks to members who have difficulty acquiring essential teaching materials. We are currently trying to raise funds to support this program. Once funded, we expect to enhance the quality of education in learning institutes by ensuring that no educators and learners have difficulty accessing essential IE texts.

3. Developed a short industrial ecology course

We developed a five-day Industrial Engineering (IE) course with plans to launch it in South Africa. This course is designed to provide intensive training and professional development for IE educators and practitioners. The launch is pending funding, and we are actively seeking financial support to make this initiative a reality.

4. Web platform for sharing educational resources

The Committee is currently exploring and testing a web platform that can serve as a repository of open educational resources (OER). With this, we hope to support the building of a community of IE educators by providing easy access to shared teaching resources and fostering collaboration. The testing phase is ongoing, and we are optimistic about the potential to enhance educational practices within our Society.

5. Special session focusing on education at ISIE2025

We are organizing a special session at the upcoming ISIE2025 conference in Singapore. This session will focus on innovative teaching methods and the integration of new technologies in IE education. It will provide a platform for members to share their experiences, discuss challenges, and explore new opportunities for enhancing the quality of education.

Committee members:

- Lynette Cheah (Chair), University of the Sunshine Coast, Australia *
- Ramzy Kahhat, Pontifical Catholic University of Peru
- Heather Logan, Technical University of Denmark
- Reed Miller, University of Maine, USA
- Stijn Van Ewijk, University College London, United Kingdom

* Contact: lccheah@usc.edu.au

INTERNATIONAL INDUSTRIAL ECOLOGY DAY 2024 REPORT

On November 21, 2024, the International Society for Industrial Ecology (ISIE) hosted the fourth International Industrial Ecology Day (IE Day), continuing the tradition of it as a key annual event in the ISIE calendar.

Originally conceived during the pandemic as a substitute for in-person conferences, IE Day has evolved into a vital platform for advancing awareness and involvement in industrial ecology. IE Day reflects a growing demand for the science of industrial ecology to present science-based information to the policy and business community engaged in the circular economy, decarbonisation, and sustainable development.

This year's IE Day saw the organization of 21 sessions from locations across the globe, drawing impressive attendance with some sessions exceeding 100 participants. Additionally, this year's IE day also included 3 poster sessions, with 42 presenters sharing their latest research in 4 minutes or less.

The 2024 edition of IE Day experienced remarkable levels of participation and engagement, attracting both ISIE members and the wider community from different time zones around the world.

Key Highlights of International Industrial Ecology Day 2024

- The International Society for Industrial Ecology (ISIE) successfully hosted an impressive lineup of 21 sessions during the IE Day 2024, open to both members and the broader community, including three poster sessions, each hosted in different time zones
- These informative sessions spanned across 7 time zones, encompassing Australia, China, Germany, Norway, Cardiff, and the Americas, ensuring global reach and participation.
- For the first time, best poster prizes were awarded for the poster sessions, with the 4 winning participants being: Session 1: [Han Gao](#); Session 2: [Jonna Ljunge](#) Session 3 (tie): [Jingyan Huang](#), [Shiva Zargar](#)
- The event witnessed good attendance, drawing more than 500 [1] participants, which underscores the growing global interest in the principles and practices of industrial ecology.
- Engagement levels were notably high, with some sessions over 100 participants, highlighting the compelling nature of the topics discussed.
- Demonstrating a commitment to inclusivity, ISIE organized sessions to occur simultaneously across multiple time zones, maximizing accessibility for participants from various regions.
- ISIE's dynamic use of social media channels played an important role in promoting the event, resulting in a significant boost in social media followers and enhancing the society's digital presence.
- The society's LinkedIn profile has grown to 4840 followers, indicating a sustained interest in ISIE's activities and the field of industrial ecology.
- To extend the reach of IE Day 2024 and ensure that its valuable insights are accessible to all, ISIE uploaded 10 of the day's sessions to its official YouTube channel, allowing individuals from around the world to engage with the event's content at their convenience: [International Society for Industrial Ecology - YouTube](#)

- The contents of IE day were published in a dedicated Zenodo Conference community: [Search Industrial Ecology Day 2024](#)
- To help institutionalize IE day, we created a logo:



About organization:

We do not have an established protocol to set the organization team and the Chair(s) and it would be good to put one in place. Also, due to the workload two chairs are advisable as well as an organizing committee formed by one or two nodes in each major time zone covered.

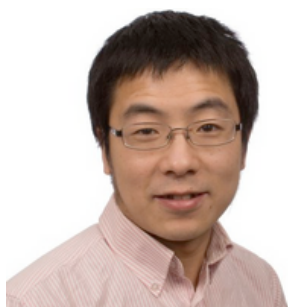
Main time zones areas are indo-pacific, Europe/Africa and the Americas. Whereas most of the participation came from the European region, further work is needed to reach African colleagues. The Indo/Pacific and the Americas regions have less activity. It might be worth it to begin IE day in a different time area each year to see if it has influence in participation.

Concluding:

The resounding success of IE Day 2024 highlights the global interest and passion within the ISIE community and beyond for initiatives in the realm of industrial ecology. The extensive participation from various time zones underscores the universal significance and critical role of industrial ecology in tackling environmental challenges on a global scale.

Looking ahead, ISIE is committed to continue harnessing IE Day as a pivotal platform for facilitating knowledge exchange, fostering collaboration, and advocating for the field. With the event's growing impact, there's a forward-looking proposition to officially designate November 30th as International Industrial Ecology Day,[1] thereby solidifying its place as a cornerstone event for the community and stakeholders involved in environmental sustainability efforts.

JOURNAL OF INDUSTRIAL ECOLOGY REPORT



GANG LIU

CO-EDITOR- IN
CHIEF



**RICHARD
WOOD**

CO-EDITOR- IN
CHIEF



**JUNMING
ZHU**

CO-EDITOR- IN
CHIEF

JIE - 2024 in review and plans for 2025

As we step into 2025, we are leaving behind a year with changes and continued progress for the Journal of Industrial Ecology, which we want to share with you below with a summary.

Our long-serving managing editor, Cheryl Myrup, has decided to take a new challenge and stop by the end of 2024. Cheryl has been with the Journal as an assistant editor already since the Yale time over a decade ago, and served as the managing editor of the Journal over the past years. We appreciate her dedication and contribution and wish her all the best in the new adventure. Meanwhile, upon the approval of the ISIE board, Wiley Partner Solutions has been contracted to provide the managing editorial service, and we welcome aboard Jon Goldsmith as our new managing editor. Together with Jon and our forever useful founding editor Reid Lifset, we as the EiC team will make our best efforts to provide the highest quality service to the Society and our Journal readership.

We clearly know that speed is a critical factor for our authors and have tested different ways to improve our service. Our median decision speed has shown consistent improvement in recent years. The time from submission to first decision decreased from 48 days in 2021 to 44 days in 2022, and further to 40 days in 2023. Similarly, the time from submission to final decision dropped significantly from 42 days in 2021 to 24 days in 2023. Meanwhile, the time from submission to acceptance — a metric that inherently includes author turnaround time — has decreased as well. It dropped slightly from 216 days in 2020 to 215 days in 2022, and further down to 212 days in 2004. This is overall on a par with other journals in our field.

The data badge option is a unique thing for the Journal to acknowledge and encourage data transparency and open data and has been appreciated by many of our members and authors in the past years.

However, the award of data badge involves additional efforts from the data editor and reviewer (after tentative acceptance of the article itself), which often results in delay of the publication of the article. Therefore, we decided to make this optional during the submission process and clearly informed the authors about the process. Hopefully this compromise will help reduce the delay while we continue to provide data badge if the authors opt to apply for it.

The number of submissions has increased continually to 446, a record high in the past five years. We are particularly glad that these submissions come increasingly from under-represented major countries such as India and Turkey (although the eventual success rate is still low), in addition to countries with active industrial ecology research such as China, Germany, United States, Netherlands, France, and United Kingdom.

A total of 153 articles were eventually published in 2024, and 73% (or 111) has been published as hybrid open access. This includes many interesting and innovative papers, for example those on the role of industrial ecology in circular economy, energy transition, urban sustainability, as well as advancements in life cycle assessment and material flow analysis. Our full-text article views have slightly exceeded 910,000, reflecting a growth trend compared to 2023, and many articles published in the Journal continue to attract significant views even 5 to 10 years after publication.

The Journal continued to publish and highlight articles on topics that have societal relevance, particularly those related to circular economy and resource criticality. In fact, out of the top 31 highly cited papers we published in 2024, 22 were focused on circular economy. The Editors' Choice papers, which we launched in 2023, have primarily focused circular economy, transport electrification, and urban metabolism as well.

In 2024, we awarded the 2023 Graedel Best Paper Prize for Senior Author to Christopher Kennedy from the University of Victoria, Canada, for their article on biophysical economic interpretation of the Great Depression, and the 2023 Graedel Best Paper Prize for Junior Author to Linbin Tang from Chinese Academy of Sciences, for their article on the global trade networks of the tungsten supply chain.

In 2024, we have organized several special issues around the themes Life Cycle Sustainability Assessment for Sustainable Development Goals, Product Lifetime and Industrial Ecology, Biodiversity Finance, and Environmental Impacts of the Digital Economy. We have also organized a special issue for the ISIE 2023 Leiden conference and have put together two virtual special issues for our published articles on circular economy and for those cited in the IPCC reports. The purpose of these virtual special issues is to highlight outstanding research in the field, offering an accessible entry point for newcomers to the society and/or the topic, and to identify research gaps and future priorities.

In 2024, we continued our social media promotion activities for the Journal and published articles across various channels. In particular, the Journal consolidated its presence on LinkedIn in 2024, with a total of 48 updates posted. These carefully curated posts attracted significant attention from LinkedIn users, achieving a total of 85,681 impressions and 4,764 clicks. This achievement not only highlights the academic value of the research, but also further enhances JIE's visibility on the LinkedIn platform. The performance on WeChat platform in 2024 is also encouraging. This year the account has gained 435 new subscribers and published 61 posts. We have started a new promotion channel, with webinar for our published articles in 2024.

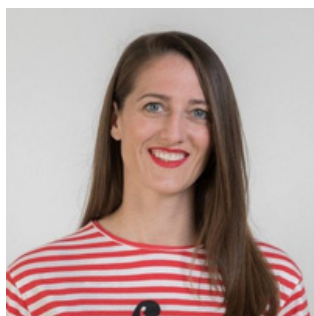
We aim to use these webinars not only to provide a valuable platform for knowledge exchange and collaboration, but also to attract interest from industry experts and scholars alike. We will continue these efforts in 2025 and welcome your suggestions and support.

We sadly lost our great colleague and industrial ecology pioneer Bob Ayres in 2024. The Journal supported an excellent initiative by Gara Villalba Mendez and colleagues to establish the Bob Ayres Award. The Award is to recognize the article or series of articles published in the Journal that is viewed by the selection committee to be best representing Bob Ayres's line and style of work, being of the highest research quality and addressing major ecological questions with the highest social, environmental, economic, and policy-oriented impact. Its first edition will be presented in July 2025 during the ISIE Singapore conference. Many of our editors and editorial members will be there in the conference, and we hope to see you and talk to you in person. Any suggestions and feedback for the sake of the Journal will be welcome. Please reach out.

This is our Society, and this is our Journal. We strongly encourage our members to submit their best work to the Journal, and we will endeavour to provide you with the best author experience. Through the support of you, the authors, the journal can keep growing and provide the best location for cornerstone industrial ecology work.

Gang Liu, Richard Wood, and Junming Zhu
Co-Editors-in-Chief

SOCIAL-MEDIA OUTREACH REPORT



**IRENA
DUKIĆ**

ISIE ADMIN AND
OUTREACH MANAGER

The International Society for Industrial Ecology (ISIE) continues to expand its social media presence, with steady growth across all platforms.

LinkedIn:

Our primary platform, LinkedIn, has grown from 500 followers in June 2023 to 1,622 in March 2025. Additionally, our LinkedIn group, now at 4.8K members, fosters discussions and networking opportunities.

Twitter:

With 688 followers (up from 555 in June 2023) and 171 tweets published, our proactive content strategy has strengthened engagement.

Facebook:

The page has grown from 76 to 110 followers, while our Facebook group (1.4K members) continues to support community discussions.

YouTube:

Subscribers have increased from 126 to 309, with 64 videos uploaded, including content from IE Day 2024, webinars, and past conferences. Notable videos include the White Paper video (1.8K views) and recordings from the SEM Perpetual Online Conference and Leiden Conference (479 views).



**WENHAO
WU**

ISIE WECHAT
SUPPORT

Expansion into WeChat:

To engage the Chinese IE community, we launched a news transfer project in November 2023, collaborating with the Chinese Society for Industrial Ecology's official WeChat account. This partnership continues to grow.

Our efforts have enhanced ISIE's visibility and engagement, and we remain committed to further expansion.

Follow us on LinkedIn, Twitter, Facebook, and YouTube for the latest updates!



Thank you all for your continued support and contributions to the ISIE community!

ISIE Sections

Environmentally Extended Input-Output
Industrial Symbiosis and Eco-Industrial Development
Island Industrial Ecology
Life Cycle Sustainability Assessment
Socio-Economic metabolism
Students
Sustainable Circular Economy
Sustainable Urban Systems

Members of the ISIE are able to join subject sections as part of their membership. Sections provide a small community within the ISIE through which ideas are exchanged and collaborations are formed. Members can engage on a minimal level or can be considered for leadership positions within a Section.

ENVIRONMENTALLY EXTENDED INPUT-OUTPUT SECTION

Reflecting on 2024

The EEIO section of the International Society for Industrial Ecology (ISIE) is to develop environmentally extended input-output analysis internationally in academia and to promote its application in policy and businesses. This year, the EEIO community-maintained cooperation with international organizations, companies, and government organizations, and enhanced collaboration with the International Input-Output Association (IIOA) when organizing its activities. We guided EEIO members through the free webinars launched by the IIOA to share information on Input-Output Analysis research. The EEIO made its deepened engagement within the community to enhance its connection.

Looking ahead

The EEIO community is looking forward to 2025 with plans to organize recurrent EEIO-related webinars and increasing activities on social media platforms.

As of February 2025, the section had a total of 402 members, an increase of 72 from last year. Given the increasing number of members in the EEIO community, the board plans to hold another election for a new board member.

In 2025, we plan to hold a section meeting at the ISIE Singapore conference.

In addition, we plan to increase some activities and some study resources in the website: introduce emerging data, tools and projects (such as EXIOBASE, Gloria) that advance the research frontier of EEIO.

SECTION LEADERSHIP

Co-Chair **Kaihui Song**

Co-Chair **Peipei Tian**

Board Member **Sébastien Dente**

INDUSTRIAL SYMBIOSIS AND ECO-INDUSTRIAL DEVELOPMENT

Section Overview

The mission of the section is to support networking and information sharing among researchers and practitioners on industrial symbiosis (IS) and eco-industrial development (EID) projects. The section maintains a knowledge repository, compiles a list of working professionals, and shares information globally through our newsletter, LinkedIn page, and meetings.

Activities in 2024

A small gathering was held in May at the Gordon Research Conference in Les Diablerets, Switzerland, to discuss the history and upcoming trends in IS and EID. Speakers included Professor Suren Erkman (University of Lausanne) and Professor Paul Ekins (University College London) who spoke on the early experiences of IS, Professor Chang Yu (Beijing Forestry University) who discussed the intersection of forestry and IS, and Professor Bart Van Hoof (University of the Andes) who spoke on the Global South, among others. Additional presenters and participants represented Yale University (organizer), Columbia University, University of British Columbia, and GreenLab in Denmark. The theme of the discussion was how the IS-EID community could promote global efforts towards IS and EIP development.

In November, the section held elections for new board members to serve the 2024–2026 term. Ten highly qualified candidates were nominated, and 57 members participated in the voting process. Welcome to the new leadership, and thanks to all who participated in the elections:

Chair: Teresa Domenech Aparisi, University College London (UK)

Vice-Chair: Luca Fraccascia, Sapienza University of Rome (Italy)

Treasurer: Biji Kurup, Murdoch University (Australia)

Secretary: Koichi Kanaoka, Yale University (USA)

Coordinator/Ambassador: Xiaohan Wu, Purdue University (USA)

Upcoming Activities in 2025

The section has many initiatives planned to further support collaboration, networking, and information sharing among the IS-EID community:

- The international Industrial Symbiosis Research Symposium (ISRS) - after interruptions following the COVID-19 pandemic, the section is fully back to promote IS and has planned the 18th ISRS as part of the extended programme for the ISIE 2025 Conference in Singapore. The meeting will be held on June 30th, preceding the conference. The topics discussed at the symposium will inform a Special Issue on IS and will be the basis to identify core themes for the working groups discussed below.
- The section is committed to organize a Special Issue on Industrial Symbiosis in a high impact journal within the field to capture novel developments around IS adoption globally with emphasis on how IS supports circularity and net zero trajectories.

- Working groups - we will establish platforms to foster continuous dialogue among scholars engaged in the section to further knowledge exchange and collaboration beyond the limited time of meetings and conferences, as well as operationalize a data system where we are able to securely share resources including research outputs, datasets, and teaching resources.
- Regular seminar series - we plan to hold webinars to discuss IS related topics on a quarterly basis.
- Update and revitalization of the section website - as the demand for knowledge on IS-EID continues to grow from industry, government, and academia, the section is committed to promote the development and maintenance of a more functional section webpage which could strengthen the footing of ISIE in the global circular economy and sustainability communities.

SECTION BOARD MEMBERS

Chair **Teresa Domenech Aparisi**

Vice Chair **Luca Fraccascia**

Treasurer **Biji Kurup**

Secretary **Koichi Kanaoka**

Coordinator / Ambassador **Xiaohan Wu**

ISLAND INDUSTRIAL ECOLOGY SECTION

Introduction

The Islands section currently has 114 members, from all regions (Figure 1). This report highlights some of the key section activities in 2024, and likely not comprehensive.

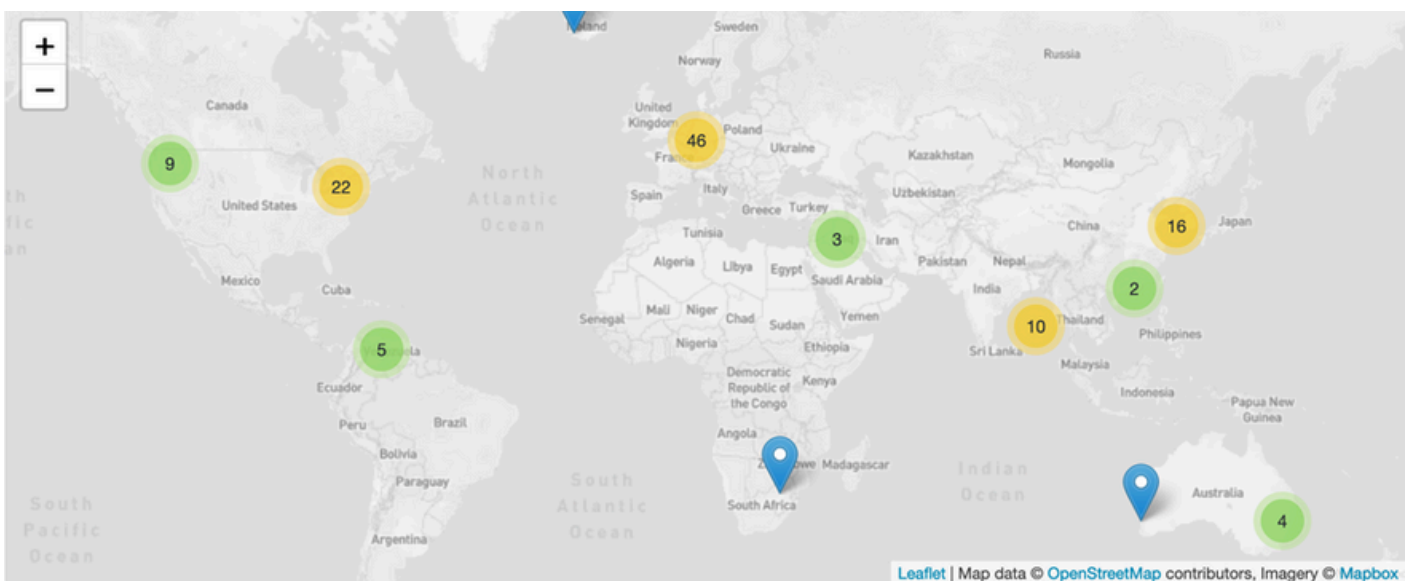


Figure 1: Map of distribution of Island - IE members

Seventh Sustainable Island Futures (SIF) Symposia (December 2024)

The Island-IE section maintains collaboration with the Sustainable Island Futures (SIF) Symposia Series, an initiative led by the Sustainable Island States Science, Technology, Engineering, and Mathematics (SISSTEM) group at the University of Aruba. This partnership, in conjunction with Metabolism of Islands (MoI), organizes biannual symposia that bring together researchers from around the world to explore strategies for promoting sustainability in small island states. On December 11, 2024, the 7th virtual Sustainable Island Futures (SIF) symposium took place, focusing on critical themes such as resource circularity, island metabolism, industrial ecology, socio-metabolic research, and island resilience. The event featured five talks with case studies from diverse island regions (Figure 2).

Name	topic	time (AST)
Nigel John	Welcome and introduction	9.00 - 9.05
Violeta López-Márquez	Currents of Connection: Investigating the Influence of Reproductive Modes and Ocean Currents on Coral Genetic Connectivity in the Dutch Caribbean	9.05 – 9.30
Charvi Choudhary	Navigating Climate Resilience in the Maldives: Resource Demands and Risks of Hard Adaptation Strategies	9.30 – 9.55
Eric Mijts	Discussion/feedback	9.55 – 10.10
Break		10.10 - 10.20
Elham Mohammadi	Assessing the Sustainability of Small-Scale Fisheries: A Holistic Approach to Food Security and Livelihoods	10.20 –10.45
Yanina Diaz-Maroto Knöfler & Gemma Negrini	Enhancing Water Security in Aruba: Feasibility and Recommendations for Rainwater Harvesting Systems	11.45 – 11.10
Simron Singh	Discussion/feedback	11.10 –11:20
Diego Acevedo	Closing	11.20 –11:30

Figure 2: Five talks with case studies

Island Industrial Ecology documentary

In May 2023, the ISIE membership approved a member proposal to create a 30-minute documentary on the science and education of “metabolism of islands” or Island-IE. The member proposal enabled the section to facilitate the planned film project as part of the Industrial Ecology Lecture Series. The section was faced with a unique opportunity in October 2023 with a majority of the section board present in Aruba at the second International Conference on Small Island States and Subnational Island Jurisdictions. The island conference provided opportunity to gather rich footage to show case the work of Island-IE. The filming at Aruba was led by Marta Ciceri, who withdrew from the project in March 2024. The documentary is now being edited by Alexandra Ulacio (from Aruba) who was part of the original film crew, and the work continued in the latter half of 2024 with additional financial support from ISIE Board. A first full draft of the documentary exists.

The documentary is expected to be finished by June 2025, with the aim to release it at the forthcoming ISIE conference in Singapore in early July.

Metabolism of Islands (MOI) courses

Between September and December 2024, a “Metabolism of Islands” (MOI) titled graduate level course was delivered at the University of Aruba, co-instructed by Sharona Jurgens, Simron Singh, and Francisco Xavier Felix Martin del Campo (the latter two ISIE members). This is the first course to teach Island-IE concepts at the university level as well as at an island university, and is a requirement in the MSc in Sustainability for Engineering at the University of Aruba.

Since June 2024, a 12-week remote course is being developed at the University of Waterloo (Canada) in collaboration with several island universities. This course will be delivered in both synchronous and asynchronous format, balancing flexibility with interactive learning. The course highlights three core pillars:

1. **Climate Risk & Adaptation:** Systems-based environmental assessments, community-driven strategies, and cross-sectoral planning.
2. **Circular Economy Concepts:** Resource reuse, waste reduction, and renewable energy solutions, framed within dynamic island economies.
3. **Local Relevance:** SIDS-specific case studies (Pacific, Caribbean, Indian Ocean) and industrial ecology tools to ensure real-world applicability.

The detailed curriculum is currently being finalized. The course will be rolled out in September 2025 in collaboration with Caribbean and Indian Ocean universities, and co-taught by several ISIE members.

Looking ahead

- The Island-IE section has organized a special session at the 12th International Conference on Industrial Ecology, 1-4 July in Singapore. The session is titled “Strategies for Resilient Islands: Risks, Vulnerabilities, and Transformative Actions” and co-chaired by Simron Singh, Andrea Thorenz, and Lynette Cheah.
- The Summer Institute in Systemic Risks, Cascades and Tipping Points (CASCADE) will take place between 17th – 26th Oct 2025 at the Mediterranean Institute for Life Sciences (MedILS), University of Split, Croatia. It is organized jointly by the University of Split (Croatia), the University of Waterloo (Canada), the University of Augsburg (Germany), the University of Graz (Austria), the University of Hamburg (Germany), the Friedrich Schiller University Jena (Germany). CASCADE will deliver a teaching module on Island-Industrial Ecology.
- Planning is starting for a regional conference in June 2026 focussing on the Americas and the Caribbean. The objective is to bring together researchers and practitioners from North, Central, and South America, and the Caribbean region, to highlight and mobilize material flow analysis and the circular economy around the informal sector that remains a significant gap in industrial ecology research. This will be led by diverse ISIE members from the Americas such as Costa Rica, Canada, Colombia Peru and Brasil. It is expected that such an event would promote the society’s activities in communities that have not been reached and increase membership.

SECTION BOARD MEMBERS

Chair	Simron J. Singh
Vice-Chair	John Telesford
Secretary	Bart Van Hoof
Treasurer	Dominik Noll
Member	Bob Paul
Member	Simran Talwar

LIFE CYCLE SUSTAINABILITY ASSESSMENT SECTION


AI4LCA Workshop at the University of British Columbia (December 2024)


Dr. Qingshi Tu (LCSA Board member) co-organized a workshop with Amazon Scientist Dr. Bharathan Balaji on “Accelerating Sustainability Through AI-Powered Life Cycle Assessment” at University of British Columbia. The workshop underscored the need for a collaborative effort between academia, industry, and policymakers to address data scarcity, develop robust benchmarking methods, and ultimately leverage LCA to drive meaningful decarbonization across diverse sectors. The integration of AI is essential to scale LCA and maintain human-centered verification and avoid biased outputs. The highlights of the workshop can be found [here](#).

IE Day (November 2024)

LCSA Board members coordinated three 1-hour sessions during the 2024 IE Day. You can watch the recordings on how data, algorithms, and tools are shaping the future of research and applications of LCA:

*  Applications of AI in streamlining the LCA modeling: <https://lnkd.in/gtwze-6N>

*  Data, Algorithm, Tools for LCA: Challenges, Opportunities, and Consensus of LCA Data: <https://lnkd.in/g8aWdbAJ>

*  Next-Gen LCA Tools: Unveiling the Latest Developments and Solutions: <https://lnkd.in/ggXBPdxY>

A new section added to LCSA quarterly newsletter

Starting in 2024, we have included a “Data & Tools” section in the quarterly newsletters. The goal is to introduce emerging data, tools and projects that advance the research frontier of LCA.

Looking ahead

After five years with LCSA Board, Dr. David Font Vivanco has decided to shift his focus to other professional development and commitments. We thank David’s dedication and leadership on LCSA section over the past years. His contributions have helped shape the section’s work and foster a strong community. We wish you all the best in your future professional and personal endeavors, David!

SECTION BOARD MEMBERS

Co-Chair **David Font**

Co-Chair **Oludunsin Arodudu**

Board member **Andrea Hicks**

Board member **Peter Berrill**

Board member **Paul Wolfram**

Board member **Quingshi Tu**

The new Board is looking forward to 2025 with renewed energy and plans to:

- Organize recurrent LCSA-related webinars with relevant stakeholders via co-sponsorship agreements.
- Increase its activity on social media platforms to feature early-stage researchers and to help visualize emerging topics.

SECTION BOARD MEMBERS

Co-Chair **David Font**

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Board member **Andrea Hicks**

Board member **Peter Berrill**

Board member **Paul Wolfram**

Board member **Quingshi Tu**

SOCIOECONOMIC METABOLISM SECTION

With about 350 members, the socioeconomic metabolism (SEM) section of the International Society for Industrial Ecology (ISIE) is the largest global network of researchers employing material flow analysis for environmental sustainability assessment. Below, we report on important recent and ongoing activities.

New section board, term 2025-2026: Every two years, our section elects its representatives as the section board. Thanks go out to all outgoing members of the previous board: Stefan Pauliuk (previous section chair), Anastasia Papangelou, Ichiro Daigo, Tomer Fishman, Peter-Paul Pichler, and Shweta Singh! They have all served on the board for two or five years, respectively, and the board's work is impossible without active participation from volunteers.

Two board members have been re-elected and will now serve as co-chairs of the section: Zhi Cao (Nankai University) and Christoph Helbig (University of Bayreuth). In addition, the newly elected board members are Peter Berrill, Romain Billy, Wu Chen, Maud Lanau, Shoshanna Saxe, and Takuma Watari. Congratulations on being elected and off to new adventures with the new board. The full board will serve until the end of 2026, and we have many new activities planned: stay tuned and approach us with your community proposals!

Perpetual SEM Online Conference: The perpetual SEM online conference is our continuous webinar and panel discussion format for socioeconomic metabolism research and policy interaction.

It has evolved over the past five years into a potent way for SEM section members to disseminate new research, have discussions on up-to-date issues, and draw new members into the ISIE. Sessions contributed and organized by the section members continued in 2024.

In April 2024, we had a session organized by Anastasia Papangelou on agri-food systems, with the presentations focusing on circularity and self-sufficiency. In July, the macro-economic models HARMONEY, MARCO, and MEDEAS were the focus of the session organized by Stefan Pauliuk. In November 2024, Huimei Li, from University of Freiburg, Germany, organized another session targeting urban metabolism modeling. Thanks to all the organizers and speakers at the perpetual online conferences. All members can propose and organize additional perpetual online conference sessions.

International Industrial Ecology Day. The fourth International Industrial Ecology Day took place online throughout the globe on November 21, 2024. Several of the IE Day sessions included SEM-related topics and presentations by SEM members, including:

- 'Multiple perspectives on tackling knowledge and data gaps in IE' with presentations on dynamic modelling to hindcast historical material stocks for EU administrative divisions, and WEEE flows in the Netherlands.
- 'Ideas for improving mineral and metal supply chain datasets' – where panelists used a single slide to present an idea for how to improve datasets or models for assessing mineral and metal supply chains.

- ‘Limits to downscaling?’ – which discussed difficult questions on required time, space, equity assumptions when translating sustainability targets necessary actions at different actor levels.
- ‘Developing stylised facts for the CE’, a collaborative effort between the SEM and Circular Economy sections
- ‘Scenario modelling for transport, the vehicle fleet, and materials’ – with presentations on drivers of global vehicle fleet dynamics, analysis of transportation service using GIS, and accumulation of materials in transport infrastructure in China

Beijing Conference Recap

This August, the biannual ISIE-SEM section meeting and the ISIE Asia-Pacific Conference took place at Peking University in Beijing, China, from August 24–27. Our colleagues at the College of Urban and Environmental Sciences (CUES) organized the event expertly. A huge thank you goes to CUES and to conference chairs Gang Liu and Xin Tong and their teams for the tremendous effort that made this event a success.

Two years had passed since our last section meeting in Vienna (2022), and this conference provided a much-needed opportunity to reconnect, network, and discuss the latest research in our field. With over 300 participants, the conference brought together a global research community committed to knowledge-based solutions for a sustainable resource future.

Highlights of the Conference: The conference featured a diverse and engaging program, including:

- 8 keynote talks
- 28 parallel oral presentation sessions
- 3 poster presentation sessions
- 3 interactive sessions (roundtable, panel, world café)

Discussions addressed key topics in industrial ecology and socioeconomic metabolism, including:

- Built environment and urban sustainability
- Circular economy and policy
- Sustainable agri-food systems
- Industrial sustainability and value chains
- AI and digitalization
- Energy transitions and more

Encouraging Early-Career Researchers: We were especially pleased to see many early-career researchers participating with enthusiasm. To support and recognize their contributions, the ISIE-SEM board presented:

- Three Oral Presentation Awards: Jiajia Li (Norwegian University of Science and Technology), Yunhu Gao (University of Cambridge), Mohammed Isah (Tohoku University)
- Three Poster Presentation Awards: Junxi Liu (The University of Tokyo), Zhimin Shi (Beijing Normal University), Sota Nagata (Nagoya university)
- Conference Side Events
- Two side events complemented the conference:
 - A 1.5-day summer school on dynamic material flow analysis with Python, organized by Zhi Cao and Stefan Pauliuk
 - A Green Campus Tour, showcasing the Peking University Sustainable Campus Project

2024 Joint ISIE Socio-Economic Metabolism and Asia-Pacific Conference (Beijing, China, 2024.08.24-2024.08.27)



Website Changes Summary

With over 350 members, the Socio-Economic Metabolism (SEM) Section supports and promotes research on anthropogenic energy and material use and its connections to economic performance, social outcomes, and environmental impacts. Our members' research on resource use dynamics across different geographical scales is a reliable source of knowledge and guidance for government and industry, helping to develop sustainable resource solutions. The 2023–2024 board, led by Stefan Pauliuk, has worked diligently to update the SEM section homepage.

Explore the New SEM Section Homepage: Our [updated section homepage](#) serves as the gateway to the global SEM research community. The page features:

- Recent research highlights
- Key policy and industry applications of SEM research
- The history of the section
- Spotlights on distinguished members

Discover Our Community Resources: We have also launched a dedicated [community resources page](#) that provides open-access tools to support SEM research worldwide. The page includes:

- Seminal papers
- Major databases and software repositories
- Educational materials and video channels
- Core textbooks and community standards that ensure high transparency and reproducibility in SEM research

We invite you to explore these resources and engage with the SEM research community!

Outlook on the year 2025

- The Perpetual Online Conferences will continue in 2025, with planned collaborations with other channels (e.g., JIE). All section members are invited to submit session proposals via the event section of the IS4IE homepage or by contacting the section board at metabolism@is4ie.org.
- The current SEM board plans to review and modernize the section's bylaws, including clarity on elections and improving organizational memory. Please approach the section board if you have any questions or proposals regarding this bylaws update.
- Activities and meetings around socioeconomic metabolism will occur at the 2025 ISIE biennial conference in Singapore, including a section meeting: please check the conference program for the exact date and room at the venue.

- The interface of SEM research with policy and industry will be strengthened by adding more examples on the homepage and increasing engagement with policy and industry contacts in the perpetual webinar
- The EU green week in 2025 in Brussels June 3-5 will focus on Circular Economy. Application will open 3-21 March to host partner events in June.
- The World Resource Forum takes place in Geneva in September 2-3, 2025. Applications for presenting at the scientific conference closed in January 2025.
- The 19th Society and Materials (SAM) conference takes place May 6-7 at University of Alcalá in Madrid, Spain.

The SEM section board looks forward to an exciting year 2025 with many research exchange opportunities with all section members. We would like to close our annual report with an early notice on the 2026 SEM section conference, which will be organized by Jonathan Cullen, André Serrenho (both University of Cambridge) and Rick Lupton (University of Bath). Stay tuned for further announcements regarding that conference.

SECTION BOARD MEMBERS

Chair	Stefan Pauliuk
Vice-Chairs	Ichiro Daigo and Anastasia Papangelou
Secretary	Tomer Fishman
Treasurer	Peter-Paul Pichler
Web Editor & Communication Strategists	Zhi Cao and Christoph Helbig
Industry Liason	Shweta Singh

STUDENT SECTION

Overview

The ISIE Student Chapter aims to connect students with peers and the broader industrial ecology community and to provide a space for exchanging ideas and resources. The Student Chapter is represented by a board, consisting of 10 international members. The Student Chapter Board (SCB) helps with identifying career pathways, provides scholarship and networking opportunities, and disseminates knowledge on industrial ecology.

Membership

In January 2024, the number of industrial ecologists enrolled in the Student Chapter amounted to 437 members from 57 countries across the globe. The figure by the middle of January 2025 has increased to 486 from 61 countries, equating to an increase of 11% over the last year. The SCB Diversity and Inclusion Committee has been working to increase the representation of students, researchers, and practitioners who reflect the diversity of the global society that have been underrepresented in the field of industrial ecology.



Figure 1: Global distribution of members of the ISIE Student Section circa January 2025.

Achievements in 2024

The SCB organized several opportunities for the ISIE community in 2024:

- To provide members with a networking opportunity also outside of conferences and other meetings, in March a virtual networking event was organized
- In May a webinar was organised with circular economy expert Vigil Yu of Verra, a company well-known for administering the Verified Carbon Standard. Vigil is a graduate of the industrial ecology master's program at Chalmers and a former Program Officer and Consultant at the Ellen MacArthur Foundation. She presented on the recent developments with her work on policy and markets surrounding plastics.
- To support student members participating in the Gordon research conference possible, the student chapter has contributed to some community management by creating a whatsapp group for all interested members to join. This allowed members to get in touch with each other, organise some social activities and not feel lost before and during the conference, even if they arrived alone.
- In the past year foundational work for the IE Platform has been laid. Different technical solutions for setting up the platform were explored and different ideas for collecting platform content were developed.
- As preparation for the Gordon research conference or any other conference members might be attending in the summer of 2024, a poster workshop was organised. The workshop consisted of a general introduction of do's and don'ts in posters and was then followed by participants discussing each other's poster drafts and sharing tips.

- As part of the world mental health day on October 10th, a well-being workshop was organised raising awareness and sharing some tips and tricks about mental well-being with a special focus on PhD students. The workshop was given by Elizabeth Sturdy from Sturdy Coaching.
- In autumn, the student chapter organised elections for new members of the student board that have started their work in November 2024. The five new board members joining were selected from a pool of 10 candidates and 90 members participated in the vote.

Upcoming activities in 2025

- **IE platform** - Building on last year's foundational efforts, during which the project was approved, and key topics and themes for the platform were identified, this year's efforts are focused on translating these initial findings into a structured framework for the platform. Content will be designed to highlight IE's topics and methods.
- **Social media** - The Student Chapter LinkedIn Group is now up and running smoothly with 67 student members and three posts. The SCB plans to use this platform to promote any upcoming activities and use the group to help to strengthen the student chapter community.
- **SIEYP Singapore 2025** - As per tradition the student chapter will again organise the SIEYP 2025 before the start of the ISIE conference on June 30th. This symposium invites students and early career researchers. The agenda will be a mix of keynote lectures, networking and interactive workshops. The event aims to already connect students before the start of the conference and to create lasting connections between our members while also offering workshops that will help members to develop skills or engage in new topics. This year's symposium will be organised around the theme of interconnectivity.

- **Diversity and inclusion:** Outreach in the form of “ISIE around the world” has been planned out, this is a seminar series that will represent researchers from across the world that are typically less represented within the ISIE community. This allows individuals to present their work and receive feedback on this, as well as represent their institution on a global virtual platform. This seminar series will take place once a month and focuses on one region at a time e.g. in March - South America, April - South Asia, May - Africa. This is to ensure that we can accommodate for the large differences in time zones.
- **Webinars:** The SCB will continue to organize webinars with professionals from the field of industrial ecology or other connected or relevant fields, aiming to provide insights into different careers, state of the art research or other relevant topics.
- **Networking:**
 - Continuing the SCB tradition, two virtual networking events are scheduled for April and October 2025.
 - The SCB explores the possibilities of an in-person networking event, at the Singapore Biennial Conference.



Figure 1. Some members of the Student Chapter Board at the Gordon Research Conference in Les Diablerets, Switzerland in May 2024. Catrin Böcher, Anna Christy, Jakob Napiontek, Wyatt Williams, Koichi Kanaoka (L to R)

SECTION BOARD MEMBERS

President	Koichi Kanaoka
Vice-president	Elisa Pastor-Vallés
Board Member	Thomas Maani
Board Member	Maximilian Koslowski
Board Member	Wyatt Williams
Board Member	Jakob Napiontek
Board Member	Anna Christy
Board Member	Catrin Böcher
Board Member	Jijia Li
Board Member	Mithun Kumar Biswas
Board Member	Ursula Cardenas Mamani

SUSTAINABLE CIRCULAR ECONOMY SECTION

The Sustainable Circular Economy section (SCE) was founded in 2022 and ramped up its activities in 2023 and 2024. As of the 21th of February 2025, the section has 338 members.

The SCE section aims to facilitate cross-cutting activities connecting researchers, practitioners, topics and approaches across the entire ISIE, to leverage synergies within the field and increase the ISIE's visibility in the broader discussions about the circular economy. The section aims to foster critical reflections about the increasingly popular concept of the Circular Economy and its relations to sustainability, drawing on the entire toolkit of systems-based approaches, concepts and methods of Industrial Ecology. Understanding how circularity strategies can contribute to meeting the grand sustainability challenges of our time is timely and crucial, to inform policy and action and assess potential trade-offs and limitations.

The section is currently governed by the founding board, which serves until the end of 2025. After 2025 regular elections, following the procedures outlined for all other sections, will take place. The founding board is on purpose shaped diversely and inclusively, comprising researchers on different career levels, from PhD student to Full Professors, as well as regarding gender and locations.

The founding board members of the SCE section are:

Dominik Wiedenhofer, co-chair	University of Natural Resources and Life Sciences, Vienna	Austria
Magnus Fröhling, co-chair	Technical University Munich	Germany
Sina Leipold, member	UFZ Leipzig	Germany
Bhavik Bakshi, member	Ohio State University	United States of America
Hannah Wang, member	Yale University	United States of America
Xin Tong, member	Peking University	China
Chika Aoki-Suzuki, member	Institute of Global Environmental Studies	Japan

Activities of the SCE section and the board in 2024:

1. The board successfully published its virtual special issue and editorial on “Unpacking the path toward a sustainable circular economy through industrial ecology” <https://doi.org/10.1111/jiec.13499>. The aim of this virtual special issue (VSI) is therefore to take stock of what has so far been published in the JIE on the circular economy. We want to highlight excellent research from the field, provide an easy entry point for newcomers to the society and/or the topic, and identify research gaps and future priorities. To do so, the newly formed Sustainable Circular Economy section of the International Society for Industrial Ecology has compiled a list of exciting and prominent studies from the JIE.
2. Together with the SEM board, the webinar “New avenues for macro-economic modelling under global constraints: The HARMONEY, MARCO, and MEDEAS models” was hosted on the 16.7.2024
3. Serving as reviewers for ISIE conferences

SECTION BOARD MEMBERS

Co-Chair **Dominik Wiedenhofer**

Co-Chair **Magnus Fröhling**

Board member **Bhavik Bakshi**

Board member **Chika AOKI-SUZUKI**

Board member **Hannah Wang**

Board member **Sina Leipold**

Board member **Xin Tong**

SUSTAINABLE URBAN SYSTEMS SECTION

The Sustainable Urban System (SUS) Section engages practitioners and researchers by providing a platform for multidisciplinary systems and approaches to understand, plan, build, and manage sustainable, healthy, and resilient cities. As of early January 2025, the section had 446 members, slightly up from 433 members in 2024. The highlighted SUS activities in 2024 include:

- **Organized a happy gathering at GRC-Industrial Ecology conference**



- **Board Co-Chairs served on 2024 IE Day Planning and Organization Committee** (chaired by Cristina Madrid-López and Eugene Mohareb)
 - Included 42 student posters and a contest
 - 21 sessions
 - Some sessions exceeded 100 participants

 **Congratulations to our Student Poster Award Winners:**

- **Session 1:** [Han Gao](#)
Effects of international trade of steel products on consumption-based recycled content and its potential promotion
- **Session 2:** [Jonna Ljunge](#)
Crushing it...? A first look at the Norwegian construction aggregates cycle through the lens of MFA
- **Session 3 (tie):**
Jingyan Huang – *Can Real-Time LCA Lead to Better Decisions in Water Contamination Crises?*
[Shiva Zargar](#) – *BIO-OPT: An Integrated Analytical Platform for Pioneering Sustainable Bioeconomy Solutions*

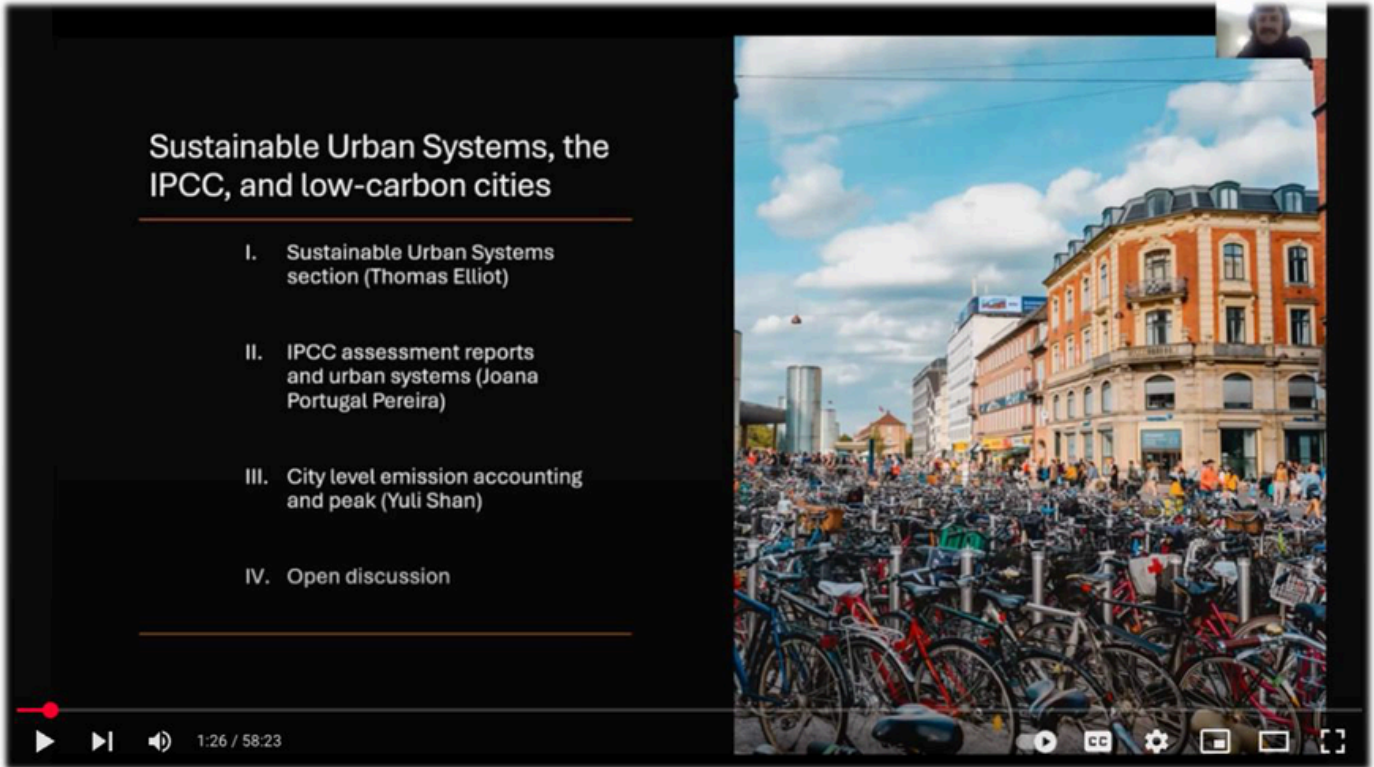
Cristina Madrid-López and Eugene Mohareb

On behalf of the Organizing Committee



- **Administered an IE Day event:** Sustainable Urban Systems, the IPCC, and low-carbon cities (chaired by Thomas Elliot, PostDoc, Aalborg University)
 - ~25 participants, 2 speakers (Yuli Shan, Joana Portugal Pereira)





- **Filled our Emerging Professional role** (Amy Brooks, Research Scientist, University of Pittsburgh)
 - She has been bolstering our social media presence among other tasks





ISIE Sustainable Urban Systems Section

Recent

- ISIE Sustainable Urban Syst...
- Energy Professionals
- American Public Health Ass...
- The 11th International Confe...
- DOE Justice Week: Equity A...

Groups

- ISIE Sustainable Urban Syst...
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Events



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Pinned by admin

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Amy Brooks posted in ISIE Sustainable Urban Systems Section



Amy Brooks · 1st
 Research Scientist at University of Pittsburgh
 Admin · Admin · 1w

Looking to jumpstart your 2025 reading resolution?!

Check out these recent publications from several of our SUS section ...more



Journal of Industrial Ecology: Vol 28, No 6
 onlinelibrary.wiley.com

1

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Amy Brooks · 1st
 Research Scientist at University of Pittsburgh
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Happy New Year, SUS members and friends!

Quick announcement: The deadline for abstract submission for the ...more



International Society for Industrial Ecology - ISIE
 1,536 followers
 3w ·

Happy New Year, Followers!

We're thrilled to share that the deadline for abstract submission for ...more

Released the first news bulletin



International Society for Industrial Ecology

Dear SUS Members,
 Please find our first issue of SUS Bulletin (July 2024) below. Hope you will enough read it.
 If you have any outputs or events that you would like to include in our next bulletin, please **send them to me (y.shan@bham.ac.uk) before September 15th**. The next issue of the bulletin will be released around the end of September.
 Best regards,
 SUS Board Members

SUS Board Composition

The SUS Section Board's last election cycle was in 2023 and will reach its end-of-term in 2027. We conducted an election in November of 2023 to populate the new Board.

The current Board includes (2024-2026):

- Co-Chair/Treasurer: Kangkang "KK" Tong, Shanghai Jiao Tong University
- Co-Chair/Secretary: Joe F. Bozeman III, Georgia Institute of Technology
- Research/Awards Coordinator: Shauhrat Chopra, City University of Hong Kong
- Web Editor and Communication Strategist: Yuli Shan, University of Birmingham
- Co-Liaison with Other ISIE Societies: Benjamin Goldstein, University of Michigan
- Co-Liaison with Other ISIE Societies: Thomas Elliot, Aalborg University
- Emerging Professional: Amy L. Brooks, University of Pittsburgh

Upcoming Plans and Events for 2025:

- Events:
 - Special session approved at 2025 ISIE conference
 - Navigating the Socioecological Tipping Points in Urban Transitions: Resilience and Sustainability Tradeoffs in Coupled Urban Infrastructure Transition
 - SUS meeting at 2025 ISIE
- Delineating/Clarifying overlaps of SUS-ISIE with other complementary scientific orgs (e.g., American Association of Geographers)
 - Propose an SUS special issue to a journal which helps to delineate/clarify SUS moving forward
- Increase News Bulletin Activity
- Co-develop and explore other ideas with the General Body and Board

SECTION BOARD MEMBERS

Co-Chair/Treasurer **Kangkang "KK" Tong**

Co-Chair/Secretary **Joe Bozeman III**

Research/Awards Coordinator **Shauhrat Chopra**

Web Editor and Communication Strategist **Yuli Shan**

Co-Liaison with Other ISIE Societies **Benjamin Goldstein**

Co-Liaison with Other ISIE Societies **Thomas Elliot**

Emerging Professional Representative **Amy L. Brooks**

International Workshop: Industrial Ecology and Data Science for Sustainable Manufacturing in India

First ever ISIE workshop was organized in India during Dec 12th and 13th 2024, jointly by Purdue University and Indian Institute of Technology, Madras (IIT-M). The workshop focused on concepts of Industrial Ecology and Data Science for sustainability in India, bringing together researchers across India to discuss the relevance of Industrial Ecology for sustainability. There were 20 participants in the workshop, including participants from industry and academia. The workshop had four tracks: Industrial Ecology, Process Systems Engineering and Data Science, Sustainability/Policy and Industry Sustainability & Manufacturing.

Day 1 had keynote talks for various tracks. Prof. Arnold Tukker, opened the workshop with a keynote talk on Industrial Ecology, introducing the audience to ISIE society and research tracks in Industrial Ecology track. Dr. Bhavik Bakshi of Arizona State University, USA delivered a keynote talk in Process Systems Engineering & Data Science track followed by talks from faculty and postdocs in India. For the sustainability/policy track, Dr. Nandakumar from the Institute for Global Environmental Strategies gave a keynote talk remotely. Finally for the industry track, Dr. Ranganathan Srinivasan from IIT Madras gave a keynote talk in addition to several academic and industry talks from India.

Day 2 had two keynote talks. Dr. Shireesh Kedare, Director of IIT Bombay spoke about energy transition and sustainability and Dr. Anu Ramaswami, from Princeton University, gave a talk on Urban Sustainability and metabolism. Dr. V. Kamakoti, Director of IIT-Madras gave a short address highlighting the value of these international workshops and focus of IIT-Madras on sustainability research where the field of Industrial Ecology can contribute significantly. Followed by the keynote talks, there was a panel discussion led by Prof. Arun Tangirala on industry and academia challenges & opportunities for Future Manufacturing. Finally, the workshop wrapped up with breakout groups discussion on next steps in each track to increase sustainability research in context of local challenges in India.

One of the key outcomes of the workshop is discussion on establishing local chapters of ISIE in India, engaging more researchers from SE Asia which has been a long-term goal for ISIE. The co-organizers of the workshop, Dr. Shweta Singh (Purdue University) and Dr. Arun Tangirala (IIT Madras/IIT Tirupati) are now working with ISIE executive board to identify a way of establishing these chapters and continue engagement with Indian researchers and ISIE. We hope to see many more participants from India at the ISIE Singapore conference. The organizers are grateful for the funding from ISIE and IIT-Madras for organizing this workshop and Dr. Arun Tangirala's team at IIT-Madras for all the hard work in organizing the workshop smoothly.

▲ International Society
▼ for Industrial Ecology

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