

# STUDENT ENERGY SUMMIT 2019

## BREAKING BARRIERS

### Impact Report



**SES2019**  
INTERNATIONAL STUDENT  
ENERGY SUMMIT

STUDENT  
**ENERGY**

# SES 2019 BY THE NUMBERS

650 DELEGATES

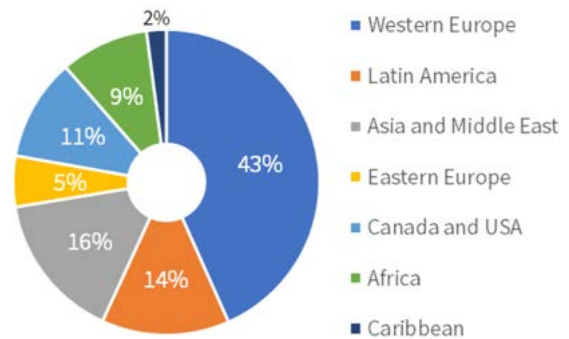
500 BURSARIES OFFERED

*Partial and full bursaries*

98 COUNTRIES

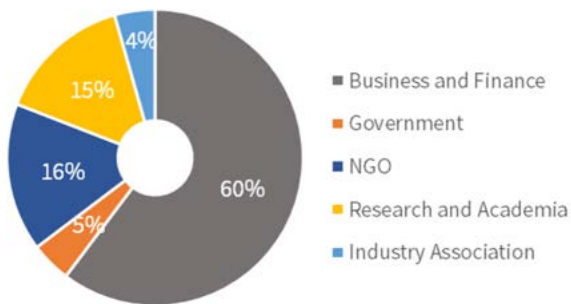


Geographic profile of all attendees



65 SPEAKERS

Professional Breakdown of Speakers



In addition to uniting a diverse group of delegates, SES 2019 sought to invite diverse voices and perspectives in every panel and workshop.

- Of all speakers, **51%** were men, and **49%** were women
- Approximately **31%** of speakers were people of colour

30+ PARTNERS

22 PANELS

9 WORKSHOPS





# TEN YEARS BRINGING TOGETHER THE LARGEST YOUTH ENERGY MOVEMENT IN HISTORY

Student Energy's Theory of Change is centered on empowering young people to act and making space for youth to accelerate a sustainable and equitable energy future. Since the organization's inception by three students in 2009, we've gone on to prove that every young person is capable of creating change on a global scale when provided with the platform and tools they need to act.

## A HISTORY OF STUDENT ENERGY SUMMITS

- 2009** ● CALGARY, CANADA
- 2011** ● VANCOUVER, CANADA
- 2013** ● TRONDHEIM, NORWAY
- 2015** ● BALI, INDONESIA
- 2017** ● MÉRIDA, MEXICO
- 2019** ● LONDON, UK

Student Energy started with a spark. Three driven students, passionate about energy, found themselves with no space to talk to key influencers who were determining their energy future. It took just one ambitious idea: an international conference, with hundreds of youth passionate about energy, the world's energy leaders, and three days of innovation and dialogue, for that spark to turn into something much bigger.

Since the first International Student Energy Summit in 2009, Student Energy has expanded its programming to offer a groundbreaking digital Energy Literacy Platform, empowered thousands of youth through University-level Student Energy Chapters and reached over 1.5 million individuals worldwide.

The International Student Energy Summit is now the largest forum in the world for students on energy, and in 2019 we made history by bringing together 650 students from over 100 countries, more than double our numbers from year one.

This growing movement of students is Student Energy's greatest success story, with over 50,000 students from over 130 countries consistently engaged in our programs. Our alumni have gone on to develop new renewable technologies, run for political office, advise the United Nations, and work with some of the most influential energy companies on the planet.



# OVERVIEW: THE 2019 INTERNATIONAL STUDENT ENERGY SUMMIT

The International Student Energy Summit (SES) is a global forum that unites and empowers hundreds of international post-secondary students from multi-disciplinary backgrounds to become leaders in the energy transition. SES also brings the world's leaders on energy and climate change to engage with students and build awareness of opportunities in the field.

We would like to thank the 30+ partners that supported SES 2019. These partnerships allowed us to provide travel and conference bursaries to the majority of our student participants, ensuring that SES 2019 was accessible to diverse groups of young people.

SES 2019, the 6th International Summit, was created and implemented by young people, providing an intensive learning opportunity for the organizing committee as they worked with Student Energy for the entire two-year organizing process. The process to host the International Student Energy Summit is rigorous, as the bidding team needs to get official support from their university and potential partners in order to complete the application, as well as outlining their unique vision for the Summit.

## OUR HOST: IMPERIAL COLLEGE LONDON

In January 2018, a highly-skilled, international team of students based in London, Durham, Galway, Cork and Paris won the bid to organize SES 2019. The team partnered with Imperial College London, a world-leading institution in research and innovation in a major international city. Host institutions are crucial to making Summits possible, as they take on legal risks, provide venues, and other resources necessary to host an initiative of this scale. Imperial College London supported the SES 2019 organizing committee with key resources throughout the planning process, and provided media and communications support during the Summit, as well as bursaries for students in developing countries to attend.

We would like to thank the many departments and institutes at Imperial College London who supported SES 2019:

- Chemical Engineering
- Energy Futures Lab
- Enterprise
- Electrical and Electronic Engineering
- Centre for Environmental Policy
- Materials
- Mechanical Engineering
- Business School

## 2019 THEME: BREAKING BARRIERS

The theme of this year's Summit, Breaking Barriers, brought together expertise from across the energy sector to overcome siloed thinking. Recognizing that transitioning the energy system at the pace we need to address the climate crisis requires a strong commitment from all actors in the energy system, SES 2019 empowered delegates with the skills, networks and agency to ask tough questions and take on complex, multidisciplinary challenges. Tackling issues from energy access to urban planning to the role of finance in the energy transition, SES 2019 explored how the energy system could respond to changing natural, economic and political climates.

SES 2019 also broke barriers between generations, by inviting students and established actors in the energy system to collaborate on tangible solutions, through workshops, breakout sessions, and the Innovation Jam.

**Thank you to all the delegates and partners of SES 2019!**

# ADAPTING FOR IMPACT

With each Summit we work hard to learn from the delegates experience to build on each event to make the Summit more impactful and inclusive for students attending. In 2019, we identified three key areas where we saw the potential to add a more meaningful experience for 650 youth.

## 1. Reducing Barriers

The 2019 International Student Energy Summit made history by offering no fewer than 500 full or partial bursaries to attend the forum for free. The team designed an assessment process that identified which students had the greatest need for financial assistance, mapped with a system that ensured the students receiving bursaries would be geographically balanced. Through all our programming we've consistently seen that the greatest barriers youth (particularly youth in developing economies and rural-remote areas) face to accessing opportunities for their personal and professional development are financial barriers. Student Energy strives to mitigate this where possible by expanding our Summit bursary program year-on-year, making all our other core programs completely free for youth, and working with organizations, companies and governments to unlock opportunities for youth to access finance.

## 2. Interactive Programming

Every Summit, we get the same response from delegates on their favourite session: The Innovation Jam. The Innovation Jam is Student Energy's pinnacle session, a 600-person mass solutions session where students are empowered to pitch their big ideas, and the room self-forms to work on strategic plans to make them happen. Countless ideas have gone on to manifest outside of the Summit, like the biomass clean cooking solution WEYI that is now scaling across Uganda; Canada's first Indigenous Student Energy Summit SevenGen held with 200 Indigenous youth in 2019; and an incredible Latin American Student Energy Network that continues to run regional forums and projects to this day.

Building off this impact the 2019 Summit designed the Innovation Jam to be a centerpiece of the Summit program, working with Summit partners to provide more feedback from the energy industry as students developed their plans. The Innovation Jam was broken into two large sessions: a comprehensive brainstorming session, and the "Innovation Jam Finals" where selected teams were invited to pitch their plans on the plenary stage to the full delegation. Feedback from the delegate survey told us that the Innovation Jam had a huge impact on the delegate experience, the connections they made, things they learned and ideas they sparked.

To build off general interest in more interactive programming throughout the Summit, Student Energy brought back two program pieces from the 2017 Summit: Students on Stage, and the Workshops. Students on Stage gave 50 delegates the opportunity to present their research to a group of 50 delegates who were interested in the general topic. This was a chance for delegates to get to know each other and learn from other students work. The workshops will be described in more detail further down, and had an impressive diversity of partners who co-designed dynamic workshop sessions with the Summit team. The Workshops were one of the highest rated sessions by delegates.

## 3. Integrating Student Energy's Programs

As Student Energy's core programs have grown, we've received input from our network that they want to see these programs more integrated at SES, particularly the Student Energy Chapters, which are local Student Energy branches run by students on their post-secondary campus. This year, we integrated our Chapters program into the Summit through Leaders Day, which brought together 85 current and future Chapter presidents for a day of in-person collaboration and leadership training.



*"It's definitely been the people, the delegates. They are filled with so much energy and passion that just being here has been an inspiration."*  
- Yanik Yearwood, Trinidad and Tobago

# SES 2019 HIGHLIGHTS

## CHANGEMAKERS

To capture the impact of the Summit, the Changemakers panel is a feature of every program, designed to inspire the current delegates by showcasing how alumni have been impacted by the Summit and gone on to create impact in energy.



The Changemakers panel features four SES alumni (the “Changemakers”) who were inspired by their experience and connections at the Summit to become a young leader in the energy transition.

*Clockwise from top left:*

Based in South Africa, **Churchill Agutu** attended the 2017 International Student Energy Summit where he was inspired to start Green Collar Africa with the mission to build a knowledge economy for young people in Africa to enable them to create a sustainable future for the continent.



An energy engineer and energy markets analyst at Sweco in Sweden, **Emma Wiesner** attended the 2015 Summit and went on to run for European Parliament with the Swedish Centre Party in 2019.

**Joshua Miguel López** attended the Summit in 2017 and currently works in a German political foundation in the Philippines, where he was empowered to create a Renewable Energy Bootcamp to train youth to collaborate on energy projects in marginalized communities.



**Alec Macklis** attended the Summit in 2017 where he met one of the co-Founders of Student Energy who influenced him (and currently sits on Gridspan’s Advisory Board) to found his energy storage enterprise, Gridspan Energy which works to improve sustainable energy resilience on islands.

*“This was my favourite panel of the summit - It was much more meaningful because the speakers had been in our shoes recently.”*

*“It was great to see what other people have been inspired to do after attending and also hear practical stories of what to do next”*

*“It was really amazing to see what WE could achieve and have good inspiring examples”*

*- SES 2019 Delegate Survey*





# SES 2019 HIGHLIGHTS

## INNOVATION JAM

The Innovation Jam is the pinnacle of all Student Energy events, and this year's was the largest yet. A fast-paced brainstorming, collaboration and pitch session, the Innovation Jam has sparked many ideas over the years that have since turned into fully-fledged initiatives.

The Innovation Jam at SES 2019 was a multi-day process in which delegates proposed ideas on our digital platform, and voted for their favourites. Teams were formed to work on these ideas, which ranged from novel policy ideas to renewable energy technologies to new community-based initiatives.

### *A sample of ideas generated at the SES 2019 Innovation Jam:*

**Know Your Carbon:** Can you use blockchain technology to follow the full supply chain of things you buy? This could allow people to make better decisions by seeing how much carbon each product has produced over its lifecycle.

**Efficiently using space to install renewables:** Rather than installing centralized RE systems that occupy large areas of land, which is finite, we could pursue a decentralized, networked system that utilizes wasted space on buildings, parking lots, etc.

**Climate risk pricing:** A think tank to make the insurance lobby effective and work in the public interest by working to bring data into activism to make climate risk data accessible, using a climate pricing tool.

**Just energy transition:** Include Indigenous voices in the energy transition by integrating traditional knowledge and relationship to the land through policies that actively consider Indigenous knowledge. This could be facilitated through a database that would have information on the Indigenous tribes in a certain region, and their knowledge regarding energy and climate projects.

**Solargency - Energy Storage for Post-Disaster:** The 2004 Indian Ocean tsunami created lack of energy and clean water. Energy storage combined with solar PV can be used at critical times, as it is sustainable, modular, mobile, and reliable, especially when used as part of a microgrid.

**Smart-E:** The UK has the oldest, least energy efficient homes in Europe and we need to reduce demand. A data driven app can support homeowners and communities to better understand technical solutions and connect with smart financing options. Smart-E will also connect with other communities, and generate income by creating leads for finance-providers and providing contracts.



And the winners of the SES 2019 Innovation Jam are.....



### **A history of impact:**

Cory Beaver and Disa Crowchief, delegates at SES 2017, first brainstormed their idea for an Indigenous Student Energy Summit during the Innovation Jam at SES 2017. In 2019, they co-chaired SevenGen, the first ever Indigenous SES, and brought together 200 Indigenous youth from across Canada. Building on the momentum generated at SevenGen, Cory led the first Indigenous Delegation to SES 2019 consisting of many SevenGen alumni.

# SES 2019 HIGHLIGHTS

## LEADERS DAY

Taking place the day before SES 2019 officially kicked off, Leaders Day brought together 85 students who are either current Student Energy Chapter leaders, or incoming leaders. In partnership with HSBC, Leaders Day gave chapter members an opportunity to connect in person, and develop key skills that they can implement in leading their Chapters.



The day featured a **'Rock Your Profile'** presentation from LinkedIn to help participants build their professional brand and network.

Keynotes from **Michael Liebreich** of Liebreich Associates, and **Nick Beglinger** of Hack4Climate helped set the stage for the Summit by introducing participants to global energy system basics and the main challenges facing the energy transition. Participants then applied their knowledge and skills in a **Solutions Hackathon**, organized around the energy challenges facing some of the world's biggest cities.



HSBC's **'Disrupting Business as Usual'** panel was a chance for participants to dive deep on the role of finance in the energy transition. Leaders Day concluded with a **Personal Narratives workshop** led by Student Energy, to help Chapter members with personal and collective goal setting to make the most of SES 2019.

*"That days really made a difference in my life, because I learned really useful things and met really interesting people, I really felt in the same channel with everyone and it will help me a lot in my professional life"*



*"Leaders Day reminded me that there's so much to fight for and that I have what it takes to fight."*

*"The day of the leaders helped me in my academic training, because I knew better ways to use professional tools. Also, it helped me a lot in my personal development by meeting the other chapters with whom we work and we are part of a single team. That was incredible. Also, seeing how the Student Energy team organized the chapter day inspired me a lot to do events of that height in my university."*

- SES 2019 Delegate Survey





# SES 2019 HIGHLIGHTS

## RESEARCH AND KNOWLEDGE EXCHANGE

Breaking barriers between academia and other disciplines was another major goal for SES 2019, which we aimed to do by inviting speakers and partners from academic and research institutions to participate in sessions alongside representatives from industry and government. As the 650 delegates come from a wide variety of academic and professional backgrounds, SES 2019 also created several opportunities for delegates to share their work with their peers, speakers and partners.

**Poster Presentation:** The poster presentation was an opportunity to share delegates' research or entrepreneurial work in a visual format. Posters were displayed throughout the Summit venue.

**Students on Stage:** Many delegates also opted to give a five-minute presentation on their research across the following five themes:

- Empowering Young Energy Leaders
- Integrating Technology
- Enacting the Equitable Transition
- An Interdisciplinary Approach
- Energy in a Changing Climate

**Journal Abstract Submission:** Delegates also had an opportunity to submit abstracts prior to the summit on the topic “Breaking Barriers: An Interdisciplinary Approach to the Energy Transition”. Eight research abstracts were submitted, which will be reviewed by a team of guest editors. The best abstracts will be invited to submit manuscripts to be published in a special issue, promoted by the *Frontiers in Environmental Science Journal*.



# #SES2019 DIGITAL IMPACT

## HIGHLIGHTS AND TOP POSTS

### Media Coverage by Imperial College London, Article: "Students discuss climate solutions as Imperial hosts Student Energy Summit"

The Summit, which empowers young people to change the way we use energy to improve our relationship with the climate, meets every second year at a different host university.

The Summit demonstrates the extent to which Imperial students are engaged members of the local, national, and international community.

— Professor Simone Buitendijk  
Vice-Provost for Education

It was held this year at Imperial College London, with 30 students from Imperial and other universities making up the committee board. Topics discussed included changing the worldwide energy system to reduce carbon emissions, and the roles young people have in making this happen.

The three-day conference came soon after UK Prime Minister Theresa May announced historic plans to end UK carbon emissions by 2050 at Imperial's Carbon Capture Plant.

It also immediately followed the London Climate Action Week.

This year's Summit co-chairs, Jochen Cremer and Geraldine Buisson, are both Imperial PhD students at the Department of Electrical and Electronic Engineering and the Centre for Languages, Culture and Communication, respectively.



I am so proud of the @imperialcollege students who worked so hard to organize an amazing conference, bringing together 650 students from 100 countries for joint global action on energy and climate change. Wonderful opening event tonight! #SES2019



1:48 PM · Jul 17, 2019 · Twitter for iPhone



Business is Driving the Energy Transition, we had the signature Student Energy Innovation Jam! Delegates were spread across the Imperial College Campus, with a winning idea from each room selected to pitch their idea at the finals on Saturday. From there we transitioned into a series of workshops, including Orsted's The Wind Farm Game, Carbon Tracker's Myths of the Transition, and the Energy Prediction Prize's Forecasting Energy Trends. After a Recruitment Fair full of opportunities, we went back to the National History Museum for the final night party, bringing delegates closer together than ever 🥳

7w

Liked by custudentenergy and 146 others

Twitter impressions:

179K

Instagram reach + engagement:

9,050

Facebook reach + engagement:

4,900



studentenergy Last night we officially launched #SES2019, welcoming 650 delegates from 98 countries to London 🌍 our opening ceremony included keynotes from Peter Mather (BP), Tim Lord (BEIS), Francesco LA Camera (IRENA), Harriet Lamb (Ashden), Simone Buitendijk (Imperial College London), H. R. H. Princess Abze Djigma (Abze Solar) and Rachel Kyte (SE4ALL), as well as a beautiful performance from the Orchestra for the Earth 🌍 the night capped off with a Cultural Mingle, for delegates to start getting to know each other 🥳

Keep up with the events at the Summit by following us on Twitter (@studentenergy) or our Instagram story!



Liked by nick\_ogilvie and 210 others

JULY 17



Student Energy

Published by Greta Jang · July 17 at 1:35 AM ·

Michael Liebreich joined the movement! 🌟 Yesterday, we heard an energizing keynote from Michael Liebreich as part of the Student Energy Leaders Day to kick off #SES2019



[WWW.STUDENTENERGYSUMMIT2019.COM](http://WWW.STUDENTENERGYSUMMIT2019.COM)

### Student Energy Summit Vice-Chair Sponsorship, Luciana Miu Interviewed by Horizon Magazine Article: "Young scientists share protesters' sense of urgency on climate"

'Also, at Student Energy we are organising the largest youth energy conference in the world, the International Student Energy Summit 2019, which will be held in London (UK) this July.



'Young people who have come to these summits have been really inspired by seeing what is possible and have gone back to their home countries and done amazing things. They have started businesses, they've started movements based on working with their own governments. So my biggest focus is to make sure that the power of young people is truly acknowledged by their counterparts in business and government.'



Website traffic June 1-July 23, 2019:

15.5k unique visitors

46.4k pageviews



# PARTNERS

The Summit united an impressive 30+ partners to support the Summit by providing financial support for 650 students to attend, and by offering strategic support and advisory capacity. The Summit was supported by a mix of energy industry, finance, utility, education and government partners, several of whom have been supporting Student Energy's initiatives for many years. The Summit offers partners creative ways of engaging with the Summit, by exposing delegates to career opportunities at the Opportunities Fair, delivering interactive workshops to delegates, and offering insights on plenaries and keynotes.

The 2019 Student Energy Summit partners broke SES records by supporting 500 Summit bursaries for students to attend the Summit at little to no cost.

## TIER ONE



## FOUNDING



## ASSOCIATE



## SUPPORTING



## OPPORTUNITIES



## MEDIA

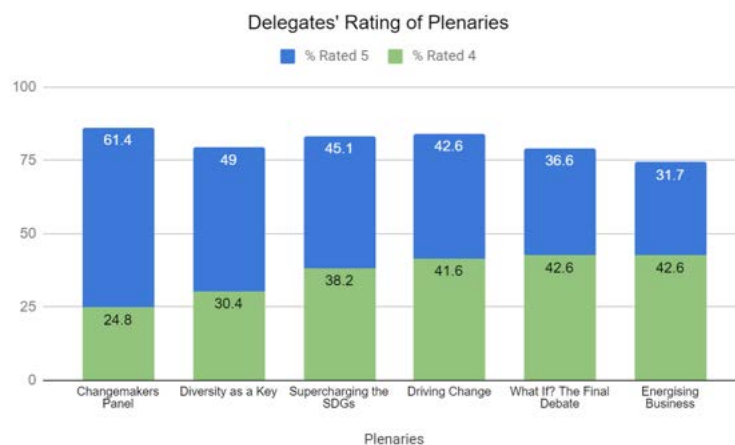




## DELEGATE SURVEY RESULTS

### BY THE NUMBERS:

- 102 survey respondents
- 96% of survey respondents rated the Summit a 4 or above (out of a 5 point scale)
- 86.2% rated quality of keynote speakers a 4 or above
- 95.1% rated the organization of the Summit a 4 or above
- Top 3 most frequently mentioned plenaries:
  - Changemakers
  - Driving Change - how can youth continue to impact our changing energy climate?
  - Diversity as the Key - Unlocking a Sustainable Future



### HIGHLIGHTS:

- Delegates rated the plenary sessions as one of the main highlights of the conference, with most survey respondents giving a score of 4 or 5 for all plenaries. In particular, delegates '5' ratings and commented most frequently on the Changemakers panel.
- The Innovation Jam was another favourite, as were other interactive Workshops, though many delegates expressed a wish for more time to work together on these projects.
- Diversity among delegates and speakers was a major highlight for delegates. Many of them cited meeting delegates from so many countries, having so many women on panels, and opportunities to work in diverse teams as the highlight of their Summit experience

*"I got inspired by the level of young people getting involved in the clean energy sector and the level of progress they have made so far. I also got inspired by the amount of young people actively involved in the tremendous research that will be essential to the forward march of a clean energy in the future."*



*"It's a great summit with the most diverse range of student voices I had encountered in one event. Worth attending just for the people you'll meet and the mobilization you'll feel."*  
 - SES 2019 Delegate Survey



# DELEGATE SURVEY RESULTS

## RECOMMENDATIONS:

- 33% of survey respondents expressed interest in participating in more interactive sessions during the Summit, with more time for discussion with their fellow delegates and speakers.
- Several delegates suggested bringing in more speakers from different professional backgrounds, such as politics and government, academia, advocacy, and more speakers representing the renewable energy industry.
- To take advantage of having such a large, diverse group of young people in one place, several delegates recommended providing a digital or in-person platform to develop a collective position statement, calls to action or legacy project

## REFLECTION ON THE ROLE OF SPONSORS:

One theme that emerged during conversations at SES 2019 and through the delegate survey is that delegates are increasingly attuned to and concerned about the role of corporate oil and gas sponsors in youth-led programs like SES. While sponsors were not able influence the development of the SES 2019 programme, speakers, or overall vision, Student Energy is taking these comments into consideration as we move forward. The following are some of the steps we will be taking, inspired by comments and suggestions from SES 2019 delegates:

- Student Energy has developed a set Partnership Principles that all partners must sign on to at the beginning of the partnership.
- Future Student Energy Summits will rethink and redesign Keynote speaker spots to consist of active dialogue from additional panelists, a moderator, and young people in the audience. This is to ensure that delegates have an opportunity to ask and receive answers from all speakers at the Summit.
- Organizing committees will continue to seek diverse perspectives to speak at the Summit, with a goal to include more policymakers, community organizers, young people, and leaders from academia on panels and breakout sessions.

# LOOKING FORWARD

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SES 2019 helped to grow the Student Energy movement by uniting new members and alumni alike, and we look forward to carrying on the momentum generated at the Summit. Now that the Summit has ended, dozens of delegates have expressed interest in founding a Student Energy chapter at their home university. We aim to continue impact with programs that are online and accessible, to reach our global network.

## **Student Energy Leaders Fellowship**

The Student Energy Leaders Fellowship, launching in January 2020, is a 10-month web-based program that provides future work skills training, energy knowledge, connections to global leaders and young professionals, and the hands-on experience to students or young professionals seeking careers related to climate change. As SES 2019 delegates come from a diversity of academic and professional backgrounds, many have expressed interest in applying for the first Leaders Fellowship cohort.

## **Global Youth Energy Outlook**

**The Student Energy Youth Energy Outlook** is designed to be the definitive tool for understanding what today's youth, 18 to 30 years-old, want for the future of energy. Focused on the energy transition through 2030, the Youth Outlook will provide a future energy scenario and include timelines, roadmaps, policy recommendations and pathways for the private and public sector to partner with young people to achieve this future.

Student Energy is engaging a diverse set of partners and youth in developing the methodology that will be used to do a comprehensive study of Student Energy's 50 000-person network in over 130 countries. The result will be the world's first data set and analysis of the energy future from the perspective of young people around the world illustrating the solutions they are prepared to set into motion and the expectations they have for governments and corporations alike.

## **Making Space for Youth**

### **UN Climate Summit**

In September 2019, Student Energy is participating at the Youth Climate Summit and UN Climate Summit in New York City, as a delivery partner of the Secretary-General's Youth and Public Mobilization and Energy Transition Action Tracks. As part of Student Energy's mission to create space for youth to voice their perspectives and engage in meaningful dialogue with decision-makers, we will be providing a diverse global delegation of young people with leadership and storytelling training, as well as creating opportunities for them to engage with high-level stakeholders in the energy sector, to increase the impact of their participation in the Summit.

In partnership with Mission Innovation and Environmental Defense Fund, Student Energy will run an intergenerational solutions hackathon, to connect the Youth Summit and Energy Transition track, to support youth in developing policy, technology and finance solutions for facilitating emissions reductions and the clean energy transition.



**SES2019**  
INTERNATIONAL STUDENT  
ENERGY SUMMIT  
LONDON, UK  
17 - 20 JULY 2019

**STUDENT  
ENERGY**



# SES 2019 ORGANIZING COMMITTEE

## CHAIRS

**Geraldine Satre-Buisson** - Co-Chair

**Jochen Cremer** - Co-Chair

## VICE-CHAIRS

**Luciana Miu** - Vice-Chair Sponsorship

**Sohail Mian** - Vice-Chair Event Management

**Mari Aanesen** - Vice-Chair Delegate Relations

**Kitty Stacpoole** - Vice-Chair Programme

**Nicholas Ogilvie** - Vice-Chair Programme

**Hannah Cardiff** - Vice-Chair Programme

**Pietro Mezzano** - Vice-Chair Marketing

**Shane McDonagh** - Vice-Chair Impact & Legacy

## COMMITTEE MEMBERS

**Michael Ehrenstein** - Finance Director

**Valérie Pâquet** - Delegate Relations Director

**Paula Schmid-Schmidsfelden** - Delegate Relations Director

## COMMITTEE MEMBERS

**Rob Godfrey** - Delegate Relations Director

**Farin Lari** - Logistics Manager, Hospitality Director

**Komal Mehta** - Logistics Manager, Hospitality Director

**Kelvin Chi Cheng** - Logistics Manager, Hospitality

**Shil Ghosh** - Sponsorship Research Director

**Caoimhe Culhane** - Sponsorship Documentation Director

**Liam Conway** - Sponsorship Team

**Cécile Farber** - Sustainability Director

**Lukas Malms** - Sustainability and Impact Manager

**Miguel Lema Botelho** - Impact and Legacy Coordinator

**Muhammad Waabis** - Event Producer

**Bethany Reyniers** - Event Producer

**Estefania Villavicencio** - Media Director

**Sara Moubarak** - Media Director

**Fernanda Sapina** - Social Media Manager

**Frances Hagen** - Programme Lead, Panels

**Shaun Hunt** - Programme Lead, Workshops

**Tarek Cheaib** - App Director

## ADVISORY BOARD

**Charles Mallo** - Director Enterprise, Imperial College London, *Chair of Advisory Board*

**Katie Sullivan** - Managing Director, International Emissions Trading Association

**Dirk Forrister** - President and CEO, International Emissions Trading Association

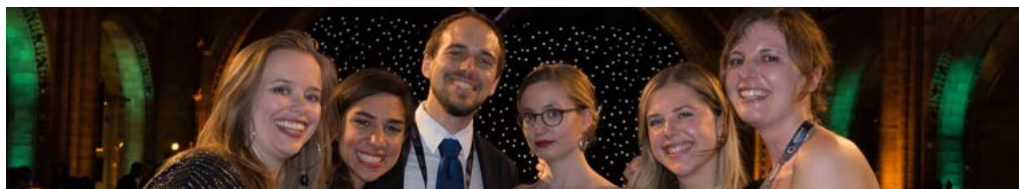
**Martin Siegart** - Director of the Grantham Institute, Imperial College London

**Tim Green** - Director of the Energy Futures Lab, Imperial College London

**Jon Gluyas** - Director of the Durham Energy Institute, Durham University

**Nicholas Parker** - Chairman, Parker Venture Management Inc.

**Dame Fiona Woolf** - Lawyer at CMS Cameron McKenna, former Lord Mayor of London



# SES 2019 PROGRAMME

## WEDNESDAY, 17TH JULY

### Opening Ceremony and Cultural Mingle

Dr. Simone Buitendijk - Imperial College London  
H.R.H. Princess Abze Djigma - AbzeSolar S.A.  
Francesco La Camera - IRENA (video)  
Harriet Lamb CBE - Ashden  
Tim Lord - BEIS  
Peter Mather - BP plc  
Rachel Kyte - Sustainable Energy for All (video)

## THURSDAY, 18TH JULY

### Welcome and Keynotes

Dr. Faith Birol - International Energy Agency (video)  
Roger Humphreville - OGCI Climate Investments

### Plenary: Diversity as the Key - Unlocking a Sustainable Future

*Sponsored by OGCI*  
Rhea Hamilton - OGCI Climate Investments  
Danny Kennedy - New Energy Nexus | California Clean Energy Fund  
Harriet Lamb CBE - Ashden  
Dr. Purnomo Yusgiantoro - Bandung Institute of Technology  
*Moderator: Meredith Adler, Executive Director, Student Energy*

### Plenary: Supercharging the SDGs - Energy as the Enabler

H.R.H. Princess Abze Djigma - AbzeSolar S.A.  
Abyd Karmali OBE - Bank of America Merrill Lynch  
Kali Taylor - Co-founder, Student Energy  
*Moderator: Geraldine Satre-Buisson, SES 2019 Co-Chair*

## BREAKOUT SESSION I

### Take Me There: The Decarbonisation of Transport

Prof. Yi Liu - Tsinghua University  
Roy Williamson - BP plc  
Julia King, Baroness Brown of Cambridge - Carbon Trust  
Dr. Alejandro Rios Galvan - Sustainable Bioenergy Research Consortium  
*Moderator: Janice Tran, Co-Founder, Student Energy*

### Sustainable Finance: How Can New Financial Models Accelerate the Energy Transition?

*Sponsored by Impax Asset Management*  
Eva Weightman - IETA  
Audrey Desiderato - SunFunder  
Bruce Jenkyn-Jones - IMPAX  
Dr. Raj Thamotheram - Preventable Surprises  
*Moderator: Valérie Pâquet, SES 2019 Team*

### Step-over: The Power of the Technology-Driven Leapfrog

Dr. Ellen Morris - Columbia Sustainable Energy Solutions  
Jay Patel - Enlight Institute  
Andres Bustamante - EcoSwell  
Dr. Magi Matinga - Dunamai Energy  
*Moderator: Cécile Farber, SES 2019 Team*

### Fueling the Next Generation: Women In Energy

*Sponsored by Equinor*  
Isabelle Christensen - EnerIO  
Margaret Mistry - Equinor  
Dr. Linda Davis - Giraffe Bioenergy  
Paula McCann Harris - Schlumberger  
*Moderator: Kitty Stacpoole, SES 2019 Team*

### Moving Forwards: How are the Actions of Big Oil Influencing the Energy Industry?

Benj Sykes - Ørsted  
Dr. Carole Nakhle - Crystol Energy  
Marta Nevøy Bjørkestrand - Equinor  
Olaf Martins - International Association of Oil & Gas Producers  
*Moderator: Mari Aanesen, SES 2019 Team*

### Students on Stage Presentations

## BREAKOUT SESSION II

### Navigating Negative Emissions Technologies

David Addison - Virgin Group  
Prof. Jon Gluyas - Durham Energy Institute  
Dr. Marcius Extravour - Carbon XPrize  
Mathilde Fajardy - Imperial College London  
*Moderator: Shane McDonagh, SES 2019 Team*

### Intelligent Cities: Cleaner, Greener, Healthier

*Sponsored by EIT InnoEnergy*  
Dr. Lucienne Krosse - EIT InnoEnergy  
Ian Gardner - Arup  
Alfredo Redondo - C40  
Brian Kilkelly - EIT Climate-KIC  
*Moderator: Farin Lari, SES 2019 Team*

### Hidden Energy: Global Supply and Behaviour

Shakti Ramkumar - UBC | Student Energy  
Hannah Phang - Futerra  
Divya Sukumar - Signal  
*Moderator: Hannah Cardiff, SES 2019 Team*

### Emerging Technology Disruptors

Dr. Tim Green - Imperial College London  
Irena Spazzapan - Partner System IQ  
Dr. Vera Silva - General Electric  
Justyna Swat - Federation Open Space Makers  
*Moderator: Estefania Villavicencio, SES 2019 Team*

### Charge-up! Changes in the Electricity Generation Mix

Anna Carolina Tortora - National Grid  
Marissa Leshnov - Grid Alternatives  
Prof. He - Tsinghua University  
Alastair Davies - EDF  
*Moderator: Shil Ghosh, SES 2019 Team*

### Gala Dinner - Natural History Museum

**Keynote:** Dame Angela Strank - BP plc  
**MC:** Sohail Mian, SES 2019 Team

# SES 2019 PROGRAMME

## FRIDAY, 19TH JULY

### Keynotes

Intro: Ian Duffy - BP plc  
Brian Gilvary - BP plc

### Plenary: Energising Business - How is business driving the energy transition?

Peter Kanning - HSBC  
Marcius Extravour - Carbon XPrize  
Marina Bulova - Schlumberger  
Nigel Purcell - Engie  
*Moderator: Jochen Cremer, SES 2019 Co-Chair*

### Innovation Jam

*Sponsored by BP plc*

### Workshops

1. Breakthrough Climate Innovations, *XPrize*
2. Efficiently Integrating Renewables into the UK Electricity System through Virtual Power Plants, *Statkraft*
3. Wind Farm Game, *Ørsted*
4. Low Carbon Energy Transitions, *Low Carbon Network*
5. Forecasting energy trends, *Energy Prediction Prize*
6. Myths of the Transition, *Carbon Tracker Initiative*
7. Bioenergy with Carbon Capture and Storage, *Imperial College London*
8. Strategic Challenges for our Future Energy Systems, *ABB*

### Opportunities Fair

- BBoxx
- BP
- CliMates
- EIT InnoEnergy
- Springer Journal
- Grantham Institute
- Hilton
- National Grid SO
- OGCI
- Ørsted
- Reactive Technologies
- Ricardo Energy
- Schlumberger
- Soltec
- Statkraft
- Student Energy
- UK Power Networks
- Young Energy Professionals Forum

**Final Night Event - Natural History Museum**

## SATURDAY, 20TH JULY

### Welcome and Keynote

Jayathma Wickramanayake - UN Secretary-General's Envoy on Youth (video)

### Plenary: Driving Change - how can youth continue to impact our changing energy climate?

Kirsten Dunlop - Climate-KIC  
Larissa Crawford - Larissa Crawford Speaks  
Seth Schultz - Global Covenant of Mayors  
Chebet Lesan - Women's Empowerment Activist and Energy Entrepreneur  
*Moderator: Luciana Miu, SES 2019 Team*

### What If? The Final Debate

Chris Nelder - The Energy Transition Show  
Mallika Ishwaran - Shell  
Elena Giannakopoulou - Bloomberg New Energy Finance  
Dr. Joeri Rogelj - Grantham Institute & International Institute for Applied Systems Analysis  
Serge Peyrat - Equinor  
*Moderator: Nicholas Ogilvie, SES 2019 Team*

### Plenary: Changemakers

Alec Macklis - Gridspan Energy  
Churchill Agutu - Green Collar Africa Project  
Emma Wiesner - SWECO | Centerpartiet Substitute for European Parliament  
Joshua Miguel López - FDE Philippines  
*Moderator: Daniela Gavaldón Eichelmann, SES 2017 Alumna*

### Innovation Jam Finals and Awards Ceremony

### Closing Session



**SES2019**  
INTERNATIONAL STUDENT  
ENERGY SUMMIT  
LONDON, UK  
17 - 20 JULY 2019

**STUDENT  
ENERGY**



# SES 2019 PROGRAMME

## STUDENTS ON STAGE PRESENTATIONS

1. **Muhammad Hassan Bin Afzal:** Embracing Off-Grid Communities in Rural Bangladesh to Promote Sustainable Living
2. **Jorge Luis Aguilar-Santana:** Novel thin-film photovoltaic vacuum glazing
3. **Anindityo Arifiadi:** Addressing the Intermittence Renewable Energy by Utilizing Abundant Resources
4. **Luis Badesa:** Achieving a Cost-Effective Operation of Low-Carbon Electricity Grids
5. **Ali El Hadi Berjawi:** An Evaluation Framework for Whole Energy Systems Scenarios
6. **Mayur Bonkile:** Modelling of standalone PV-Battery hybrid systems using physics-based battery models
7. **Alan Arturo Bravo Sagaon:** Public policy based on techno-economic evaluation. Case study: Solar Power towers in Mexico
8. **Abdul-kudus Bukari:** Green Energy, the Solution to Energy Poverty in rural Africa
9. **Elizabeth Bullock:** Correcting the sampling bias of linear boreholes for geothermal exploration
10. **Roberto Cabrer:** Geophysical EM Modeling for Energy Resource Assessment
11. **Prithvi Singh Chauhan:** Nanoparticle application in Oil and Gas industry
12. **Conor Deane:** Incorporating a thermal comfort control function in reduced order models using detailed energy simulation
13. **Essam Elnagar:** Optimized Technology sets for nearly zero energy buildings
14. **José Armando Gastelo-Roque:** Technical analysis of a 12kW hybrid PV/wind micro-grid with battery storage for rural electrification in Laguna Grande, Pisco, Perú
15. **James Harris:** Sensor fusion methods for offshore inspection and maintainance
16. **Alfy Ifthikhar:** Enhancing Solar Pv usage in Islamic countries market using sharia credit leasing business model
17. **Nathan Johnson:** How have clean energy technologies contributed towards the global decarbonisation agenda to date?
18. **Diego Moya:** Global GIS-based energy demand density assessment for estimating spatio-temporal energy demand profiles in the energy policy discussion
19. **Doyinsola Olagunju:** "UP NEPA! " —The Untarred Road to Fixing Power Supply in Nigeria"
20. **Olukunle Owolabi:** Prospects and Challenges of Solar Electricity Generation in Nigeria
21. **Maximilian Parzen:** Cost reduction of Solar Thermal Plants by integrating solar PV systems
22. **Martin Paul:** Experimental investigation into effect of earth's magnetic field on the conversion efficiency of polycrystalline silicon solar cell
23. **Nicholas Perry:** An Energy Life Cycle Analysis of Renewable Energy Options for Vietnam
24. **Joaquin Quesada Zeljkovic:** Light Humanity NGO: Light a Life
25. **Sujay Simha Sairam:** TUEmpowerAfrica
26. **Gustavo Santos Raga:** Integral geochemical methodology for the exploration of hidden geothermal systems: A case of study of Acoculco, Puebla, Mexico.
27. **Syed Faisal Shah:** To Dam or Not to Dam?
28. **Danish Shahzad:** Assessment of Carbon Credits of KPK Micro Hydro Power Project
29. **Sara Shuli:** Miscanthus as a Green Wall and Energy Source
30. **Ryan Jose Sumaya:** Sizing of 2MW Rooftop Solar PV System and Its Effect to the Daily Load Profile of the Province of Marinduque, Philippines
31. **McKenzie Tilstra:** Imagining our Energy Future: Breaking Barriers with Accessible Solutions
32. **Davide Tonelli:** H2 Fueled Gas Turbines
33. **Mariana Velasco Carrasco:** Phase Change Materials for Building Application
34. **Camilla Wikström:** Comparative Analysis of Co-created Smart City Solutions
35. **Cassie Yuan:** Energy Consumption Analysis & Proposed Retrofit of a Duke University Dormitory
36. **Vasco Zeferina:** The cooling demand of Office buildings in response to climate change and the potential effects on the power network
37. **Iker Zulbaran:** Algae Photoreactor Biofuel

