

# SOLAR POWER AFRICA

7-9 February 2024

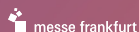
Cape Town International  
Convention Centre  
South Africa

THE LEADING SOLAR & ENERGY STORAGE  
EVENT IN AFRICA

## CONFERENCE PROGRAMME

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# CONFERENCE PROGRAMME

Theme: Empowering Africa’s Energy Future: Solar and Storage Solutions for Sustainable Development

| SIDE FUNCTIONS: (Closed events by invitation only)  |  |
|---|--|
| <b>AFSIA TRAINING</b> , 06 February 2024, <b>TIME:</b> 08:00 - 16:00, <b>Venue:</b> Watsonia (Level 3)    |  |
| <b>DMRE BREAKFAST</b> , 07 February 2024, <b>TIME:</b> 07:00 - 09:00, <b>Venue:</b> Hall 8                |  |
| <b>HUAWEI</b> , 07 February 2024, <b>TIME:</b> 08:00 - 16:00, <b>Venue:</b> Freesia (Level 2)             |  |
| <b>GERMAN ENERGY LUNCH</b> , 07 February 2024, <b>TIME:</b> 12:30 - 14:30, <b>Venue:</b> Orchid (Level 2) |  |
| <b>CANADIAN SOLAR</b> , 08 February 2024, <b>TIME:</b> 17h00 - 19:30, <b>Venue:</b> Watsonia (Level 3)    |  |

| Keynote Address 1                |  |
|----------------------------------|--|
| <b>Time:</b>                     | 09h20 - 10h00  |
| <b>Venue:</b>                    | Hall 8   |
| <b>Keynote Address</b>           | DMRE   |
| Plenary Session 1                |  |
| <b>Time:</b>                     | 10h00 - 11h00  |
| <b>Venue:</b>                    | Hall 8   |
| <b>Theme:</b>                    | <b>A Match Made to Last</b>  |
| <b>Theme Description:</b>        | <p>Large-scale solar projects are often only possible through public-private partnerships (PPPs). This model has proven successful across the continent, with government and private sector stakeholders collaborating to deliver much-needed energy to the grid.</p> <p>In this session we will take a closer look at the successes, reviewing which models worked best and what policy frameworks enabled investment to turn from opportunity to reality.</p>  |
| 11h00 - 11h30 Tea Break          |  |
| Plenary Session 2                |  |
| <b>Time:</b>                     | 11h30 - 12h30  |
| <b>Venue:</b>                    | Hall 8   |
| <b>Theme:</b>                    | <b>Green Means Go</b>  |
| <b>Theme Description:</b>        | <p>As it seems it is all system's go for developing South Africa's Green Hydrogen economy, this session will explore the reality of transforming South Africa into a major producer and exporter of green hydrogen.</p> <p>What is the right environment both from a policy and investment perspective, to help us capitalise on the opportunity to create 370,000 jobs and add 3.6% to GDP by 2050? How can we ensure that this new green hydrogen economy adds additional renewable energy generation capacity and supports the local development of renewable energy?</p> |
| 12h30 - 14h00 Lunch & Exhibition |  |

|   | <b>Breakaway Session 1: Solar and Storage: The Future Hub</b>   | <b>Breakaway Session 2: Sustainable Development</b>   | <b>Breakaway Session 3: Investment and Collaboration</b>  |
|---|---|---|---|
| <b>Time:</b>  | 14h00 - 15h00   |   |   |
| <b>Venue:</b>   | Hall 8.1  | Hall 8.2  | Hall 8.3  |
| <b>Theme:</b>   | <b>Access all Areas</b>   | <b>Right Skills for Right Now</b>   | <b>Financing a Revolution</b>   |
| <b>Theme Description:</b>   | Solar plus storage is critical to addressing the energy access gap in Africa. We need to leverage innovative technologies and implement advanced storage solutions if we are to light up and power Africa. From battery innovations to grid integration strategies, the panel will delve into optimizing storage capabilities, ensuring reliable power supply, and mitigating intermittency issues, emphasizing the transformative potential of efficient storage systems in bolstering energy security across the continent. | The South African energy sector is constantly evolving as we adapt to the ever-changing needs of individuals and the economy as a whole. But are the skills of workers across the value chain keeping pace with these transformations? How do we ensure we are upskilling for the jobs of today and tomorrow? Can we confidently say that current skills programmes are fit for purpose and appropriate for the needs of industry?                                    | There is no one-size-fits-all approach to financing Africa's renewable energy projects. The diversity of the continent is reflected in the intricacies of the diverse funding models required to overcome obstacles such as limited infrastructure and localised regulatory complexities. From public-private partnerships to internationally funded schemes, the panel will explore the ever-evolving financial requirements needed to propel Africa's renewable sector forward. |
| <b>15h00 - 15h30 REFRESHMENT BREAK</b>                                  |   |   |   |
|   | <b>Breakaway Session 4: Solar and Storage: The Future Hub</b>   | <b>Breakaway Session 5: Sustainable Development</b>   | <b>Breakaway Session 6: Investment and Collaboration</b>  |
| <b>Time:</b>  | 15h30 - 16h30   |   |   |
| <b>Venue:</b>   | Hall 8.1  | Hall 8.2  | Hall 8.3  |
| <b>Theme:</b>   | <b>Sustainable Mining through Storage</b>   | <b>Off Grid and on Track</b>  | <b>Free Wheeling in Cape Town</b>   |
| <b>Theme Description:</b>   | Powering mining in Africa is an energy-intensive business. But as mines transition away from traditional fuel sources and embrace renewable energy, it is vital that the right energy storage solutions are in place. What advanced energy storage systems can support mines as they look to alleviate load-shedding, drive decarbonisation and create a greener, more responsible industry.  | Off-grid solar solutions are transforming lives in rural communities across Africa. These underserved communities are now able to access the transformative benefits of electrification. This session will review case studies and best practice, looking at how to overcome infrastructure challenges, scale up off-grid solar adoption, and leverage community engagement for inclusive development and improved living standards to maximise the benefits for all. | Is wheeling the answer to our energy woes? Cape Town's wheeling project is expected to contribute up to 350MW to the grid, deliver reliable power and driving socio-economic growth in the region.  |
| <b>16h30 Closing of Conference Day</b>                                  |   |   |   |
| <b>18h30 - 22:00 GALA DINNER, Gold Restaurant, (by invitation only)</b> |   |   |   |

# CONFERENCE PROGRAMME

**Theme: Empowering Africa's Energy Future: Solar and Storage Solutions for Sustainable Development**

| Keynote Address 2                |  |   |
|----------------------------------|--|---|
| Time:                            | 09h00 - 09h20  |   |
| Venue:                           | Hall 8   |   |
| Keynote Address                  | South Africa Energy Storage Association  |   |
| Plenary Session 3                |  |   |
| Time:                            | 09h20 - 10h20  |   |
| Venue:                           | Hall 8   |   |
| Theme:                           | Africa in the Spotlight - The Way Forward for the Renewable Sector in Africa   |   |
| Keynote Address 3                |  |   |
| Time:                            | 10h20 - 11h00  |   |
| Venue:                           | Hall 8   |   |
| Keynote Address                  | The City Of Cape Town  |   |
| 11h00 - 11h30 Tea Break          |  |   |
| Plenary Session 4                |  |   |
| Time:                            | 11h30 - 12h30  |   |
| Venue:                           | Hall 8   |   |
| Theme:                           | Long-Duration Energy Storage – The Time is Now   |   |
| Theme Description:               | Flexibility and resilience are required if the grid is to fully utilise renewable energy. Long-duration energy storage (LDES) offers exactly that and is set to be a game-changer in Africa. During this session, participants will gain insights from companies that have conceived and implemented groundbreaking LDES projects in various African regions. We will discover real examples of how LDES technologies are ensuring reliable backup energy during times of strain and maintaining the essential balance, flexibility, and stability required to sustain continuous operations. The diversity and adaptability of LDES technologies will be showcased, with an opportunity to see how LDES can be tailored to suit a wide range of applications and scaled up to help Africa achieved its decarbonization goals. |   |
| 12h30 - 14h00 Lunch & Exhibition |  |   |
|                                  | Breakaway Session 7: Solar and Storage: The Future Hub   | Breakaway Session 9: Investment and Collaboration |
| Time:                            | 14h00 - 15h00  |   |
| Venue:                           | Hall 8.1   | Hall 8.2  |
| Theme:                           | Batteries, Act Two: Second Life Energy Storage   | Paving the Way for Systemic Change                |

|                           |   |   |
|---------------------------|---|---|
| <b>Theme Description:</b> | Efficient and cost-effective energy storage solutions are critical if renewable energy sources are to be fully harnessed. Second life energy storage, the practice of repurposing retired electric vehicle (EV) batteries for stationary energy storage applications, not only extends the lifespan of EV batteries but also addresses this growing demand for energy storage systems while providing reliable grid resiliency. This session will take a closer look at emerging technologies and review the best practices and standards required to make second life energy storage viable. | Embedding diversity, equity, inclusion, and justice in our culture is our collective responsibility. The same goes if we are to create an equitable clean energy economy. All of us in the industry must prioritize the inclusion of previously excluded communities and stakeholders, empowering and supporting them to take part and benefit from the just transition. In this session we will hear from panellists who have implemented workforce developments solutions and operationalised equity into their business processes. This is an opportunity to learn more about best practices for ensuring equity is at the heart of the clean energy transition. |
|---------------------------|---|---|

#### 15h00 - 15h30 REFRESHMENT BREAK

|                           | <b>Breakaway Session 10: Solar and Storage: The Future Hub</b>   | <b>Breakaway Session 11: Sustainable Development</b>  | <b>Breakaway Session 12: Investment and Collaboration</b>   |
|---------------------------|--|---|---|
| <b>Time:</b>              | 15h30 - 16h30  |   |   |
| <b>Venue:</b>             | Hall 8.1   | Hall 8.2  | Hall 8.3  |
| <b>Theme:</b>             | <b>Electric Vehicle Solutions for a Sustainable Africa</b>   | <b>The Importance of a Circular Economy</b>   | <b>Climate Finance Mapping</b>  |
| <b>Theme Description:</b> | Electric vehicle use is growing rapidly across Africa, with the associated benefits of improved urban air quality and reduced carbon emissions. Strategic investment in the development of EV infrastructure, including charging networks, is required alongside robust policies to support the roll-out across the continent.<br><br>This session will explore how solar, and storage can work together to enhance the adoption of EV's in the public transport, micro-mobility, and private passenger vehicle segments and address policy requirements as well as adoption and implementation. | The circular economy for renewable energy has the potential to create a lower-emission supply chain for materials, reduce waste, and create economic opportunities.<br><br>The panel will discuss successful sustainability initiatives within the industry and their impact on local communities and ecosystems and the positive impact of the Extended Producer Responsibility (EPR) Regulations after two years of implementation. | The 2023 South African Climate Finance Landscape report intricately maps climate investments from 2019-2021, revealing gaps and opportunities. It urges targeted funds for vulnerable communities, empowering policymakers to align decisions with global commitments. This prompts action to allocate resources effectively, focusing on urgent climate needs. What change will this report affect and how will it aid decisions and policymakers ensuring South Africa delivers on its International climate commitments? |

#### 16h30 Closing of Conference Day

# CONFERENCE PROGRAMME

**Theme: Empowering Africa's Energy Future: Solar and Storage Solutions for Sustainable Development**

| Plenary Session 5                                       |  |
|---|--|
| <b>Time:</b>  | 09h00 - 10h00  |
| <b>Venue:</b>   | Hall 8   |
| <b>Theme:</b>   | <b>Africa's Critical Minerals: Powering Renewable Energy and Socioeconomic Growth</b>  |
| <b>Theme Description:</b>                               | This Plenary will focus on Africa's pivotal role in the global shift toward renewables, leveraging its abundant critical minerals. With 30% of the world's reserves, Africa stands as a linchpin for renewable energy technologies, heralding socioeconomic growth and local content development. The discourse highlights the continent's mineral wealth-essential for solar panels, wind turbines, EVs, and green hydrogen-and its transformative potential for both Africa and the world. However, this transition presents challenges, as key minerals lie in various SADC countries, raising concerns about environmental and social impacts. The panel will discuss these challenges to support the energy transition while addressing social disruptions to meet the demands of a minerals-intensive journey toward a net-zero economy. |
| Breakaway Session 13 Sustainable Development            |  |
| <b>Time:</b>  | 10h00 - 11h00  |
| <b>Venue:</b>   | Hall 8   |
| <b>Theme:</b>   | <b>Global or Local Talent Pool?</b>  |
| <b>Theme Description:</b>                               | South Africa's transformative shift towards renewable energy has and will continue to require international support. However, if we are to ensure a just transition, we must develop local skills, focussing on empowering and enabling local workers across the renewable value chain. Together we will explore how best to allocate resources to local skills development if we are to achieve the potential socio-economic benefits of the Just Transition Investment Plan.   |
| 11h00 - 11h30 Tea Break                                 |  |
| Breakaway Session 14: Solar and Storage: The Future Hub |  |
| <b>Time:</b>  | 11h30 - 12h30  |
| <b>Venue:</b>   | Hall 8   |
| <b>Theme:</b>   | <b>Securing the Grid</b>   |
| <b>Theme Description:</b>                               | Smart technologies bring manifold benefits to the grid. However, with increased cyber capabilities come increased cyber security risks. It has never been more important to implement a 'security by design' approach as we decentralise and integrate smart tech into Africa's electrical systems. Following a comprehensive review of Africa's cyber capabilities on a country-by-country basis, we will take a look at specific threats to the future clean energy grid, the resilience advantages offered by clean energy generation, storage, and distributed energy resources, and a discussion of programs aimed at enhancing both physical and cyber security in the energy sector.  |
| 12h30 Lunch and Exhibition                              |  |
| 16h30 Closing of Event                                  |  |