



Invitation to Session 2 of the Industry Think Tank

Earthing of Alternative Supplies – Safety, Performance & Compliance

The ECA(SA) invites all professionals, specialists, and stakeholders in the electrical industry to join a focused Think Tank session on one of the most critical aspects of modern electrical installations: Earthing of Alternative Energy Supplies.

With the rapid expansion of solar PV, wind energy, and backup generation systems, there is an urgent need to address the often-overlooked but vital issue of proper earthing. Misunderstandings around correct grounding techniques, especially in inverter-based systems, can lead to serious safety hazards, system underperformance, and non-compliance with national standards.

This forum aims to explore:

- The role of earthing in ensuring system safety and reliability
- Compliance requirements with SANS 10142-1 and related standards
- Types of earthing systems and design considerations
- Integration of alternative supply earthing with existing grid systems
- The unique challenges posed by off-grid and hybrid systems

Topics for discussion:

- Compliance with national and international standards
- Grounding methods for inverter-based systems
- Earth fault loop impedance and system disconnection
- Surge protection and lightning mitigation
- Designing systems for both safety and performance

Following this session, key takeaways will inform the development of national guidance documentation and recommendations to the ECA(SA) National Technical Committee for review of relevant standards and potential gaps.

Call for Speakers:

We are seeking knowledgeable professionals to share insights and experience, including:

- Electrical engineers and system designers
- Contractors with experience in renewable installations
- Safety experts and inspectors
- Renewable energy consultants



Session 1

Meeting date: 9th May 2025

Start time: 10:00 pm **End time:** 2:00 pm

Meeting location: Zoom (Online)

Agenda Session 1:

Item	Presenter	Topic	Time
Opening	Anthony Schewitz (ECASA)	Current Legislation and Requirements and Gaps.	20 minutes
Speaker 1	AREP – Carel Ballack	TBA	20 minutes
Speaker 2	SAPVIA	TBA	20 minutes
Q and A Break			10 minutes
Speaker 3	LPP		20 minutes
Speaker 4	ELPA		20 minutes
Speaker 5	Munic Rep		20 minutes
Closing	Deliberation and Final Arguments		40 Minutes

Session 2

Meeting date: 16th May 2025

Start time: 10:00 pm **End time:** 2:00 pm

Meeting location: Zoom (Online)

Agenda Session 2:

Item	Presenter	Topic	Time
Opening	Anthony	Opening	5 minutes
Speaker 6	Jose Gancho		20 minutes
Speaker 7	Earth Muti - Gavin		20 minutes
Q and A Break			10 minutes
Speaker 8	Manufacturer/Contractor		20 minutes
Speaker 9	Engineer		20 minutes
Speaker 10	Leon Roos		20 minutes
Closing	Deliberation and Final Arguments		40 Minutes

More spaces can be generated based on speaking interest.

If you are interested in participating or being a part of in this session, please contact **Anthony Schewitz** at anthony@ecasa.co.za or on **072 823 0241**.

Thank you for considering this opportunity to contribute to and benefit from the growth of our industry.

Kind regards,

Anthony Schewitz

ECA(SA) National Renewable Energy Committee Secretary