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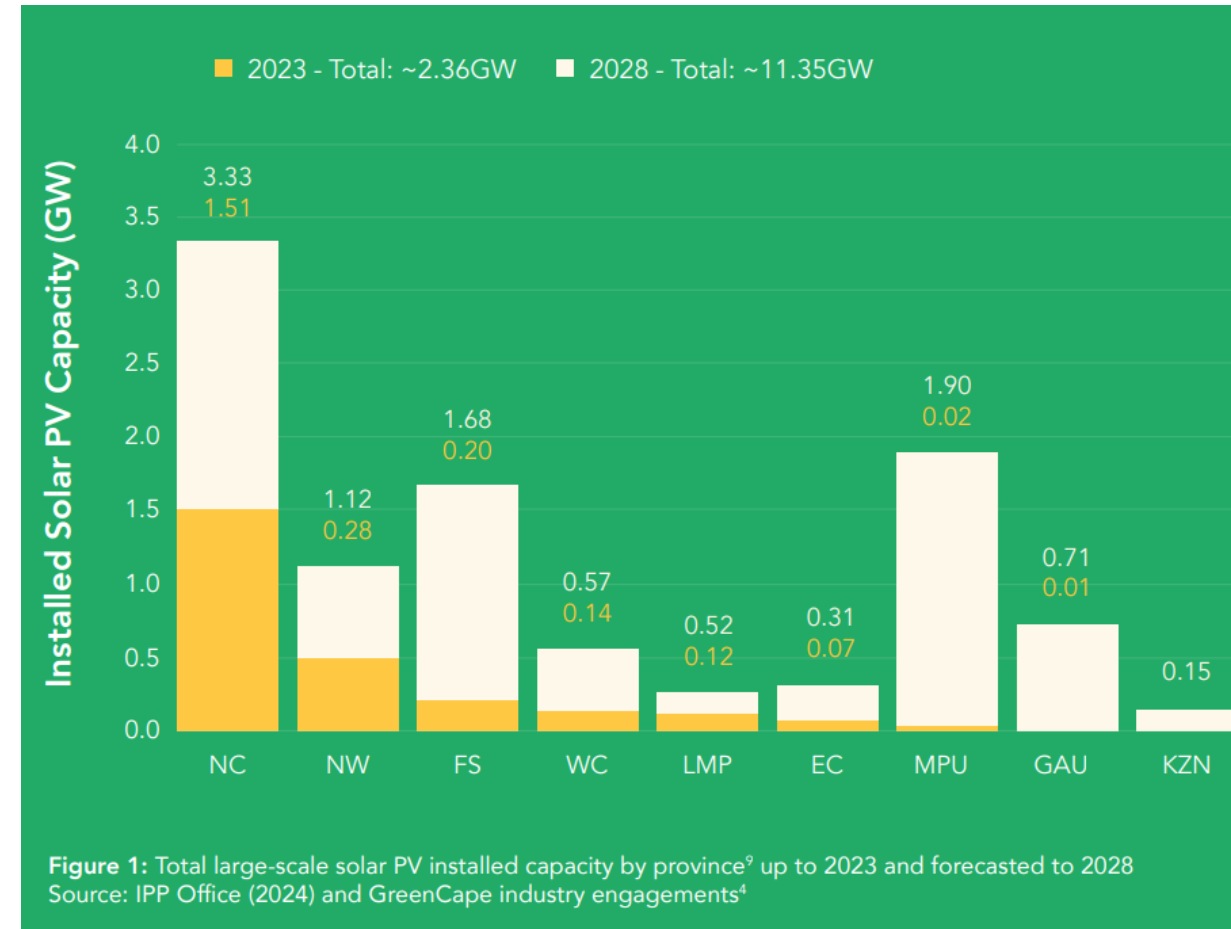
PV Module recycling as a necessity for future PV development

Ismail Jefferies | Cape Town: South Africa | 4 July 2025

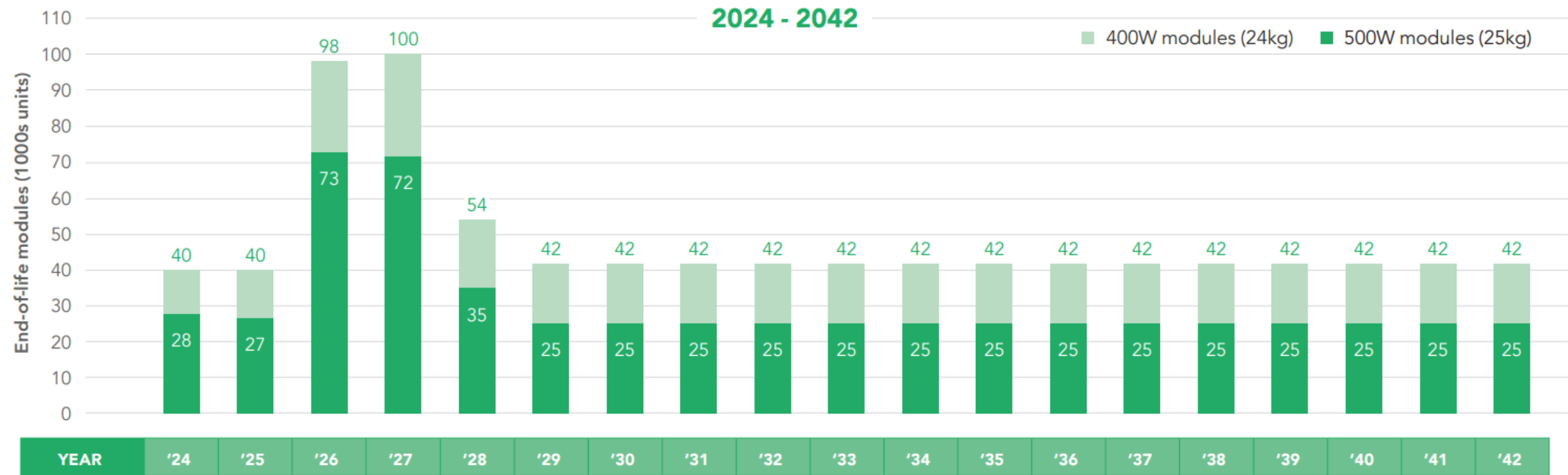
Making progress possible. **Together.**

Registered Capacity in South Africa

- Large scale deployment of RE into South Africa power grid has been assisted by the amendment of Schedule 2 of the Electricity Regulation Act, 2006 (Act No. 4 of 2006), allowing power plant projects to be registered by the National Energy Regulator of South Africa (NERSA), without undergoing a licensing process.
- Growing rapidly estimate of 11.35 GW in next 5 years
- Source: GreenCape



Annual number of end of life in SA for 2024 - 2042



• Source: GreenCape



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Legislative requirements for solar PV producers and end-of-life solution providers

- **The Waste Act:** In South Africa, the management of waste is regulated by the National Environmental Management Waste Act (Act 59 of 2008) (NEMWA).
 - **Classification of waste:** In South Africa, solar PV panels and some of the associated equipment (e.g. inverters, cables) are classified as e-waste under the country's EPR regulations (GN1184 of 2020), which came into effect in 2021.
 - **E-waste landfill ban:** The National Norms and Standards for Disposal of Waste to Landfill (GNR636 of 2013) prohibit the disposal of certain waste streams to landfill. This includes **electrical and electronic waste** (e-waste) equipment and consequently solar PV related streams. This means that solar PV waste must be managed by a landfill alternative solution. This should drive the demand for landfill alternative disposal measures
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- Source: GreenCape

Challenges

- **Market Demand:** Creating a viable market for recovered materials from recycled solar panels is a significant challenge.
- **Public Awareness:** Raising public awareness about the importance of responsible solar panel disposal is crucial for the success of recycling initiatives

- Source: GreenCape

Contributors/ Enablers

- A number of e-waste solution providers already exist in South Africa, such as **DESCO**, **Ewaste Africa**, and **Reclite**. These companies collect broken and decommissioned solar PV modules from across the country, disassemble them, and segregate the components for different recycling solutions

