

A photograph of three professionals, two women and one man, wearing white hard hats and safety glasses. They are dressed in white long-sleeved shirts and are looking at a tablet and a clipboard. They are standing in front of a large array of solar panels. The background shows a clear blue sky and green grass.

Overview of the Solar PV Industry & Skills development initiatives

Western Cape's Premier's Council on Skills

Date: 5th August 2022

By: Dr Rethabile Melamu

SAPVIA OVERVIEW

The South African Photovoltaic Industry Association (SAPVIA) is a not-profit industry association that aims to promote, develop and grow the Photovoltaic industry as part of the wider renewable energy sector in South Africa.

VISION

Solar PV is the Electricity generation technology of choice in South Africa and the rest of Sub-Saharan Africa, in support of socio-economic Development

MISSION

To vigorously mobilise support for the sustainable growth of solar PV in South Africa and the rest of Sub-Saharan Africa

VALUES

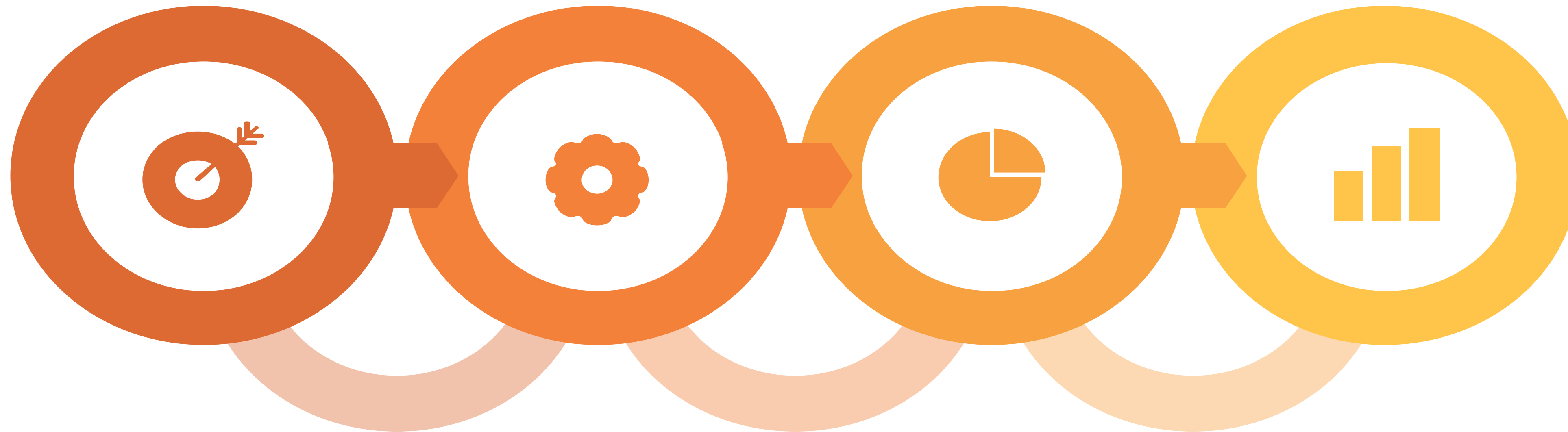
Cohesion We embrace diversity, our strength.

Consistency We say what we mean, do what we say. Always.

Collaboration Instead of walking fast on our own, we walk together with our stakeholders, so we can walk far.



VALUE PROPOSITION



Industry Representation

Influence is significant when industry speaks with a united voice.

Advocacy and Lobbying

Regular engagements with Government, Labour and Business through various platforms

Thought Leadership

Positioning through various media engagements, leading Webinars and Working Groups

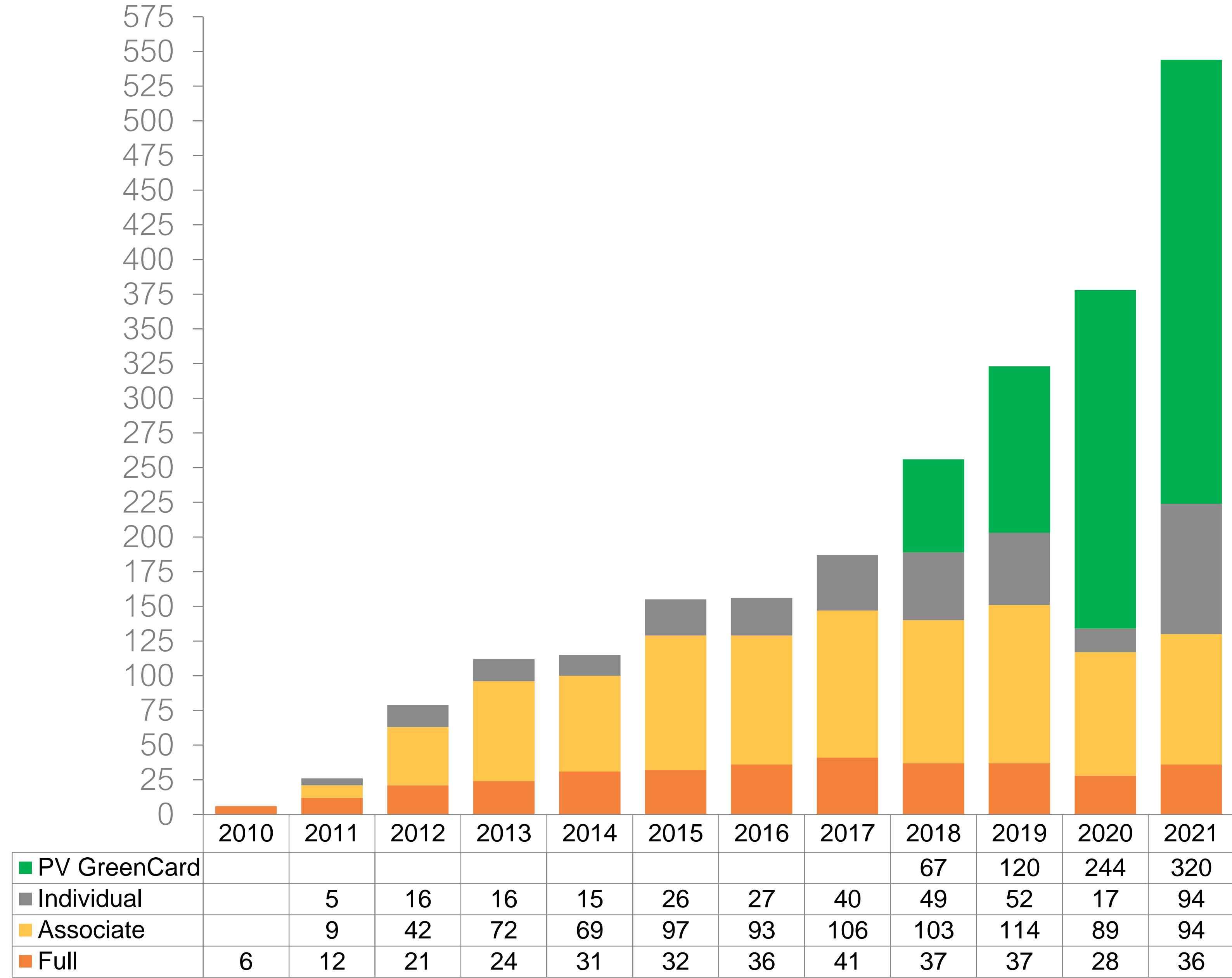
SAPVIA Reach

Most extensive industry database of > 9000 players in Solar PV, > 15000 social media followers



MEMBERSHIP DETAILS

- Project development
- PV project ownership (as independent power producers)
- Engineering-procurement-construction (EPC)
- Operations and maintenance (O&M)
- Manufacturing (OEMs)
- Embedded (roof-top) PV installation
- Training, Consulting and Research
- Finance Institutions
- PV Professionals (individuals)



SOLAR PV CONTRIBUTION in SOUTH AFRICA

KEY INDICATORS

Solar PV contribution to REIPPPP Indicators



2 373MW of Solar PV procured from **61 projects**



1.6 million average households powered by solar PV



17 636 GWh Solar PV energy contributed to National Grid



35% black shareholding/ownership



R65.9 billion investment in solar PV



17.9 Mtons CO₂ equivalent RE emissions reduction achieved relative to Eskom generated power



22 383 jobs-years created



R568.7 million in SED contributions to date



75% drop in the price for solar PV power to **R1.10/kWh**



R50 billion total payments to IPP's as per PPA

Solar PV contribution to SSEG Indicators

1.3GW
of SSEG
installed capacity
(estimated)

80%
attributed
to C&I
application

800
SSEG installation
companies
identified

11 323
jobs
created
(estimated)

8.9
Mtons CO₂
equivalent RE emissions
reduction achieved

R8-R12
cost
per Wp



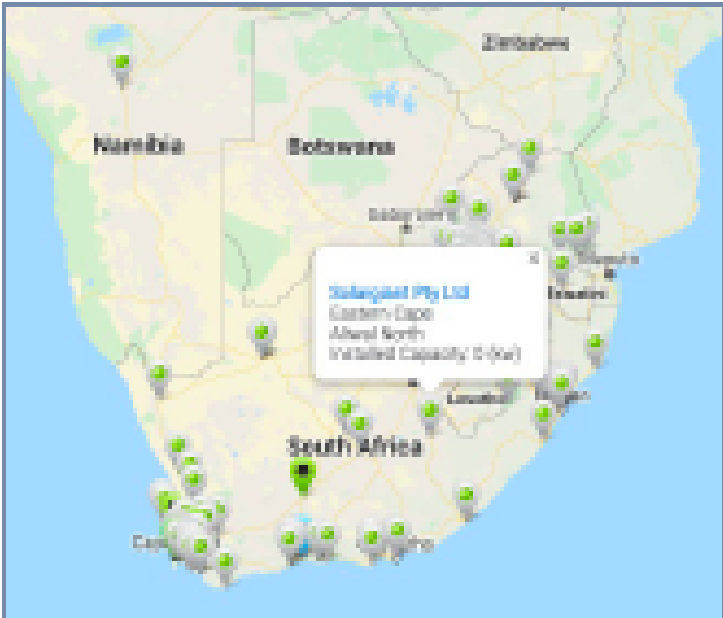
SAPVIA INITIATIVES



PV GreenCard Programme

SAPVIA is committed to supporting the development of a sustainable and safe solar PV sector. The PV GreenCard programme is designed to ensure quality and safety standards are introduced and maintained by all solar PV installers. This is now the leading quality assurance standard and training programme for solar PV installers.

Solar PV installers take part in specialized education and training which will enable them to be certified and registered on the PV GreenCard database. This certification means that these installers are proficient and compliant with all of the relevant national and municipal electrical regulations and can offer their clients reassurance of the safety and quality of the installation.



PV Spotter Map

SAPVIA has created the first database of solar PV projects across South Africa. Designed to showcase the distribution of Solar PV projects across the country, the PV Spotter includes Solar PV IPPs, C&I as well as residential installations.

The PV Spotter will contribute to the advancement of the solar PV industry and will allow SAPVIA and its members to proactively influence and provide much needed market intelligence.

By mapping solar PV projects, we are better able to understand the geographic distribution as well as the contribution that solar is making to the South African Energy mix.

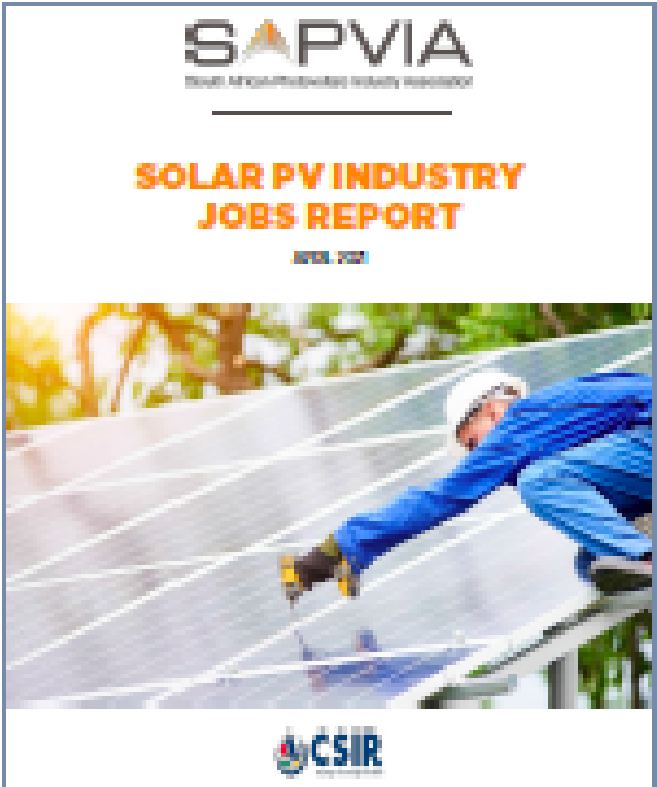


PV Professionals Platform

Designed for professionals across the solar PV value chain, the PV Professionals platform is the first of its kind in the South African solar industry.

It is a digital solution that will give members access to knowledge, training, and opportunities to collaborate with national and international stakeholders.

Developed for PV professionals, the platform is structured to facilitate dialogue and knowledge-sharing to ensure that the solar PV sector has the capacity and professionalism to capitalise on this lucrative sector.



Solar PV Industry Jobs Report

As we continue to be impacted by unemployment and the ongoing shortfall in electricity generation capacity, it has never been more important for solar PV to make a contribution. Solar PV has the potential to contribute to a sustainable economic recovery. It is therefore a fitting time for the finalisation of this work. SAPVIA via the expertise of the Council for Scientific and Industrial Research (CSIR), commissioned a Solar PV Industry jobs report. The project aimed to develop a deeper understanding of jobs created in the South Africa Solar PV market. The study will allow us to estimate the job creation opportunities from solar PV given the focus on deployment of renewables through the IRP and the current policy directive for enhanced localisation.

The final report was launched on the 28th April 2021 and can be accessed [here](#).



SSEG Municipal Map

Small Scale Embedded Generation (SSEG) installations are increasing across the South African distribution network areas. As the majority of energy generated through SSEG in South Africa is from solar photovoltaic (PV) systems, SAPVIA has created the PV Municipal Map to inform potential installers of the municipalities readiness for SSEG installations on their distribution networks.

The interactive map will provide guidance detailing the regulations, application process for customers to connect their systems as well as updates on which municipalities have NERSA-approved SSEG tariffs, allowing them to credit customers for excess electricity exported onto their distribution network.



PV Marketplace

Promoting your brand and business couldn't be easier with the PV marketplace. Created to raise awareness of the diversity of the SAPVIA membership base, this platform is ideal if you are looking to introduce yourself to the market, launch a new service or simply profile your business to the sector. SAPVIA member companies can maximise their membership with exclusive access to the PV Marketplace which will showcase their business to more than 4000 players in the solar PV sector and a social media audience of 7000 plus.



SAPVIA WEBINAR SERIES



DEVELOPING DEVELOPERS WEBINAR SERIES



SEPTEMBER 2020 – MARCH 2021

LOCAL RESOURCES - GLOBAL COMPETENCE

As the representative voices of the solar PV and Wind industries we are constantly working towards collaborating with stakeholders across the renewable energy sector to share knowledge and drive effective change. Developing South African developers to build local competence of global standard, is key in accelerating the local renewable energy market.

With this in mind SAPVIA and SAWEA are partnering with key stakeholders to present a seven-part series of workshops to address key areas that aspiring developers need to understand.

Creating a platform to develop local resources that address the skills gaps and allows for effective knowledge sharing, ensures that local developers (current or potential) can access the knowledge and expertise needed to develop world-leading projects from development through due diligence, financial close right up to commissioning.

WHO SHOULD ATTEND?
Construction Supply Chain Distributors
Industry and Government stakeholders
Entrepreneurs
Manufacturers
Aspiring Developers
Engineering Students

PARTICIPATION:
Free for SAPVIA/SAWEA and partner members

Cost for non-members
R250 per session
R1000 for all 6 sessions
(50% discount) for student
(20% discount) for Groups of more than 6



Registration opens 9 September 2020
For any enquiries: marketing@sapvia.co.za



DEVELOPING DEVELOPERS WEBINAR SERIES



AGENDA

17 SEP **UNDERSTANDING THE REIPPPP RFP**
Outlining the REIPPPP programme's RFP, it's current impact and the role it will play in transforming the South African renewable energy market.
14h00 – 16h00

- Introduction and Welcome - SAPVIA/SAWEA
- Key note presentation
- Panel discussion on impacts of the RFP
- A Reimagined RFP for South Africa
- Spotlight: (sponsor developer)

22 OCT **THE LEGAL OUTLOOK: CONTRACTS AND AGREEMENTS**
Mitigating risk through legal oversight, is an essential element in project development. Understanding the options available to best suit your project, will play a vital role in defining all the terms of a project's scope of work and the risk to be played by all stakeholders.
14h00 – 16h00

- Introduction and Welcome - SAPVIA/SAWEA
- The REIPPPP Legal Outlook – (subject matter expert)
- Panel Discussion: The REIPPPP Contract and Agreement Options
- Spotlight: (sponsor developer)

12 NOV **THE FINANCIAL OUTLOOK: BANKABILITY TO FINANCIAL CLOSE**
A financial perspective of how to make renewable energy projects bankable, how to get access to funding and what it takes to reach financial close, will be unpacked in this session.
14h00 – 16h00

- Introduction and Welcome - SAPVIA/SAWEA
- The REIPPPP Financial Outlook – (subject matter expert)
- Presentation: Making Projects Bankable
- Presentation: Access to Funding
- Presentation: Reaching Financial Close
- Spotlight: (sponsor developer)

10 DEC **THE SOCIO-ECONOMIC IMPACT**
Renewable energy projects provide an opportunity to showcase the value creation potential through combating socio-economic challenges.
14h00 – 16h00

- Introduction and Welcome - SAPVIA/SAWEA
- REIPPPP SED&ED status and impact to date – (PRC)
- Rapid presentations of high impact projects – ED Managers
- Presentation: SED&ED best practice – HoloMachobane
- Sponsor Spotlight: (sponsor developer)

SEPTEMBER WEBINAR
THE FIRST LIVE WEBINAR IS FREE TO ATTEND
OCTOBER 2020 – MARCH 2021 WEBINARS
COSTS AND DISCOUNTS APPLY

21 JAN **FUNDAMENTALS OF RE PROJECT DEVELOPMENT**
Understanding the essential elements in the framework of renewable energy project development to provide sufficient support and ensure favourable conditions for success.
14h00 – 16h00

- Introduction and Welcome - SAPVIA/SAWEA
- Overview of RE Project Development Requirements
- Presentation: Land acquisition
- Presentation: Energy resources and Technology options
- Presentation: Environmental permitting – EA
- Spotlight: (sponsor developer)

18 FEB **COMMISSIONING PROJECTS: ENGINEERING PROCUREMENT CONSTRUCTION**
Unpacking the execution phase of a project to learn best practices, how we can build local capability, challenges and hurdles experienced and the process of connecting to the national grid.
14h00 – 16h00

- Introduction and Welcome - SAPVIA/SAWEA
- RE project learnings and best practice – (subject matter expert)
- Presentation: Building South African capability: Scarce Skills
- Presentation: Projects in Construction: Challenges and Hurdles
- Presentation: Connection to the National Grid
- Spotlight: (sponsor developer)

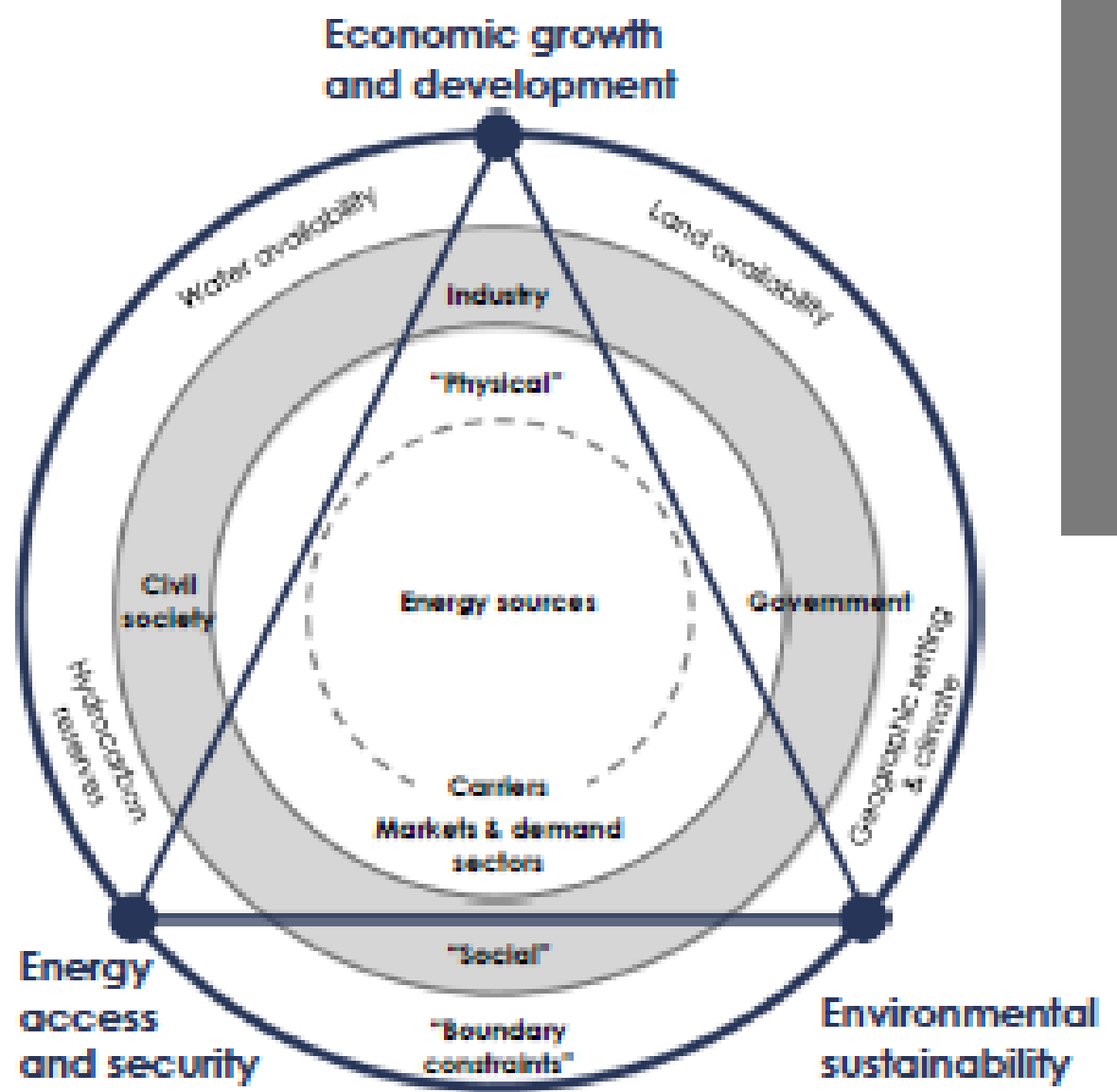
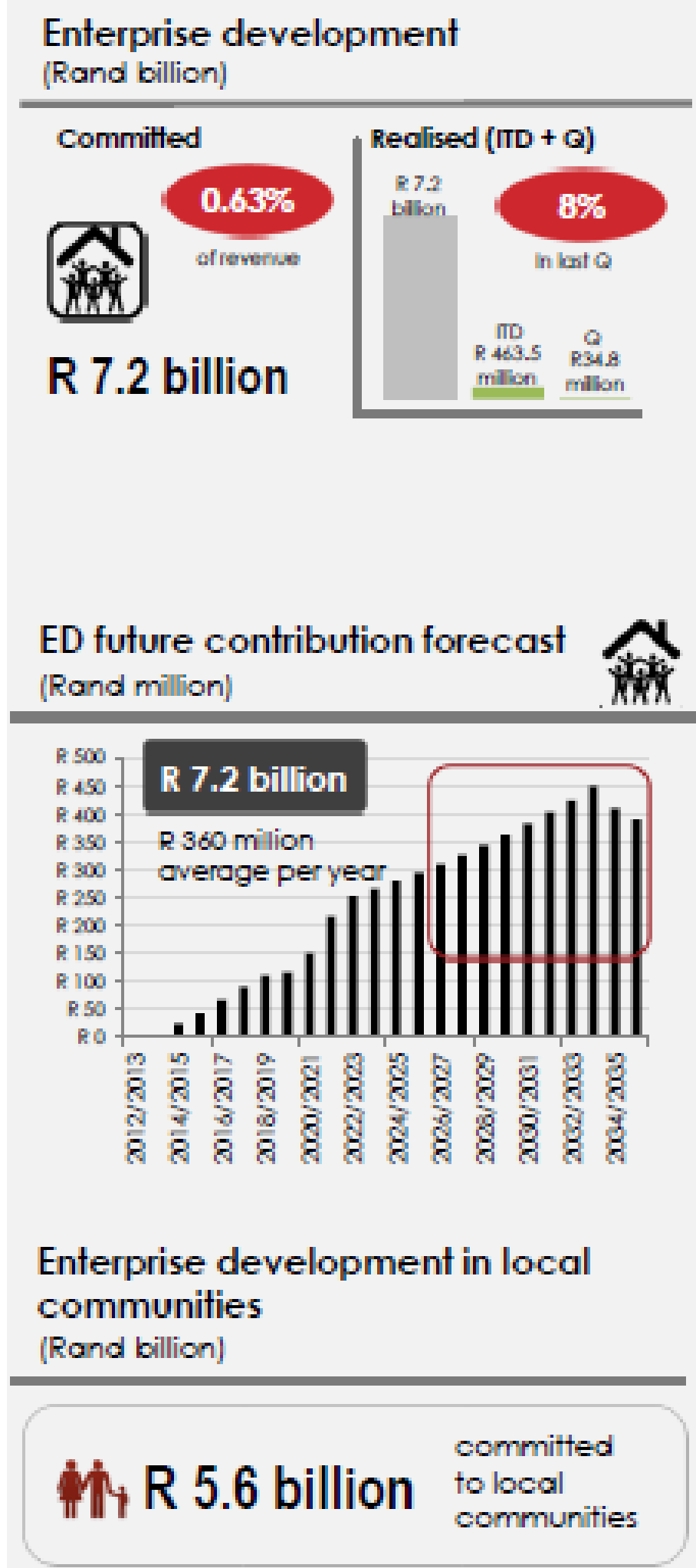
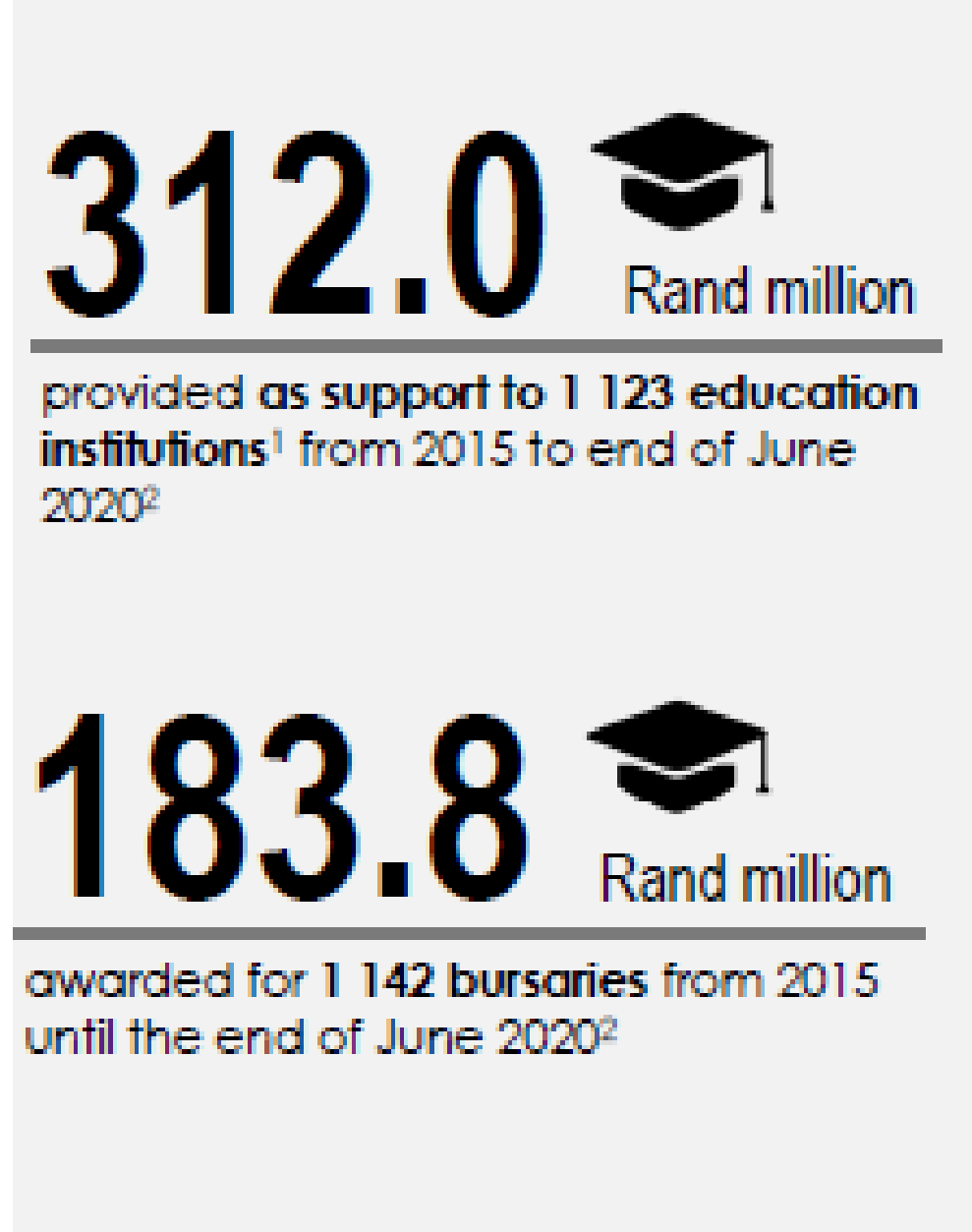
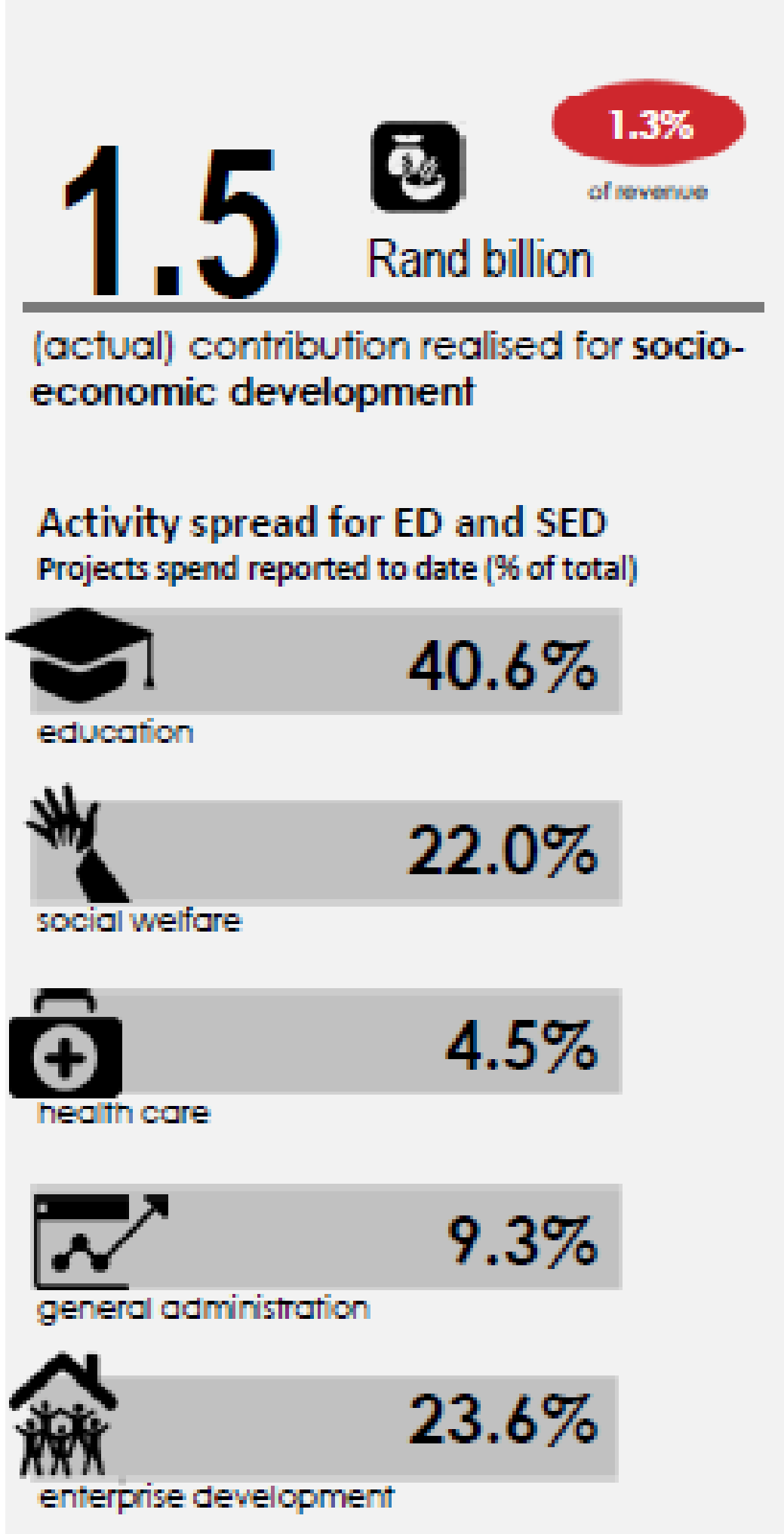
18 MAR **OPERATING PROJECTS: OPERATIONS & MAINTENANCE AND ASSET MANAGEMENT**
Necessary components of the long-term operation of renewable energy facilities, we will address how to make facilities run optimally from both a technical and financial perspective.
14h00 – 16h00

- Introduction and Welcome - SAPVIA/SAWEA
- Presentation: O & M
- Presentation: Asset Management
- Spotlight: (sponsor developer)

For agenda enquiries: marketing@sapvia.co.za



BROADER ECONOMIC IMPACTS – EMPOWERMENT OBJECTIVES



Source: IPP Quarterly Report – 30 June 2021



THANK YOU



The new evolution....

