

BMU-IASS Side Event

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Social and Economic Co-Benefits of Renewable Energy for South Africa

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**Berlin Energy Transition Dialogue
April 2019**



INTERNATIONAL CLIMATE INITIATIVE (IKI)



**»Building a strong alliance for
ambitious climate action by
harnessing the social and
economic co-benefits of
renewable energy«**

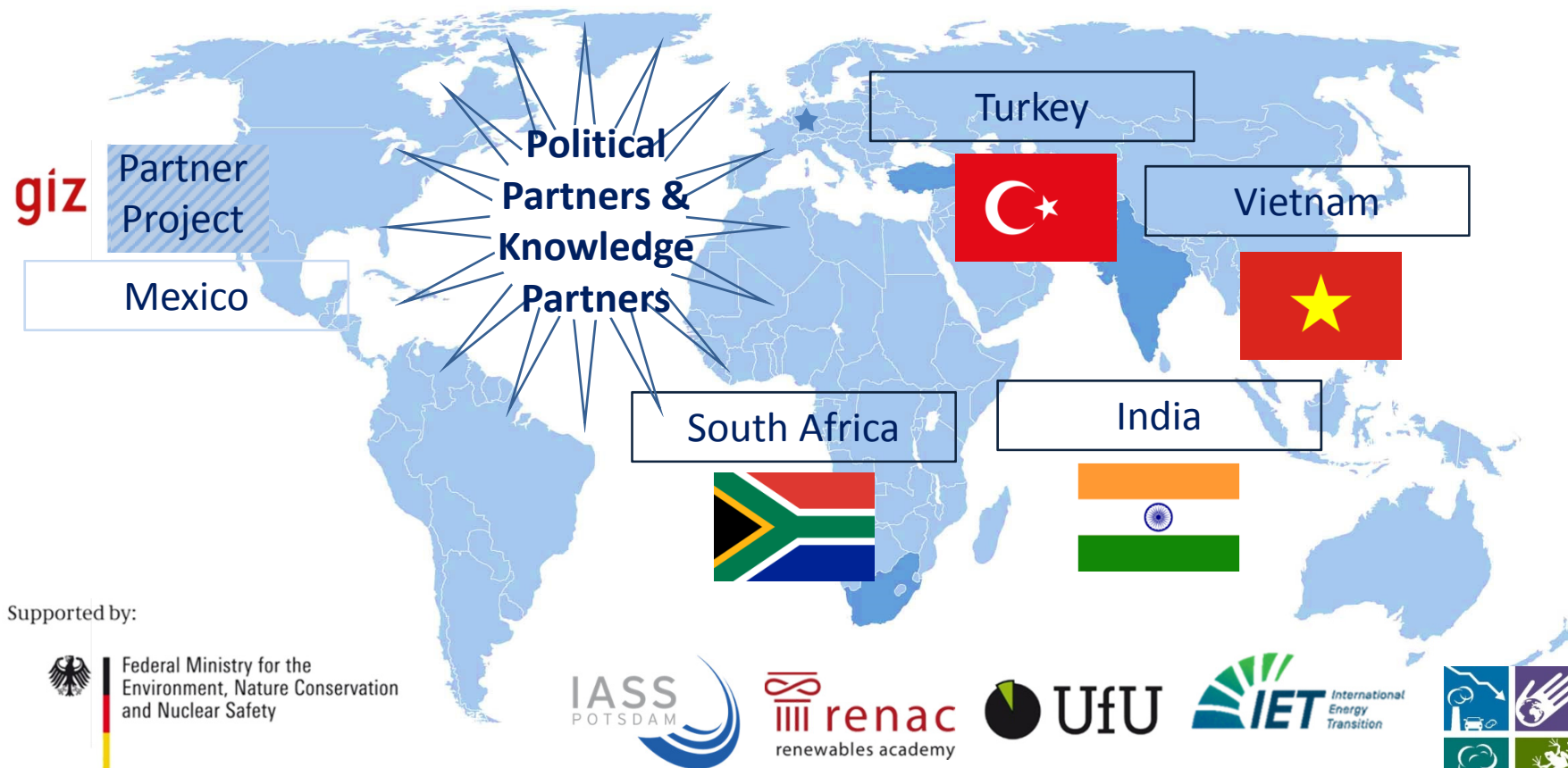
**Making the Paris Agreement a success
for the Planet and the People**

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International Climate Initiative



»Building a strong alliance for ambitious climate action by harnessing the social and economic co-benefits of renewable energy«



Harnessing the Social and Economic Co-Benefits of Renewable Energy for South Africa

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International Climate Initiative



»Building a strong alliance for ambitious climate action by harnessing the social and economic co-benefits of renewable energy«

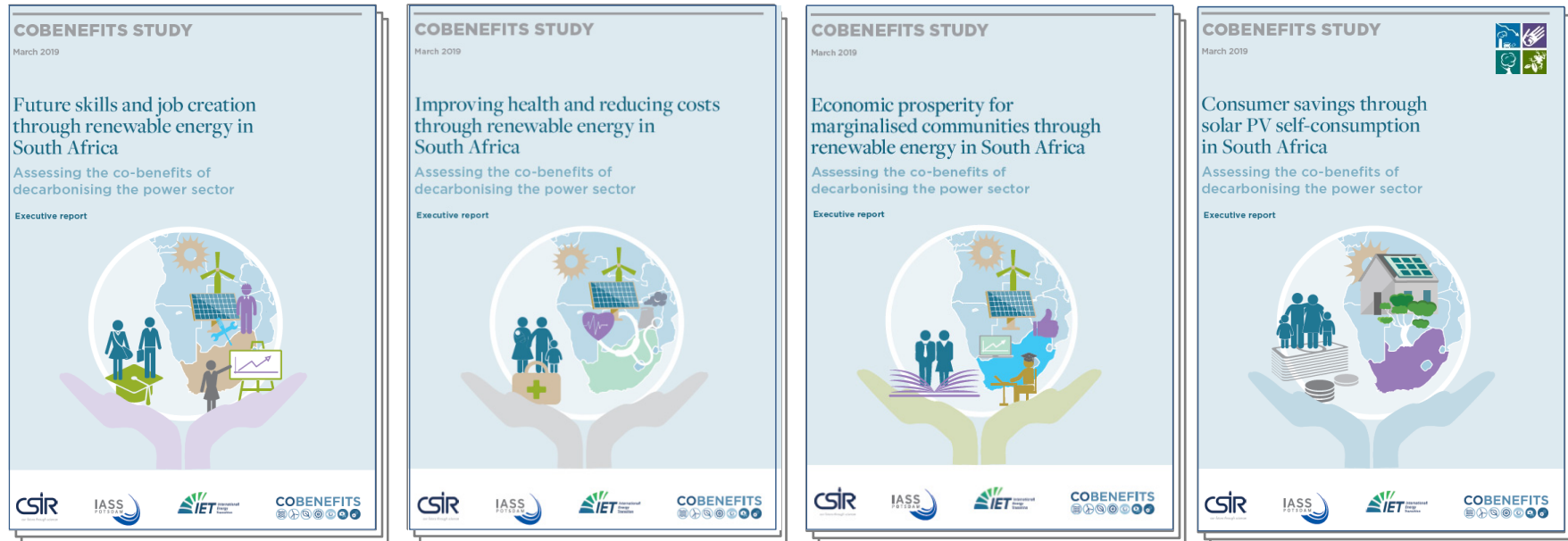
- ✓ **COBENEFITS Assessment Studies:** Country-specific co-benefit assessments
- ✓ **COBENEFITS Training Programme** for government departments / agencies
- ✓ **National Policy Roundtables** on enabling environments to maximise co-benefits
- ✓ **Inter-governmental Policy Dialogues** on connecting Co-Benefits to NDC and SDG implementation



Harnessing the Social and Economic Co-Benefits of Renewable Energy for South Africa

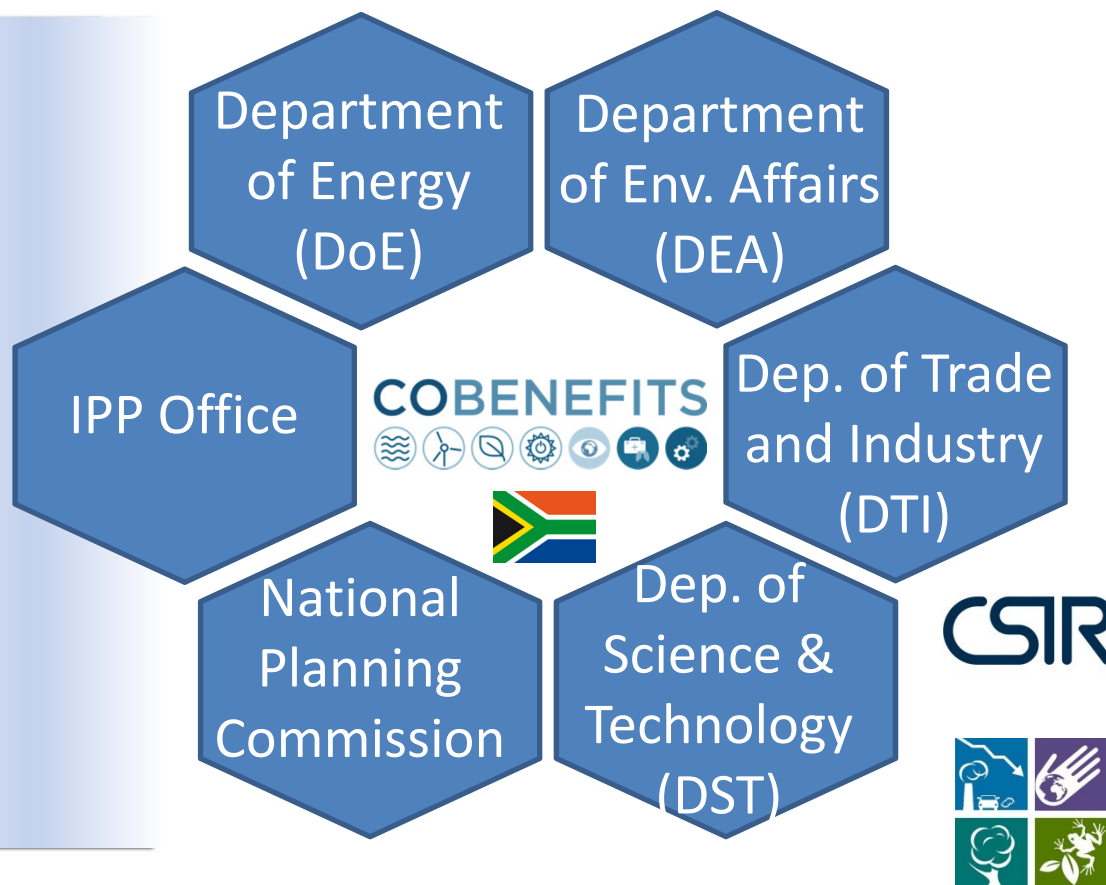


COBENEFITS South Africa Studies



- ✓ Future skills and job creation
- ✓ Improving health and reducing costs
- ✓ Economic prosperity for marginalized communities
- ✓ Consumer savings through solar PV self-consumption

Is it important to jointly working with different government departments?



What do we learn from comparing different energy pathways?

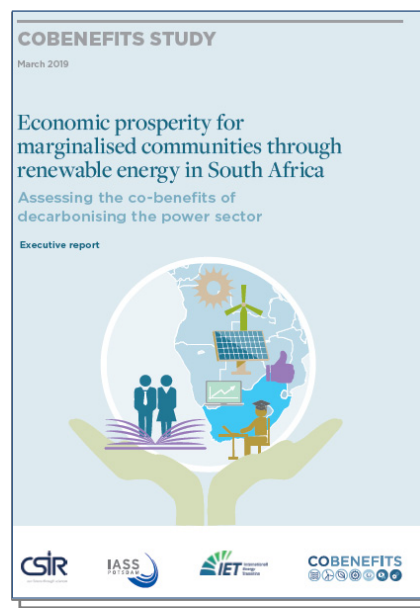


Decarbonisation of
South Africa's power sector

- ✓ **What has been achieved?**
- ✓ **Is there room for more?**

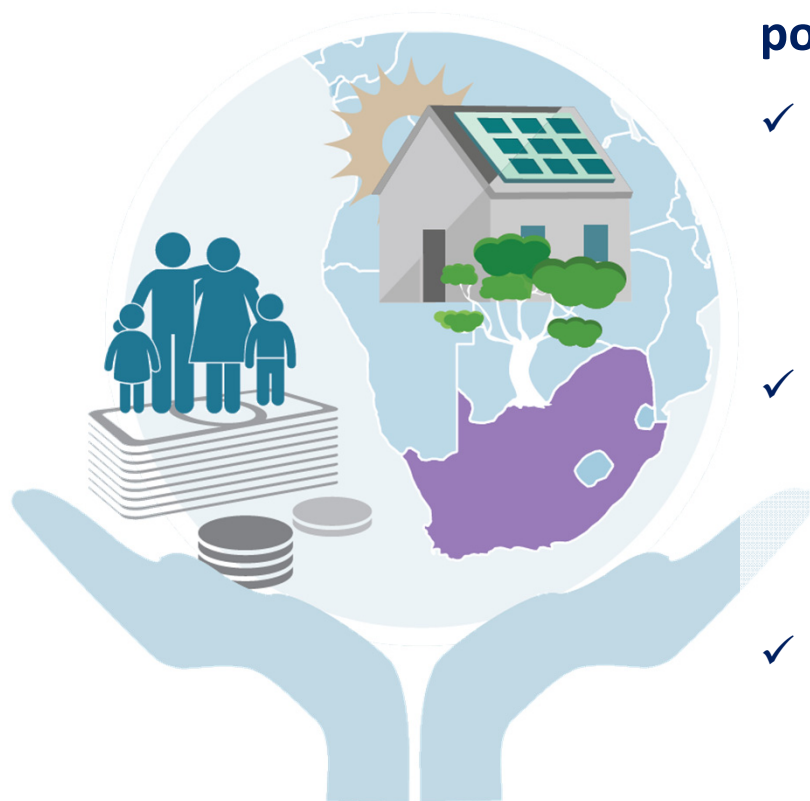


RESULTS



Harnessing the Social and Economic Co-Benefits of Renewable Energy for South Africa

Consumer savings through solar PV self-consumption



South Africa has a tremendous potential for rooftop solar PV

- ✓ It is technically and economically feasible to install **more than 11 GW** of solar PV on residential rooftops in the metropolitan municipalities by 2030
- ✓ South African households and businesses can save money by investing in solar: for the residential sector **savings sum up to around USD 90 billion** by 2030
- ✓ **PV+Battery** solutions can play an **important role** in incentivizing prosumers and reducing peak load during evening hours.



Future skills and job creation



South Africa can significantly boost employment by increasing the share of renewables

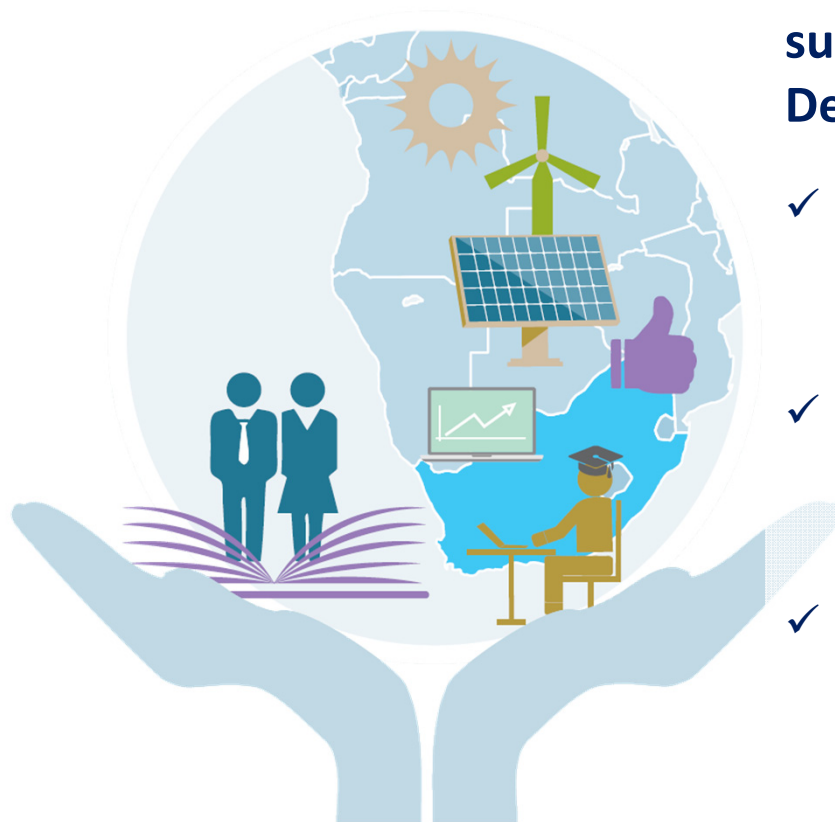
- ✓ With its decision to scale up renewables by moving from IRP 2016 to IRP 2018, employment (job years) can be expected to **increase by an additional 40 %** in the next 10 years.

Coal-sector employment to decline regardless of a shift towards renewable energy

- ✓ With expected reductions in global demand and exports, **coal jobs to decline by 35-40%** between 2020 and 2050.



Economic prosperity for marginalized communities

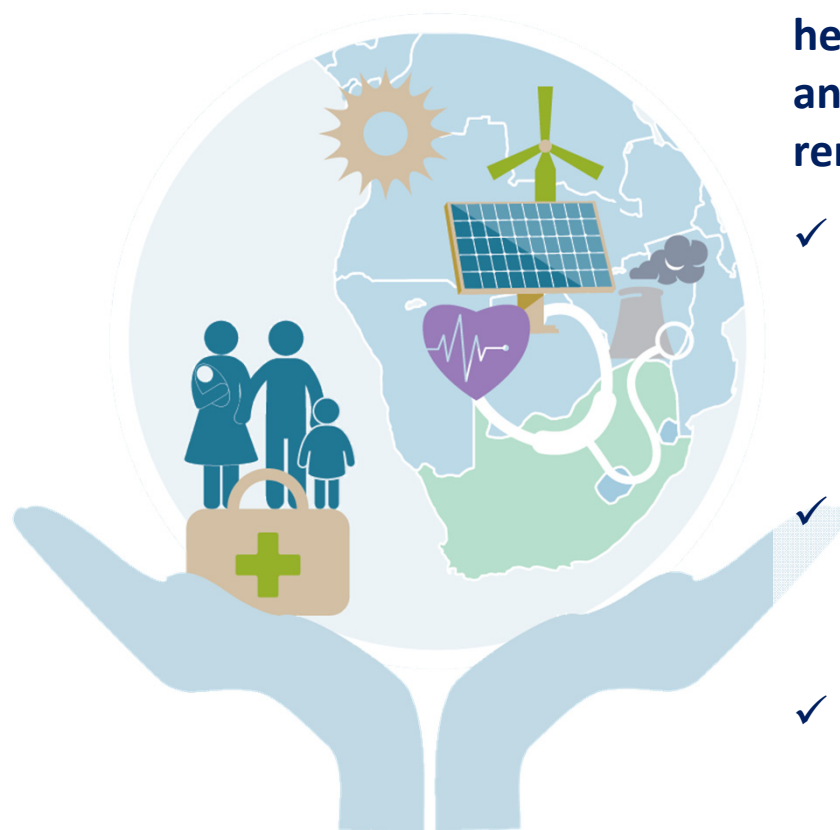


Local prosperity benefits to increase substantially by following DEA's Rapid Decarbonization Pathway

- ✓ Up to **30 000 individuals** in marginalised communities can benefit from **access to education** programmes by 2050.
- ✓ More than **3 000 local enterprises** in marginalised communities can be supported until 2050.
- ✓ Up to **10 000 local jobs** can be created in marginalised communities through socio-economic and enterprise development until 2050.



Improving health and reducing health system costs

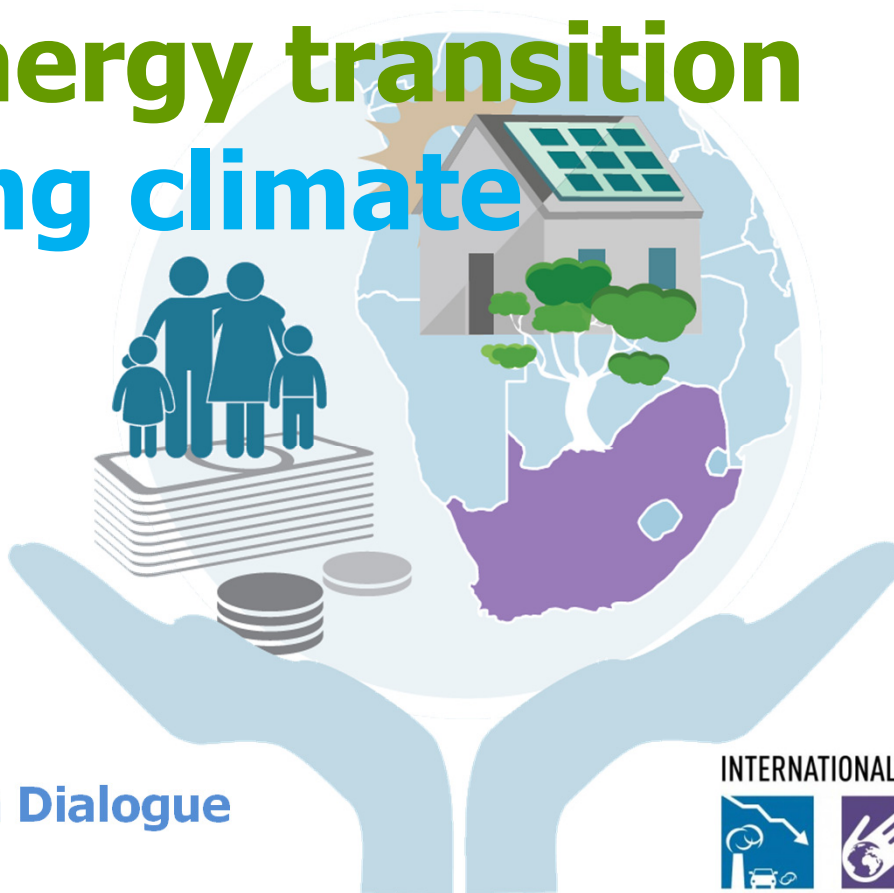


South Africa can significantly cut negative health impacts and related costs for people and businesses by increasing the share of renewable energy

- ✓ With its decision to scale up renewables in South Africa's Integrated Resource Plan (IRP) **health costs associated with the power sector can be cut by 25% by 2050.**
- ✓ Up to **44 million** people are exposed to **air pollution** from coal power plants in South Africa.
- ✓ **Health cost externalities of Eskom's power plants** are estimated in a range from **5-15 Rand cents per kWh.**



How can co-benefits contribute to a just energy transition while raising climate ambitions?



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COBENEFITS Studies in South Africa

Out Now
Data and figures on
the co-benefits of
decarbonising the power
sector in South Africa



> More...

Connecting the social and economic opportunities of renewable energies to climate change mitigation strategies.

www.cobenefits.info



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Online [...]

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