

GREEN R&D

at a glance 2017/18

SOUTH AFRICAN NATIONAL
SURVEY OF RESEARCH AND
EXPERIMENTAL DEVELOPMENT

It is globally acknowledged that green R&D is vital to promote sustainable development and mitigate the risks of climate change.¹ Research and experimental development considered 'green' typically focuses on new or significantly improved products and processes that seek to reduce environmental impacts and better manage resources.² In the context of South Africa and the world's pressing environmental challenges like climate change, the case for investment in green R&D could not be more urgent or compelling.

This Fact Sheet shows that, in 2017/18, public sector investment in green R&D far outweighed investment by businesses and civil society organisations, commanding more than three-quarters of total expenditure. Spending is also on the increase, across all institutional sectors. As South Africa grapples with its energy transition, policy makers from all sectors should, however, be concerned that energy-related green R&D is proportionally low in comparison to domains such as farming or environmental management.

IN THIS FACT SHEET:

- The value of green R&D expenditure in South Africa
- Distribution of green R&D by research type
- Sectoral distribution of green R&D performers
- Green R&D spend by socio-economic objective
- Sources of green R&D funding



¹ OECD. (2019). The integration of green growth in Going for Growth. Paris: Organisation for Economic Co-operation and Development.

² CeSTII. (2018). South African National Survey of Research and Experimental Development, Green R&D at a glance (2015/16). Fact Sheet No. 11. Cape Town: Human Sciences Research Council.

FACT SHEET NO. 32

The **value** of South Africa's **R&D spend** in 2017/18 was **R38.725 billion**.

7.75% was spent on green R&D.



**R38.725
BILLION**

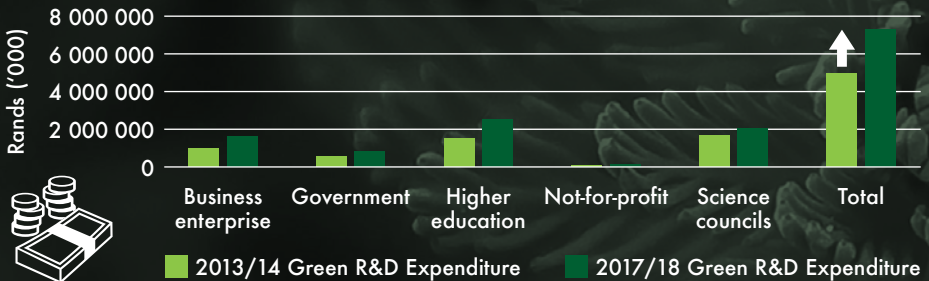


7.75%



South Africa's total green R&D spend **grew** from **R4 982 687** in **2013/14** to **R7 313 540** in **2017/18** – a **15.6% increase** over time.

Green R&D spending also **increased** in **all sectors** from **2013/14** to **2017/18**.



Nearly **two-thirds (65%)** of all green R&D was performed by **higher education institutions** and **science councils**.

Science councils **34%**

Business enterprise **21%**

Government **12%**

Not-for-profit **2%**

Higher education **31%**



Alongside **internal funding**, in 2017/18 **government**, **foreign** and **local business** funding sources were the **largest supporters** of green R&D performers.

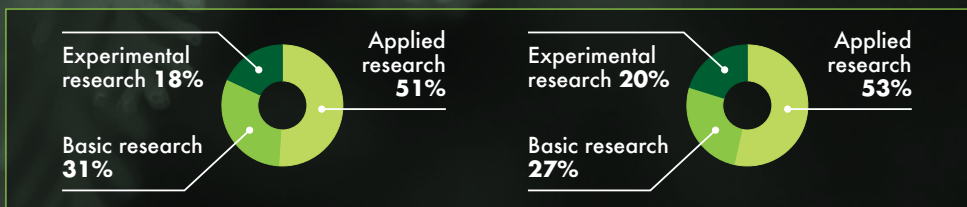


The **benefits** of green R&D investment were **most widely** in the **economic development domain** of **plant production** and **plant products (22%)**.



More than half of all **green R&D spend** in 2017/18 was for **applied research**.

Across **all South African R&D expenditure**, applied research was also **more than half** of the **total spend**.



BEHIND THE NUMBERS

The annual South African National Survey of Research and Experimental Development and Business Innovation Survey are conducted by the Centre for Science, Technology and Innovation Indicators (CeSTII) at the Human Sciences Research Council (HSRC), on behalf of the Department of Science and Innovation (DSI). R&D and innovation statistics are collected in terms of the Statistics Act No. 6 of 1999, and are quality assured by Statistics South Africa (Stats SA). Green R&D data reflected in this publication is based on a methodology developed for South Africa, which uses national R&D survey data as the basis for a thematic extrapolation.

Data collected through the surveys, and their historic data series, help to inform decision-makers on investment planning, policy making, advocacy, and research in South Africa. Data streams also add to benchmarking and performance comparisons with our international counterparts.



Access previous R&D and innovation survey reports:
<http://www.hsrc.ac.za/en/departments/CeSTii/reports-cestii>



This Fact Sheet was produced by CeSTII in May 2021.
Copy editing: Katharine McKenzie
Design and layout: Tracey Watson

CONTACT US

Anele Slater <i>Master's Intern</i>	✉ aslater@hsrc.ac.za
Sibusiso Ziqubu <i>Data Analyst</i>	✉ sziqubu@hsrc.ac.za
Viwe Sigenu <i>Master's Intern</i>	✉ vsigenu@hsrc.ac.za
Dr Kgabo Ramoroka <i>Research Specialist</i>	✉ khramoroka@hsrc.ac.za

CONNECT WITH US

 ENGAGE WITH US ON TWITTER @HSRC_CeSTII  FIND US ON FACEBOOK

 FIND US ON LINKEDIN  SEE US ON INSTAGRAM