SOUTH AFRICAN NATIONAL SURVEY OF RESEARCH AND EXPERIMENTAL DEVELOPMENT

GREEN R&D at a glance **2015/16**



Green R&D* is focused on new or significantly improved products and services that will lead to a reduction in environmental impact and the optimisation of resources that leads to sustainable development.



The potential for employment creation in agriculture, biogas, water treatment, power generation and bio-composites offers tremendous opportunities for social and economic development.



South African industry has a long history of involvement in green trade through motor vehicle equipment manufacture, environment and agricultural research, mining activities and energy generation.

Green R&D includes research and experimental development in areas focused on sustainability of natural resources, environmental impact, animal and plant science, energy research, economic impact, sustainable development, mobility and engineering sciences.

FACT SHEET NO. 11







SINCE 2010/11 THE SIZE AND VALUE OF THE SOUTH AFRICAN GREEN ECONOMY HAS BEEN INCREASING



•==
•==

IN THE 2015/16 R&D SURVEY, INVESTMENT IN GREEN R&D ACTIVITIES ACCOUNTED FOR **R 8.230 BILLION OF GDP**

THE SIZE OF GREEN R&D INVESTMENT, RELATIVE TO GROSS DOMESTIC EXPENDITURE ON R&D (GERD) IN 2015/16 WAS 25.45%

THE PUBLIC SECTOR

(GOVERNMENT, HIGHER EDUCATION AND SCIENCE COUNCILS) ACCOUNT FOR 58.8% OF ALL GREEN R&D

WHILE THE PRIVATE SECTOR

(BUSINESS AND NOT-FOR-PROFIT ORGANISATIONS) PERFORMS 41.2% OF RESEARCH ACTIVITY

THE RATE OF INCREASE IN PRIVATE SECTOR INVESTMENT IN GREEN R&D HAS DEMONSTRATED AN AVERAGE ANNUAL INCREASE OF 36.5%

THE LARGEST SHARE OF GREEN R&D EXPENDITURE IN SA WAS DEVOTED TO

APPLIED SCIENCES AND TECHNOLOGIES (13.0%) AGRICULTURAL SCIENCES (29.2%) THE SOCIAL

AND

2015/16

SCIENCES (33.2%) WITHIN THE PUBLIC SECTOR THE LARGEST SHARE OF GREEN R&D EXPENDITURE WAS DEVOTED TO





GREEN R&D IS PREDOMINANTLY FUNDED BY INTERNAL SOURCES WITHIN THE PRIVATE SECTOR (86.3%);



WHILE IN THE **PUBLIC SECTOR** GREEN R&D ACTIVITIES ARE CHIEFLY FUNDED BY THE GOVERNMENT (84.9%)

THE MAJORITY OF R&D EXPENDITURE IN THE GREEN ECONOMY WAS FOR

APPLIED RESEARCH

(57.2%)

BETWEEN 2014/15 AND 2015/16, ACROSS ALL ECONOMIC SECTORS THERE WAS A 40,4% INCREASE IN GREEN R&D EXPENDITURE ON APPLIED SCIENCES

IN THE 2015/16 R&D SURVEY, A LARGER SHARE OF GREEN R&D EXPENDITURE IN THE PUBLIC SECTOR WAS DEVOTED TO BASIC RESEARCH (34.8%) COMPARED TO THE PRIVATE SECTOR (3.3%) PUBLIC SECTOR (34.8%)

PRIVATE SECTOR (3.3%)

GEOGRAPHICALLY, 60% OF ALL GREEN ECONOMY ACTIVITIES ARE CONDUCTED IN GAUTENG, THE WESTERN CAPE AND KWAZULU-NATAL PROVINCES



BEHIND THE NUMBERS

The annual South African National Survey of Research and Experimental Development is 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 Technology (DST). R&D statistics are collected in terms of the Statistics Act No. 6 of 1999, and are quality assured by Statistics South Africa.

Data collected through the survey, and its historic data series, helps 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 survey reports: http://www.hsrc.ac.za/en/departments/cestii/reports-cestii

This Fact Sheet was produced by CeSTII in May 2018.

CONTACT US

Dr Saahier Parker Sector Lead: Business 021 466 7814 / 082 928 7473 | SParker@hsrc.ac.za

Mr Theodore Sass Researcher 021 466 7872 | TSass@hsrc.ac.za

Natalie Vlotman Sector Lead: Higher Education 021 422 7826 | nvlotman@hsrc.ac.za

Mario Clayford Sector Lead: Government 021 466 7829 | mclayford@hsrc.ac.za

CONNECT WITH US

ENGAGE WITH US ON TWITTER @HSRC_CeSTII

[O]

in FIND US ON LINKEDIN

SEE US ON INSTAGRAM





