

TECHNICAL REPORT

2018 / 2019 Financial Year



The work done by the Technical team has a major impact on the future of our Association. I want to thank everyone who has contributed to our technical projects.

The focus of the technical team is to:

- Monitor international product and industry trends, and undertake research projects that build the case for clay brick.
- Work with marketing team to distribute research to the media, and the construction and property decision-makers
- Distribute technical information to members so they have facts at their fingertips to win over customers.
- Represent our interests with standard setting processes and
- Investigate more cost-effective, more sustainable brick-making technologies

Seven Technical Committee meetings were held during the period under review. 12 project Management meetings were held to report to the funders and partners of the EU Switch Africa Green project. Additional meetings were held with EcoMetrix to discuss carbon tax implications. Nico also serves as an Advisory Board member of the Switch Fund.

Technical committee members during the year:

- Nico Mienie
- Chris Dickinson
- CBA (represented by Executive Director, Mariana Lamont)

I want to thank the team for their commitment, time and financial support. Their dedication provides benefit to us all and guides the entire industry towards improved cost-effectiveness and sustainability.

I especially want to thank the Board and Exco of the CBA for their continued support and trust in the research and work done by all in the committee.

SWITCH AFRICA PROJECT

DATA COLLECTION - BRICK MANUFACTURING STATISTICS

Initial data collection through site visits with formal brickmakers was concluded early in 2019. Data from 40 production sites has been captured. Based on user experience and feedback, the interfaces were refined for ease of use and data accuracy.

For the most part, brickmakers who were approached to participate have done so. Once the benefits of the Sustainability Portal as a tool in measuring and reporting sustainability are proven in practice, we anticipate that brick producers who have not yet provided data will reconsider.

SUSTAINABILITY FACTSHEETS

Ten Sustainability Technical Factsheets have been completed on topics as diverse as rainwater harvesting, fuel alternatives and waste management. Please go to the Sustainability section on the CBA website to download these. The CBA website has an in-depth section on the topic of sustainability, which includes project progress, research findings, news and downloads.

THE SUSTAINABILITY PORTAL

The Sustainability Portal is progressing and template reports for sector level and compliance reporting are completed. Now that actual data has been input, the reporting functions of the Sustainability Portal have been finalised up to site level.

BUILDING AND CONSTRUCTION SECTOR SURVEY

This survey was conducted and a report generated - "Baseline Study amongst SBS Stakeholders". In February 2019, The CBA Boards approved the objectives of the Strategy Paper on the role of the clay brick sector in sustainable building. The next step is to analyse requirements and define a practical action plan.

INFORMAL CLAY BRICK SECTOR SUSTAINABILITY EDUCATION

Initial findings indicate there is virtually no knowledge of sustainable consumption and production (SCP) practices. A common concern is sourcing and paying for fuel which is a major cost. Education on energy-efficient production methods will not only improve resource use and air quality, it could simultaneously benefit the informal brickmakers by reducing costs, so they are keen to participate.

Reaching out to informal clay brick manufacturers, as well as Government at Provincial level has continued, mainly in the Eastern Cape. We are building further on a "ground breaking" meeting with the DEDEAT (Department Economic Development, Environment and Tourism) in the Eastern Cape. We will be producing a written proposal for a Provincial Plan for the informal clay brick producers.

A few clay brick members have expressed their concern that the information being provided to informal brickmakers will only encourage further theft of community resources and stronger unregulated competitors.

We would like to clarify that the emphasis of training in the informal sector is to impart a better understanding of SCP practices, and is not training on brickmaking techniques. The informal clay brick producers have responded positively to visits by the project partners, which bodes well for the success of the project.

I would like to thank all the partners of the Switch Africa Green project, as well as our sponsors for their time and effort over the past year. Your contributions have been greatly appreciated.

ROAD SHOW WITH SWITCH PROJECT

The CBA's national roadshow was presented to members and construction professionals in nine cities across South Africa. We introduced the CBA's Switch Africa Green sustainability project which is co-funded by the European Union and provided facts and figures on sustainability and green building. We also presented upcoming changes to SABS standard 10400XA on energy efficiency and the LCA's findings on the thermal performance of clay brick. Our specialist guest speaker Henk Sa of EcoMetrix, reviewed recent legislation on carbon tax and emissions for the sector.

OTHER INITIATIVES

CBA Technical Director Nico Mienie presented the findings of our LCA and energy efficiency research at **Sustainability Week**, and introduced our EU-funded SWITCH Africa Green programme. The CBA exhibition stand provided a range of literature on the environmental benefits of clay brick.

Dr Smith was in Johannesburg from in November 2018 to present a **short course on ceramics** to our members.

On behalf of the CBA's Switch Africa Green Programme, Lisa Reynolds of Green Building Design Group gave two specialist presentations to the Eastern and Southern Cape chapters of the **S A Institute of Architects (SAIA)**. Topics covered included the sustainability and energy efficiency of clay brick, as well as the impact of proposed changes to SANS with regard to cavity wall construction. This presentation has been accredited by SAIA for CPD points.

Counter staff sales training in the Eastern Cape was attended by 26 people – mostly from hardware outlets and brick distributors.

INDUSTRY STANDARDS & COMMUNICATION

The team presented the LCA findings at one national and one international conference.

CBA Technical committee members are assisting with informative annexes for SANS 10400 – XA. The new standard has a revised climate zone definition and includes affordable housing for the first time. The only exemption is national key points.

The EDGE Tool for Green Building assessment developed by the World Bank makes use of factors for clay bricks drawn from India and China - this is very bad news for our sector. The Technical Team is working to incorporate more accurate figures.

THE YEAR AHEAD

Projects for 2019/20 include:

- SANS 10400XA, rules for Cavity walling
- Greenhouse Gas emissions reporting
- Carbon Tax
- Implementation of EU Switch Africa funded projects
- Review of Thermal Performance study
- Edge Tool results
- Representation on minerals council and new mining charter
- Upgrading various construction, sales training, technical notes and reference manuals to include the latest legislation and clay brick statistics.

Thank you

Nico Mienie

TECHNICAL DIRECTOR

Clay Brick Association of Southern Africa