



THE EXCITING WORLD OF FAECAL SLUDGE RE-USE

Exploring turning poop into gold



8TH JULY 2020 - 8.30 TO 13.00

**9.30-10.10
Animal Feed**

**10.15-10.55
Biomass Fuels**

**11.00-11.40
Compost**

**11.45-12.30
Electricity/Biogas**

Join us on ZOOM

Meeting ID 852 0231 3363

Block 2:

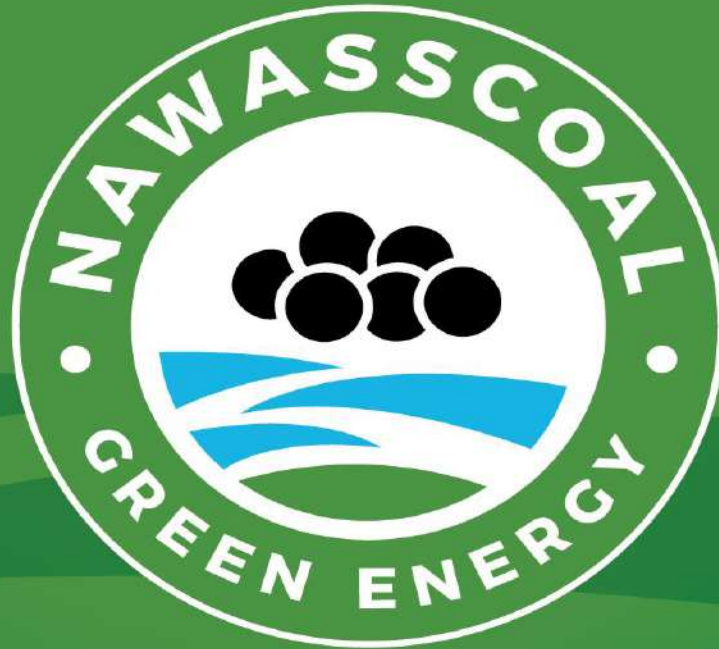
BIOMASS FUELS



Sanivation



Photo credit: NAWASSCOAL



**HUMAN POO TRANSFORMED INTO FUEL FOR
KENYA URBAN POOR**

PRESENTER: JOHN IRUNGU- GENERAL MANAGER

Makaa Dotcom



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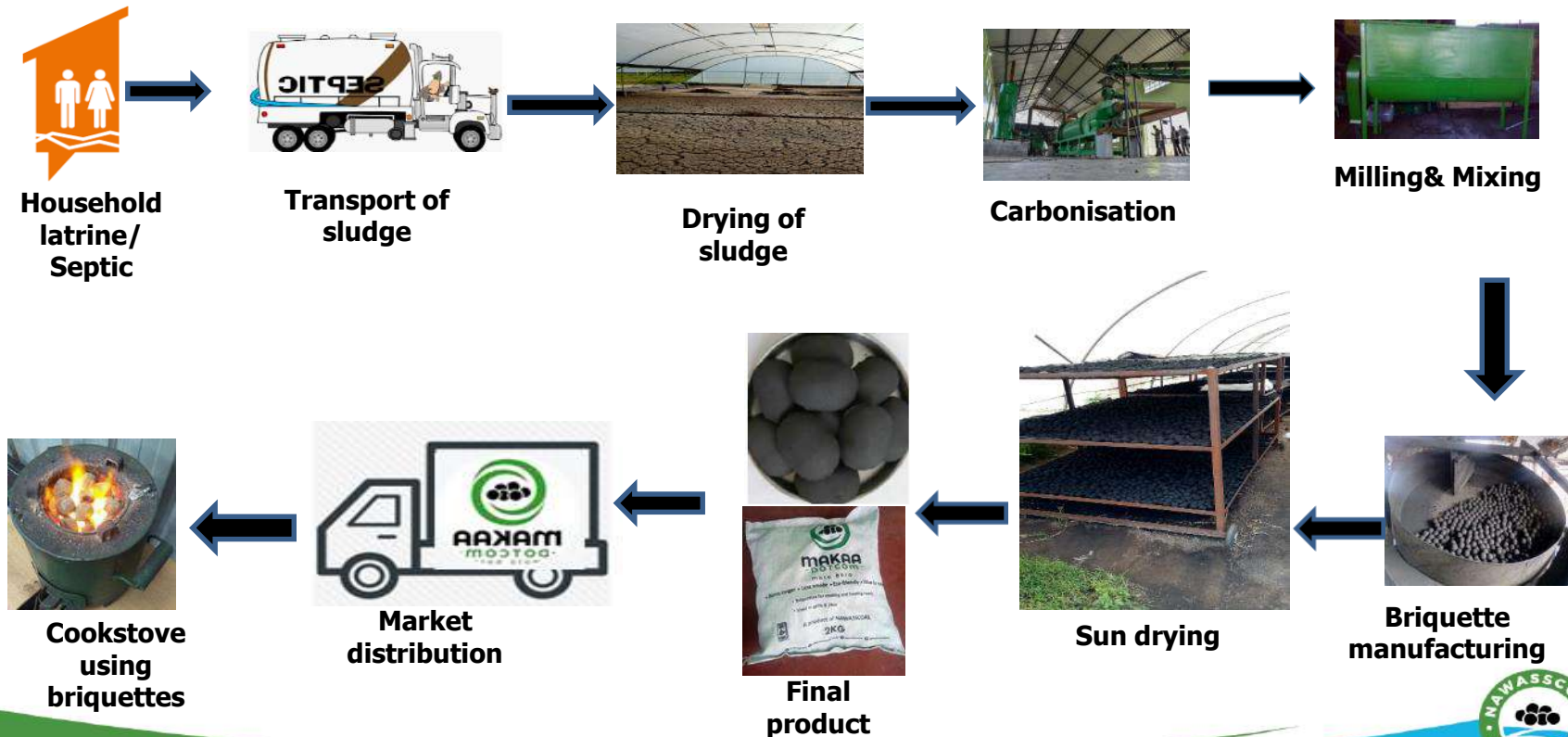
NAWASSCOAL
produces fuel briquettes
(MakaaDotcom) from a
combination of faecal
sludge and sawdust with
molasses as a binder



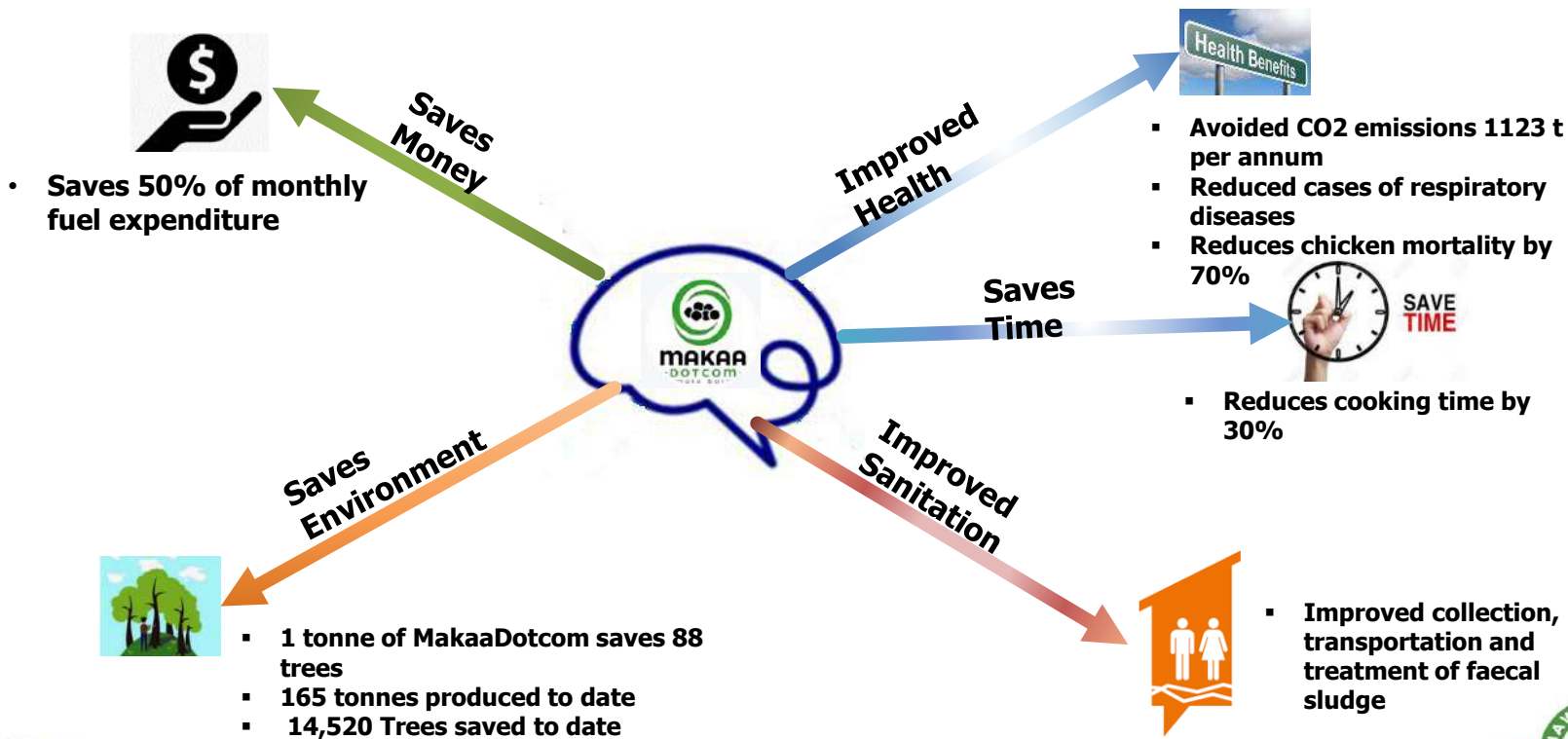
Briquette Production Process



From Household to Household



Our Value Proposition



Why Makaa Dotcom?

SDG 6: Clean water and Sanitation

- Improved sanitation
- Management of fecal sludge

SDG 7: Affordable Clean Energy

- MakaaDotcom is an alternative to charcoal
- Production target - 10 tonnes per day

SDG 8: Decent Work and Economic Activity

- Job Opportunities
- Creating circular economy
- Profits to the company

SDG 9: Industry, Innovation and Infrastructure

- Growth of manufacturing industry
- Contribute in achieving vision 2030



SDG 11: Sustainable cities and Communities

- Make Nakuru Town clean/Green
- Improved livelihoods

SDG 13: Climate Action

- 1 tonne of MakaaDotcom saves 88 trees
- Conservation of Forest/Water catchment Areas

SDG 17: Partnership for the Goals

- Partnership development partners
- Partnerships with County Government

Challenges / Advantages

- High capital investment
 - Inadequate local technologies
 - Lack of standards & Policies for faecal based products in the country
 - Product perception
- Unlimited source of raw material
 - Large market potential
 - Energy challenge solution
 - Saves trees
 - Creation of employment

Where we want to be

- To grow from 15 tons per month to 150 tons per month by 2025
- To enhance alternative energy solutions
- To create more employment for youth and empower women
- To expand and diversify into other faecal based products

Come talk to us!

Find our publications (Popular publication, Scientific Journals, and videos) on our website:

<https://nawasscoal.co.ke/>

Also follow us on Twitter - @MakaaDotcom and Facebook - MakaaDotcom

Email: johnnirungu50@gmail.com



Q & A

BIOMASS FUELS



Potential use of FS char briquettes as a cooking energy in Dar es Salaam, Tanzania



Presented by: Petro Mwamlima
Lecturer

Ardhi University
(School of Environmental
Science and Technology)

❑ Source

Or



❑ Production



❑ Production Cont...



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PATENT OWNED *(Link below)*

- ❑ [http://www.peienterprises.co.tz/uploads/upload/Utility%20Certificate %20Invention%20of%20PSP%20machine.pdf](http://www.peienterprises.co.tz/uploads/upload/Utility%20Certificate%20Invention%20of%20PSP%20machine.pdf)

PUBLICATIONS ON FS CHAR BRIQUETTES *(Links below)*

- ❑ [https://www.eawag.ch/fileadmin/Domain1/Abteilungen/sandec/publikationen/EWM/Treatment Technologies/fs pyrolysis report petro.pdf](https://www.eawag.ch/fileadmin/Domain1/Abteilungen/sandec/publikationen/EWM/Treatment_Technologies/fs_pyrolysis_report_petro.pdf)
- ❑ [https://www.eawag.ch/fileadmin/Domain1/Abteilungen/sandec/publikationen/SWM/Carbonization of Urban Bio-waste/slow pyrolysis manual.pdf](https://www.eawag.ch/fileadmin/Domain1/Abteilungen/sandec/publikationen/SWM/Carbonization_of_Urban_Bio-waste/slow_pyrolysis_manual.pdf)

EXPERIENCE ON THE PROCESS OF STANDARDS DEVELOPMENT ON BRIQUETTES IN TANZANIA

Joseph Emmanuel Ismail

Tanzania Bureau of Standards (TBS)



SANITATION FOR SECONDARY CITIES

Dickson Ochieng
Director Govt Relation, Sanivation
dickson@sanivation.com

July 8th 2020
Re-Use Webinar

OUR VALUE PROPOSITION

Cost-effectively enabling secondary cities in Africa to scale sanitation services



https://youtu.be/5lm_65Rr1eY

QUESTIONS

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Q & A

BIOMASS FUELS



SNV

THANK YOU
FOR
JOINING US!



SNV