

Why Europe Needs Frugal Innovation

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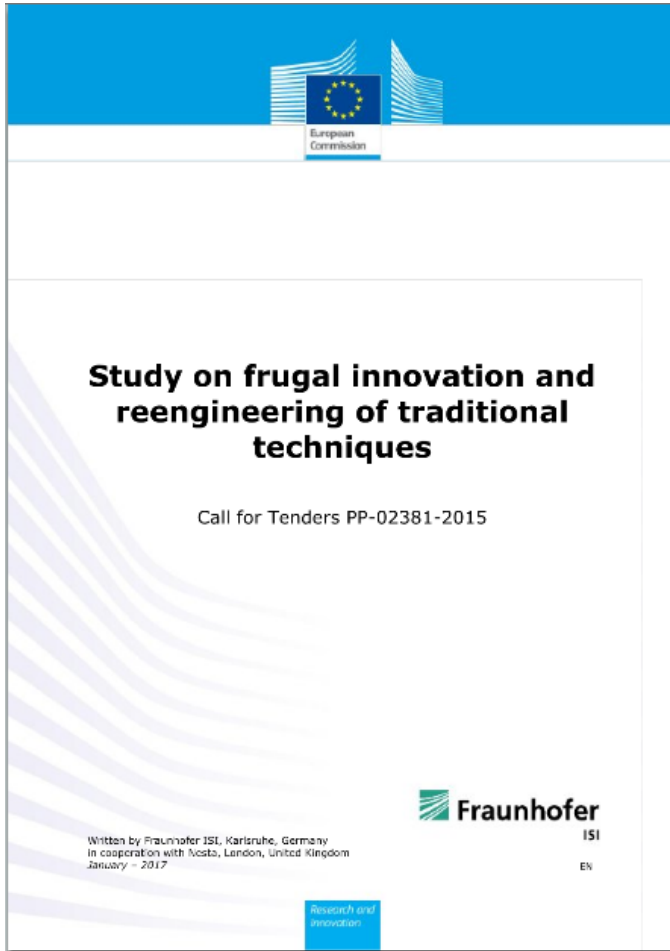


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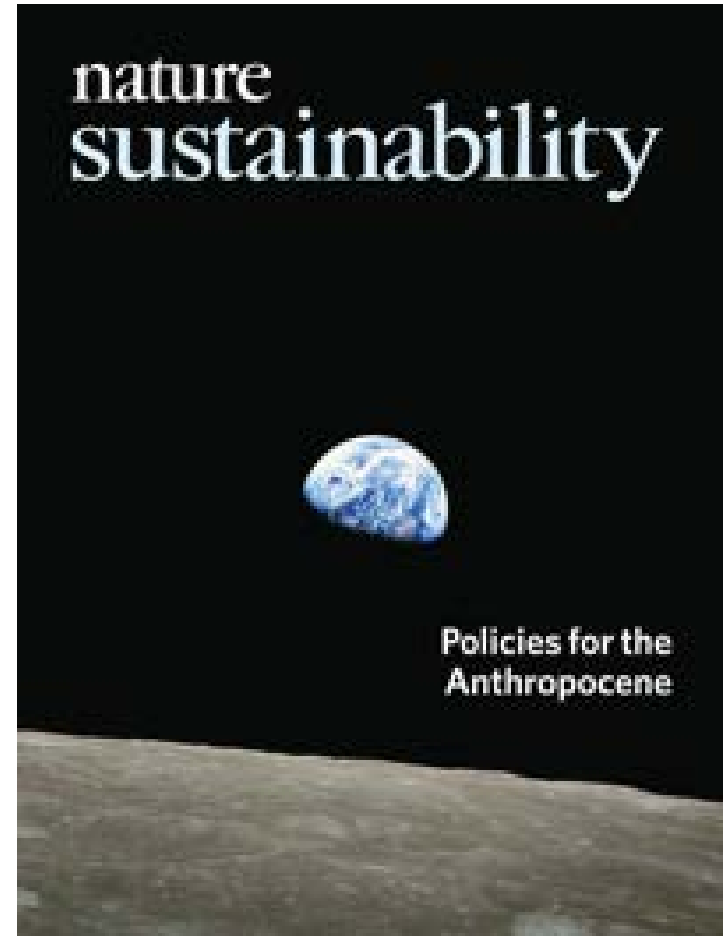




Frugal innovation increasingly ‘on the radar’



Policy debate



Academic Debate

Outline

What is Frugal Innovation and who are Frugal Innovators?

Commercial Frugal Innovations

NGO/ Social enterprise Frugal innovations

Community Frugal Innovations

How to anchor Frugal Innovation in the EU agenda?

FRUGAL



SPARING, THRIFTY



**CAREFUL USE OF RESOURCES
AND INCREASE USE OF RENEWABLE**



SIMPLE AND SMART



4TH INDUSTRIAL REVOLUTION TECHNOLOGIES

FRUGAL INNOVATION



LOW COST AND HIGH FUNCTIONALITY



REDUCE OVER-ENGINEERING



**FOCUS ON LOW INCOME
HOUSEHOLDS**

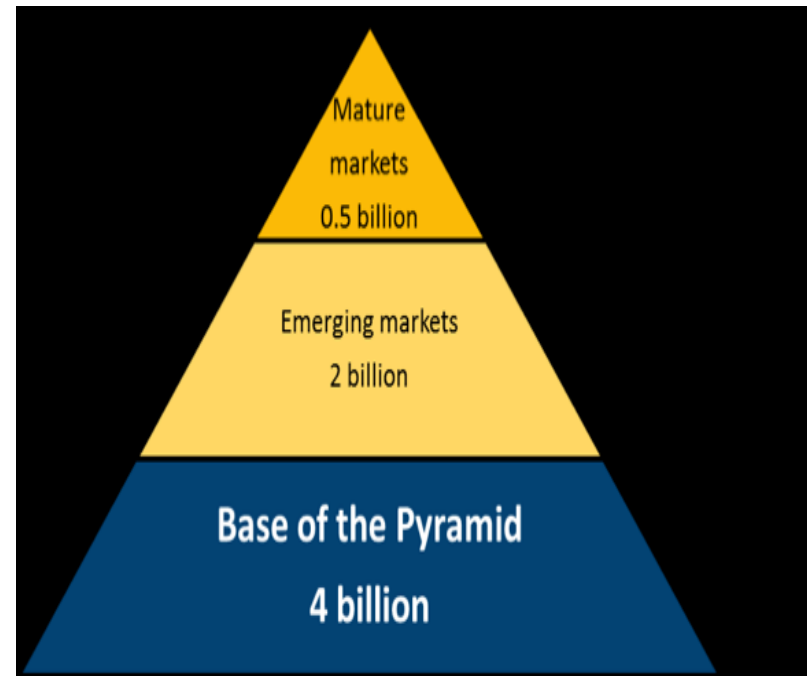
Three types of Frugal innovators

- **Firms** that develop frugal innovations to make profits and penetrate new markets
- **NGOs** and **social enterprises**, with donor funding, develop frugal innovations to address societal challenges
- **Individuals** and **communities** who develop their own frugal innovations to address their own bottlenecks

Commercial Frugal Innovations

Market segmentation: Middle of the Pyramid

- China via the Bottom
- OECD via the Top
- Fight for the Middle:
 - Basic standards
 - No frills
 - Good quality
 - Local 'flavor'



Examples of Frugal Innovations



Example from the Health sector

General Electric, Portable electrocardiogram (ECG)

- Portable ECG for rural areas in India
- Sold at 10% of price for ECG's developed for the US market



EU Policy Example: INNOWIDE

WELCOME TO

INNOWIDE


Viability assessment of collaborative and INNOvative business solutions in WorldWIDE markets


Bringing innovative European SMEs to the forefront of international markets

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2nd VAP call is OPEN

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Missions approach



MISSIONS

Mission-Oriented Research & Innovation in the European Union

A problem-solving approach to fuel innovation-led growth

by Mariana MAZZUCATO

Key criteria:

1. Bold, inspirational with wide societal relevance
2. A clear direction
3. Ambitious but realistic
4. **Cross-disciplinary, cross-sectoral and cross-actor innovation**
5. **Multiple, bottom-up solutions**

NGO/Social enterprise Frugal Innovation:



AFFORDABLE
HIGH-TECH FOR
HUMANITARIAN AID

SOLVE THE CHALLENGE
€ 5 million in prizes

EIC • HORIZON
prize



MAIN REQUIREMENTS

- ✓ **advanced technologies** for a frugal innovation approach
- ✓ developed for **people in collaboration with people**



Community Frugal Innovations: Frugal innovation 'by the people'

Broadening the meaning of 'frugal' in frugal innovation

Where frugal means judicious, industrious, intuitive, adaptive, experiential knowledge based actions

Community Frugal Innovations: Frugal innovation 'by the people'

Motivations behind frugal innovations by 'the people'

- Context specificity
- Social relations

The conventional focus of innovation policies:

- 'Exchange value'
- 'Large scale commercialisation'

Community Frugal Innovations: The evolving policy canvas

UNCTAD:

Appeals to have new
innovation approaches
to implement the SDGs.



Community Frugal Innovations: The evolving policy canvas

**EU's emphasis on:
'inclusive society' and 'science with and for society'**

Community Frugal Innovations: The evolving policy canvas

**The need and scope for rethinking on
the depth and breadth of innovation policy!**

- How to introduce non-economic motivations?
- How to include local actors and knowledge systems?
- How to strengthen the linkages between innovation policies and 'other policies'?

Way forward: How to anchor frugal innovation in the EU agenda?

To what extent can we successfully address grand challenges through integrating more *frugal* solutions into existing policy instruments?

To what extent is re-thinking of desired innovation trajectories needed?

- reduce over-engineering
- involve low-income innovators & citizens

To weave frugality into high-end advanced scientific innovations.

Thank you for
your attention

more info on our centre
www.cfia.nl



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