



21 April 2016

# New Knowledge Field: Green Skills Demand Studies

Eureta Rosenberg, Rhodes  
University Associate

**green skills**  
Building capacity for a sustainable future

---

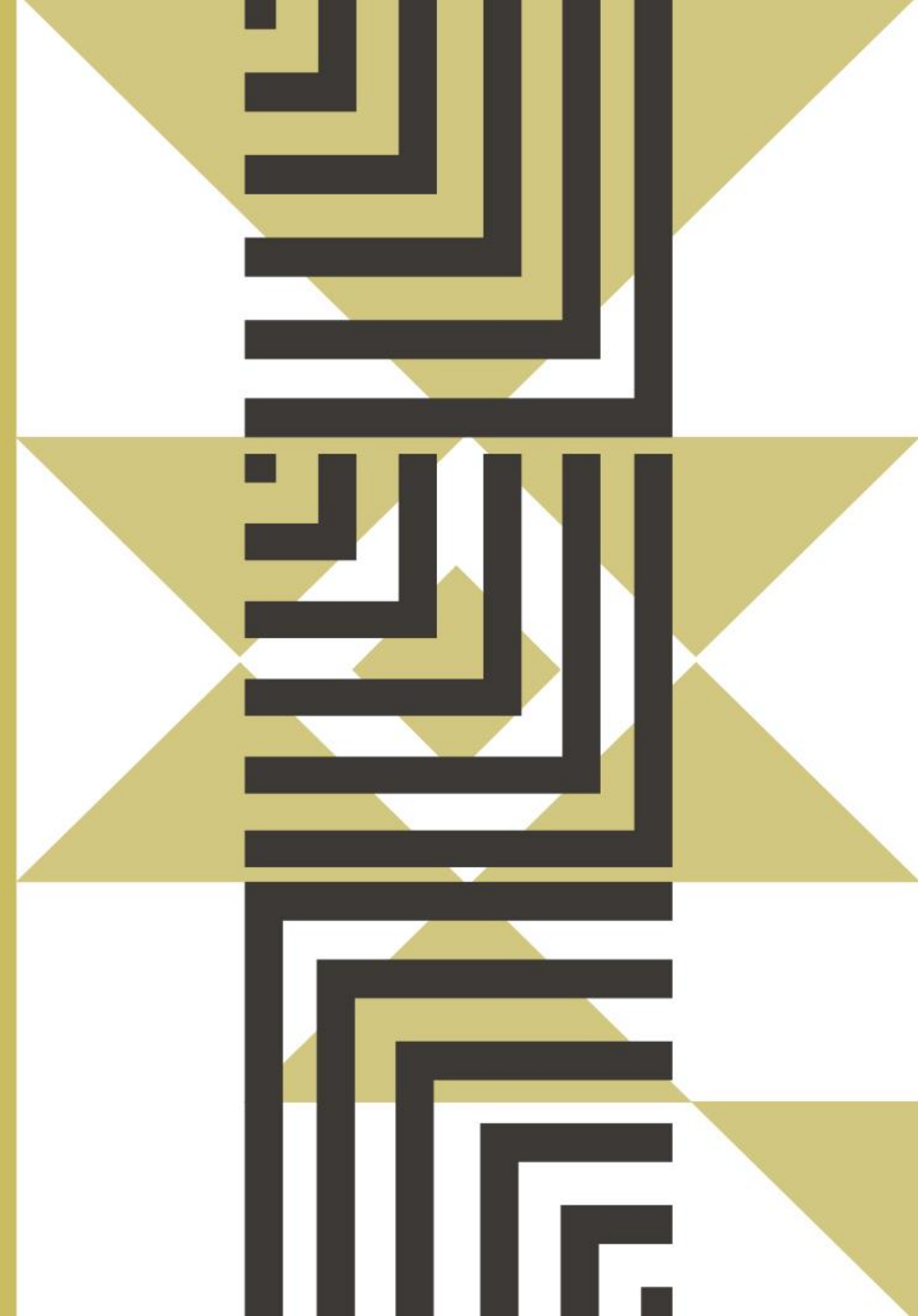
**A Monograph Chapter Reviewing  
Demand Studies through a  
Transformation Lens –**

---

**Working title:**

---

***“Methodological Considerations for  
Researching the Demand for Green  
Work Skills”***



# Case Studies

1. Water Skills Gap study (Vienings, Water Concepts)
2. Biodiversity Jobs Study (Mukhedi, SANBI)
3. *Biodiversity Human Capital Development Strategy* research (Vass et al, HSRC) and *Environmental Sector Skills Plan* research (Lotz-Sisitka, Ramsarup, Mosidi et al, Rhodes and DEA)
4. Sector studies on Chemicals: Paints (Jenkin & Molebatsi, with CHIETA) and Coal (Rosenberg, Ramsarup, Togo & Mphinyane, with MQA)
5. *Framework for the Annual Report on Supply and Demand* (NESPF input to DHET)

# 1. Demand studies are undertaken with transformative intent

- Surfacing more jobs nationally and in sectors
- Transformation of the skills body in organisations
- Changing 'business as usual' practice in industries

## 2. Demand for green skills can be ...

- Hidden
- Everywhere
- Multi-faceted ('shades of green')
- Dynamic ('moving target')
- Hard to report into the national system (codes & counts)
- Deeply transformative of practice

### 3. Transformative methodology is emerging:

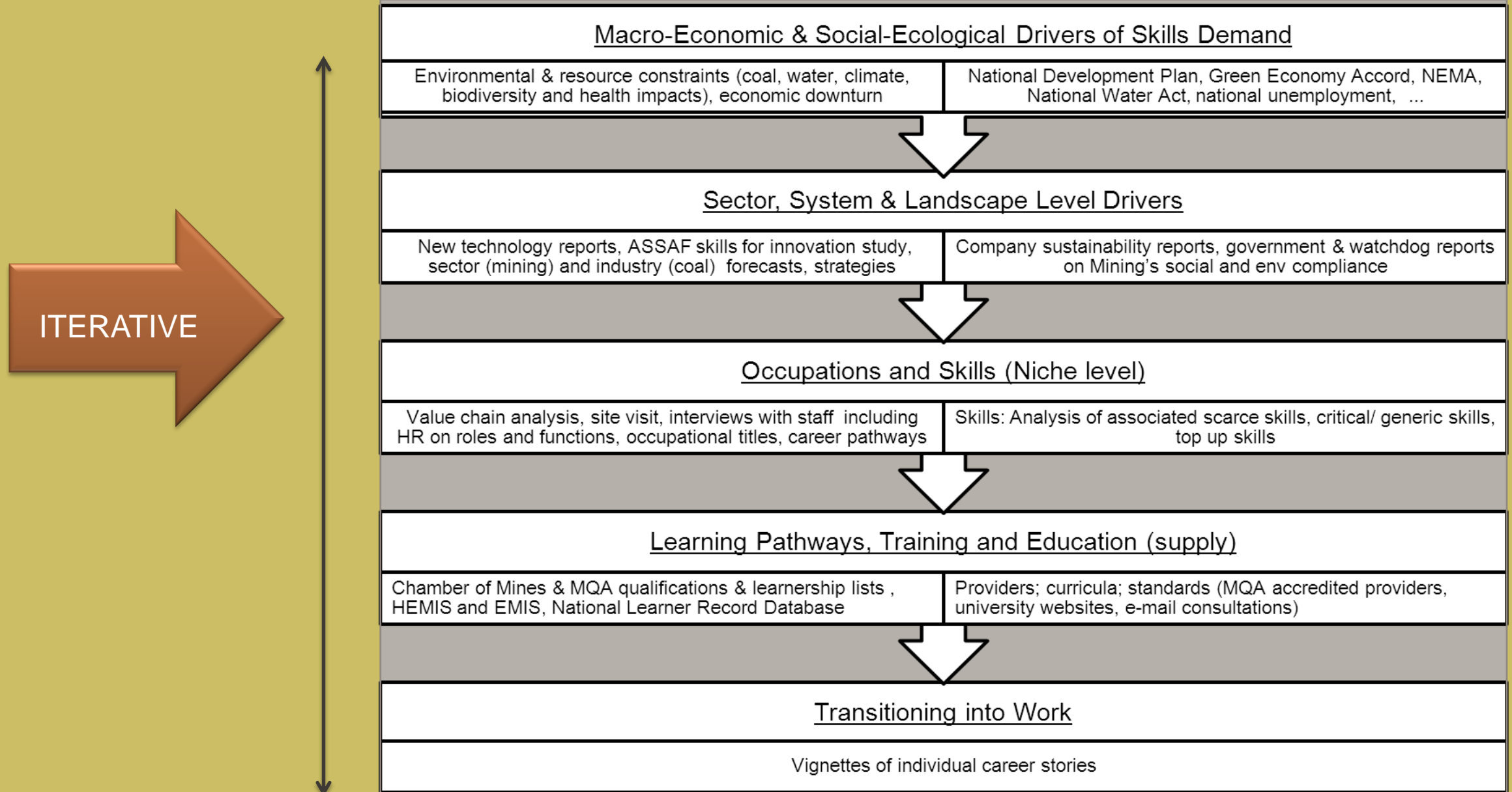
- Broadening skills ecosystems to find drivers of demand in economy, state *and civil society*
- Multi-levelled and iterative frameworks of analysis

# Concluding that

Green skills demand studies risk being reproductive of the status quo. To achieve the potential and purpose of being transformative:

- 1. Methodology must shift** : Tools, constructs and scope need to shift from a narrow economic framing to a broader social and environmental relational (ethical) framing,
- 2. National systems must accommodate** green work in capturing and coding it, and
- 3. Research must be done in partnerships** *with* intended users such that the ground is prepared for the take up of findings by workplace / national / sectoral green economy and skills planning communities.

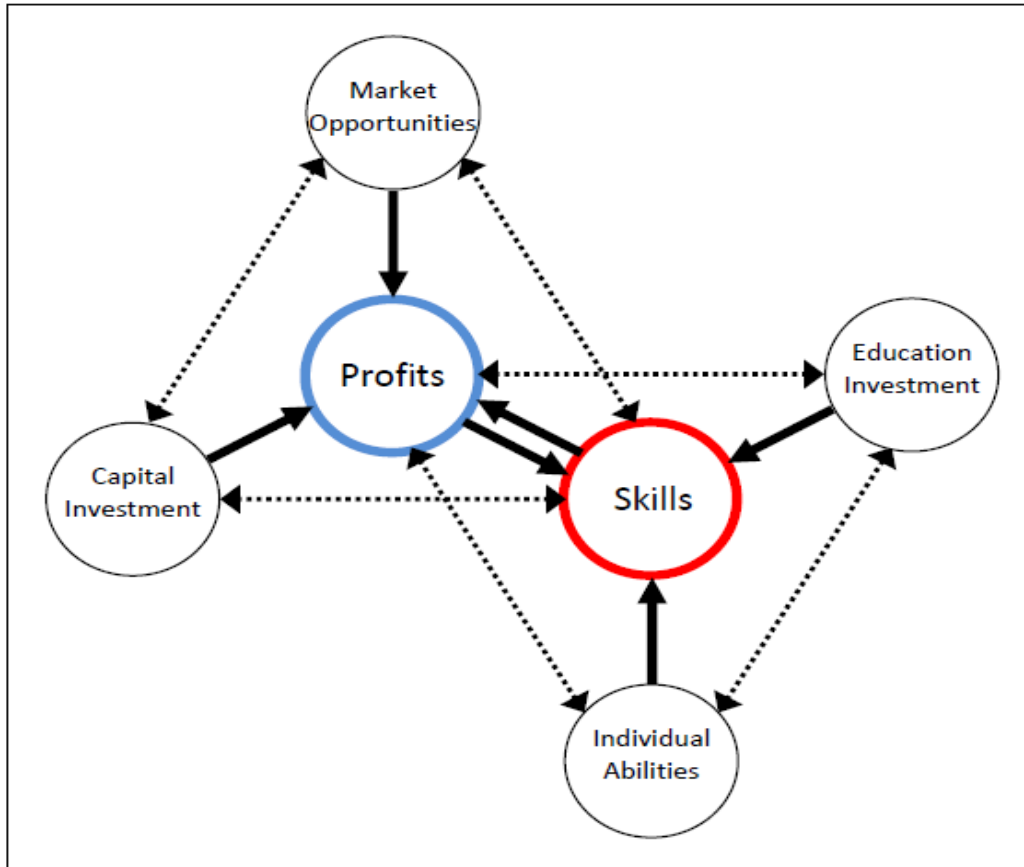
# A Multi-Level Framework for Analysis





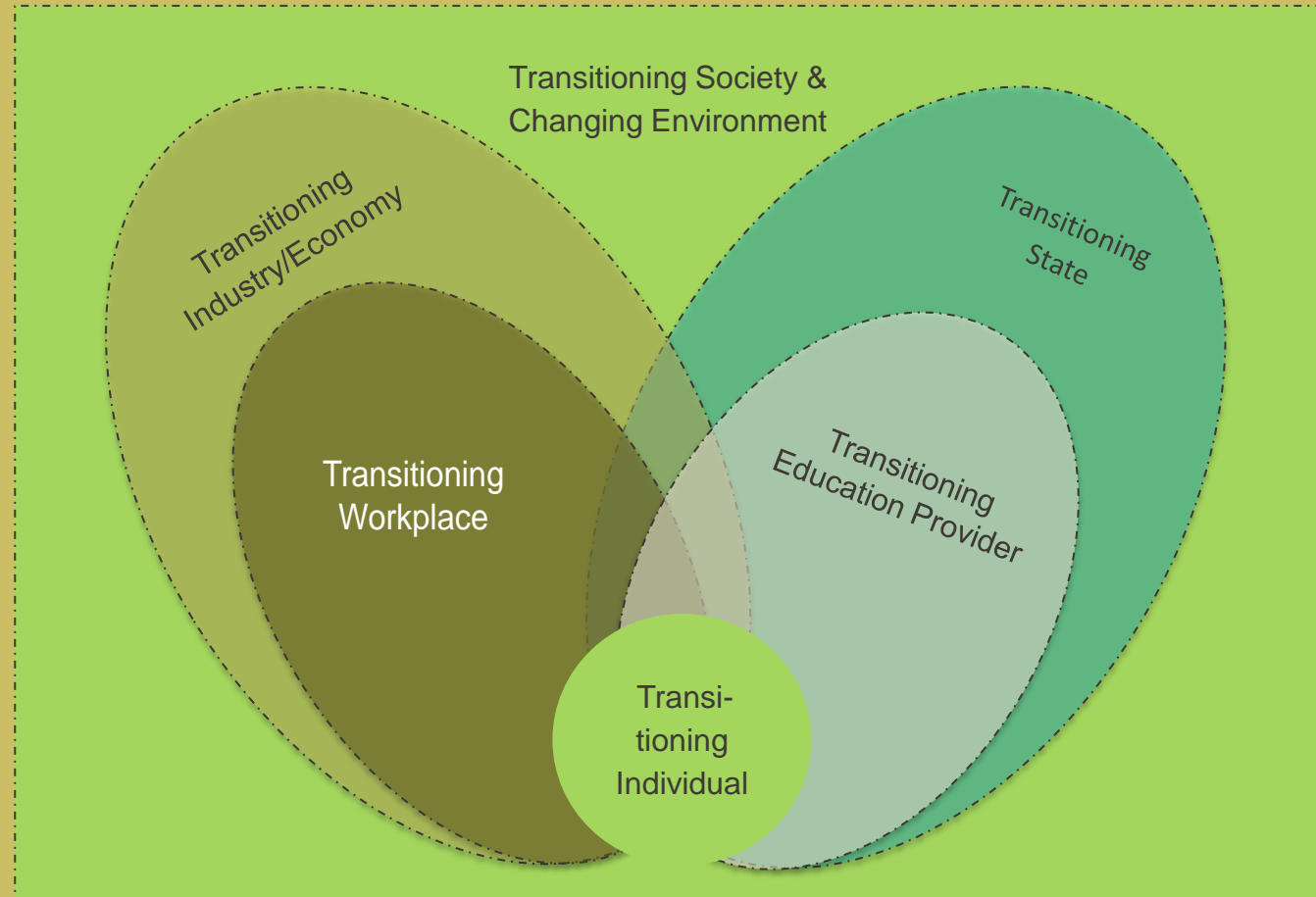
# A narrower skills ecosystem:

Figure 3: A model of a skill ecosystem

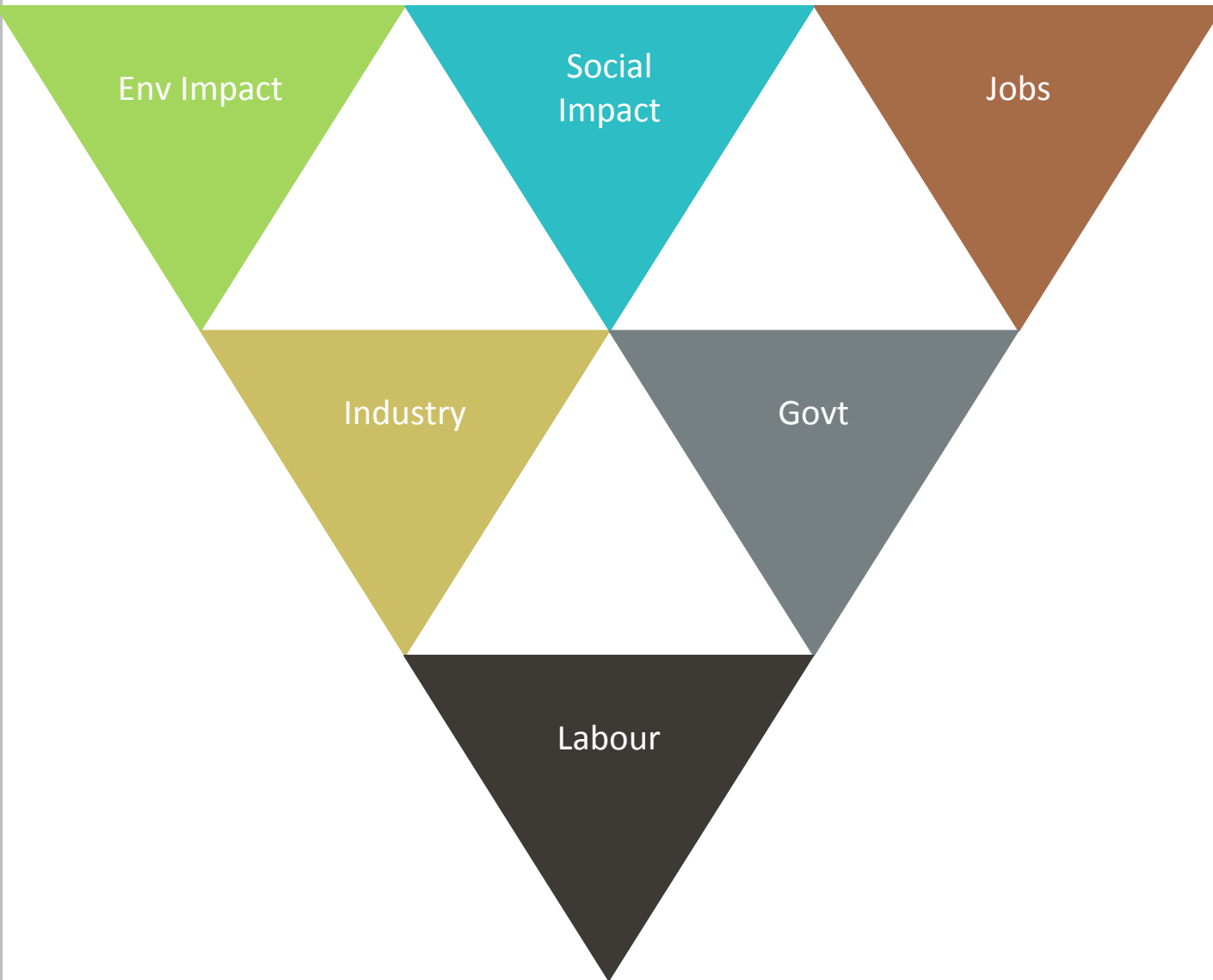


Source: Dalziel (2012, Figure 19, p. 38) reproduced from Miranda *et al.* (2011, p. 68).

# Broader skills ecosystem with drivers of demand for green skills:



# Demand Can Also Be 'Hidden'



- Env Impact**
  - R&D for new 'clean coal' technology
  - Remediation of extensive existing damage
  - Regulation is a weak link in the chain
- Social Impact**
  - Health benefits of remediating mined areas
  - Social benefits of jobs where mines close
  - Integration with IDP as per Mine Charter
- Jobs**
  - Remediation of extensive existing damage (6000+ D&O mines)
  - Jobs for new 'green graduates'
- Industry**
  - Industry needs revitalisation, new answers
  - Has been called to introduce clean, water-sensitive technology – points to R&D
- Govt**
  - Conflicting mandate in DMR – need to support 'green graduates' tasked with enforcing this under great pressure**
- Labour**
  - Advocacy to better involve Labour (NUM Naledi study on Climate Change & Mining)