# Strengthening Demand-Driven Informed Research: Some Insights

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## **Strengthening Demand-Driven Informed Research:**

Skills development, informed by demand-led research, is central to ensuring that the just transition creates meaningful work, supports equity, and strengthens resilience in our economy and society.

Demand-driven research grounds skills development and skills utilisations in the real needs of industries, and communities, we can create pathways that are relevant, inclusive, and impactful.

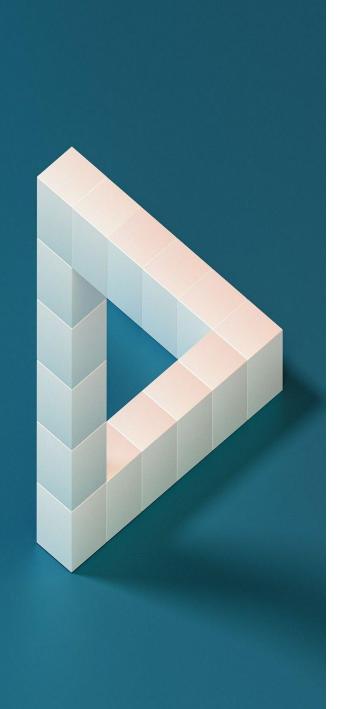
While the concept of a demand-led skilling is logical and appealing, its practical implementation is complex and requires multi-levels of data and interventions

– especially when our purpose is educational decision making...









## The Challenge of Demand-led in the Context of Uncertainty \_\_\_\_

- Demand for skills is both urgent and uncertain. While the economy signals a need for specific skills, several factors make it difficult to respond effectively:
  - Uncertain Futures: Demand projections are fluid and often unreliable.
     Modelling struggles to keep pace with rapid industrial and technological change.
  - Planning Gaps: Demand—supply systems and forecasting tools frequently fall short, overlooking regional contexts and equity dimensions.
  - Policy Lag: Even when demand is identified, translation into responsive training and implementation is slow or misaligned with real labour market needs.
- The paradox of demand is a structural challenge. It's not about a lack of information, but about how research, planning, and policy interact (or fail to) to meet evolving skills needs. Recognizing this paradox is essential to making research practical, actionable, and demand-responsive.

## Demand led ...unpacking the complexity

#### Demand led skills formation

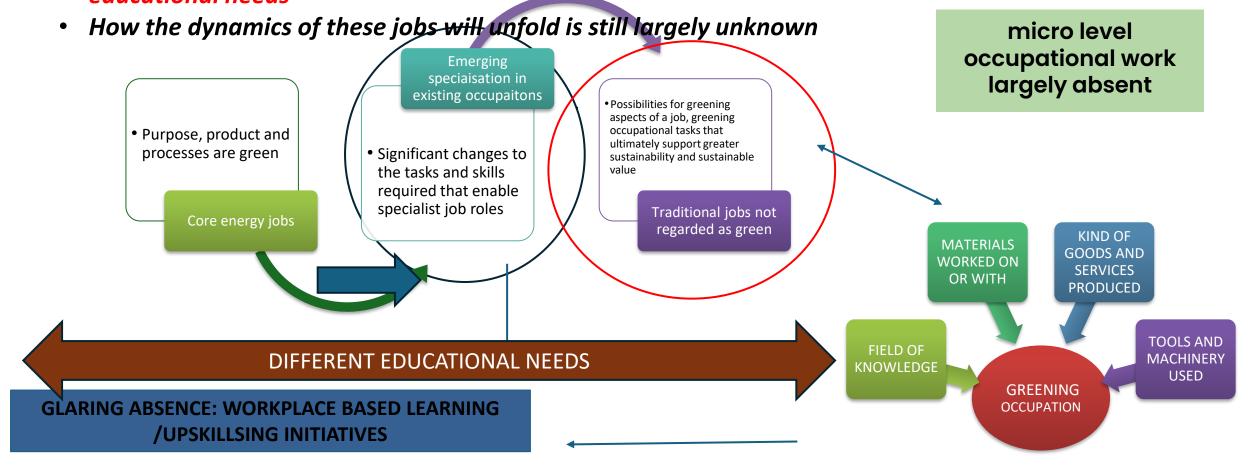
- Require nuanced occupational information, we cannot do skills planning from vague aggregate level demand information (NOT if our purpose is educational planning)
- What demand info are we planning from Current value chains, current modes of production and consumption, usefulness to understand future skills for a greener economy is contested
- Technology driven demand planning is premised on the homogenous treatment of production processes
  - Assumption that localised technical processes occurs on the same technological trajectory as in North
- Current Demand information focused on formal sectors, levy paying institutions, formal jobs hence large numbers of climate adaptation workers remain 'invisible' to the economic and skills systems





## Demand led learning pathways...unpacking the complexity

- Current Demand data tendency to homogenise GJ
  - Tendency to see green jobs as a 'one size fits all' encompassing notion hence they have different educational needs



## Demand led ...unpacking the complexity

- Although valuable for many things there are numerous challenges with data gathered from employers:
  - Move from job to occupation mapping problematic for employers
  - Employers tend to specify their current skills needs, but this data is used for planning immediate and medium to long term interventions. Conflation of time horizons - immediate skills needs and medium to long term skills planning In other words—the system is using the wrong data for the wrong decision points.
- Medium to long term planning **planning for trajectories of change** slow, long-term process (direction and speed of the change). You cannot get this information from labor force data, not from employers, but from in-depth studies of transitioning sectors of occupational streams, and from high-level consultation with employers, understanding how workers will transition.
  - Eg. GreenSkills book examples from sectors





## Turns out it's not so simple....

Gaps in Occupational Data

Employment numbers and labour demand not broken down to the level of occupations, or just isn't available Gaps/Uncertainties in Economic Data

Some energy sectors
have investment
uncertainty, e.g.
Electric vehicles, green
hydrogen

**Gaps in Established Methodology** 

Not many 'REAL'
examples of HOW to
do
Demand analysis for
iobs ir ansition

Sectors, occupations, and skills in transition – numbers of jobs are uncertain and exactly WHERE these jobs are is uncertain

Data is fragmented and lacks detail

The status of some energy projects is unknown

forms of demand Conflation of time horizons in data

## Making Demand-Driven Research Work

The paradox of demand reveals the limits of prediction and underscores the importance of using demand wisely by combining multiple lenses to guide responsive action. This includes:

- Going Beyond the Numbers: Economic modelling provides a foundation, but it must be complemented with lived realities and sector insights.
- **Engaging the Ecosystem:** Demand gains meaning when shaped through dialogue with employers, workers, training institutions, and communities.
- Co-creating Understanding: Combining data, stakeholder engagement, and community voice builds a richer, more grounded picture of demand.
- Moving from Insight to Action: Integrating these perspectives helps align research, policy, and training ensuring skills strategies truly respond to need.





Systematic analysis of the different pieces of the system that are needed to support both the demand for skills and the development and utilization of skills.

ITERATIVE METHODOLOGY TO BUILD SYSTEMS

Macro-Economic & Social-Ecological Drivers of Demand

- Policy; regulatory frameworks (national and international)
- Economic trends and conditions, enablers and constraints
- Environmental risks and cultural-historical trends

Sector, System & Landscape Level (Meso Level)

- Regional development plans, industry strategy, incentives
- New technology, regulatory frameworks, forecasting

Occupations and Skills - Workplace Focus (Micro Level)

- Value chain analysis and prioritization spots
- Occupations, functions, tasks, skill needs for new green jobs, greening existing jobs

Skills Supply : Training and Education Focus

- Qualifications, learning pathways, articulation, standards
- Provides, curricular, learning data and trends

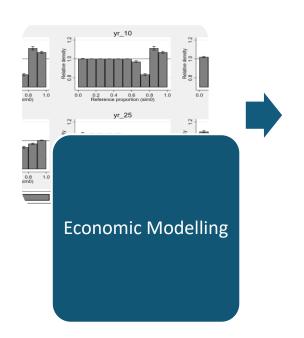
Transitioning into Work

- Tracer studies, individual study & career case studies
- Internships, skills programmes, work-based learning

Need a more substantive approach methodology that enables a clear view of multi-level/ multistakeholder skill development dynamics - connect macro and micro data – study them as analytically separate but systemically whole acknowledging that they represent different layers of empirical reality



### **Demand led – Research Process**







#### **Occupational Narratives:**

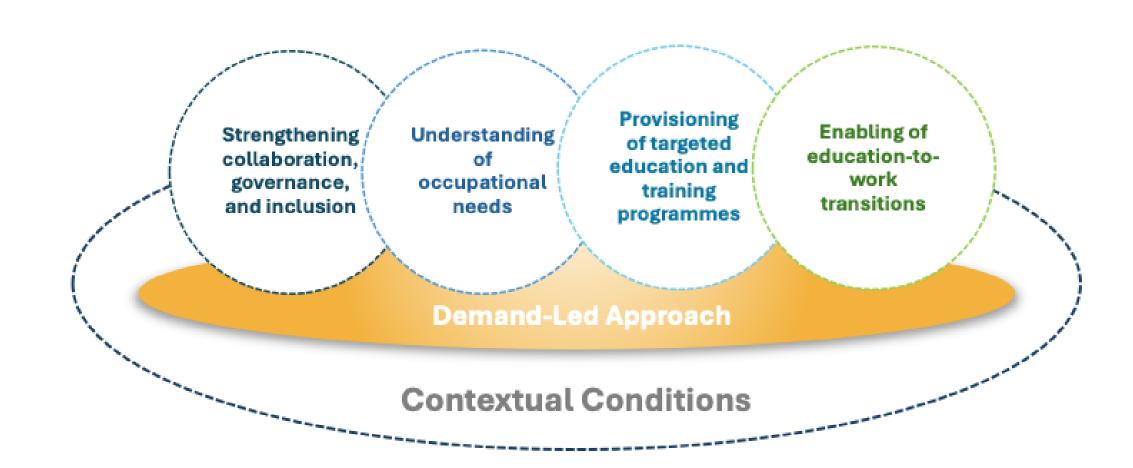
- the political economy of the transitioning occupation, which is the contextual profiling of the occupations;
- the scope and change in occupational task;
- the field of knowledge required;
- the materials, tools, and machinery;
- the goods and services produced;
- the status of occupations (core, non-core, peripheral)

Strengthening Skills for a Just ransition: Recommendations to Support Collaboration

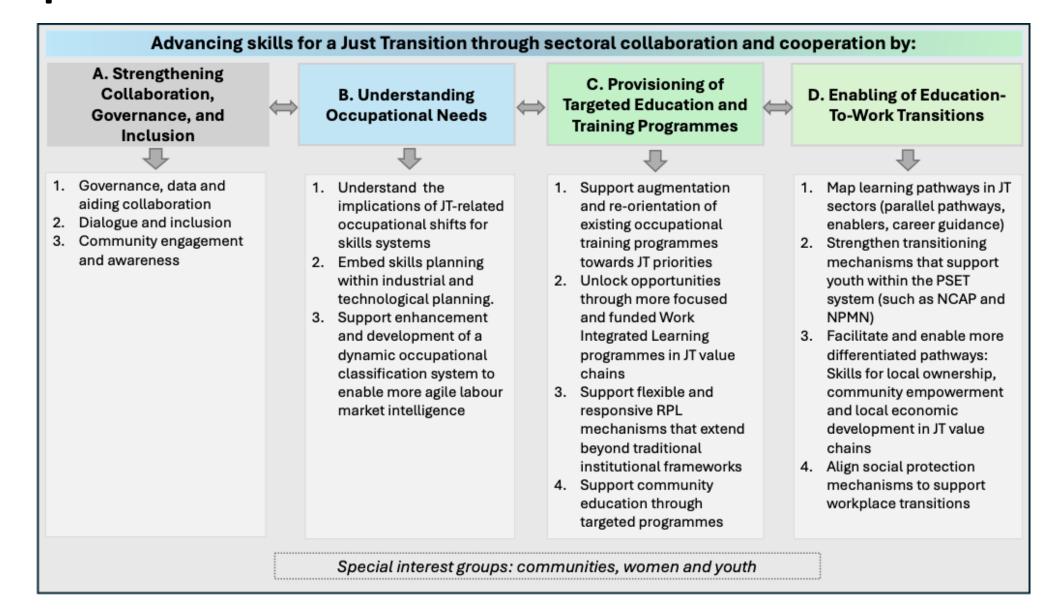


Just Transition
Recommendations
for Collaboration

# Approach to understanding the just transition skills system collaboration interventions: collective action priority areas

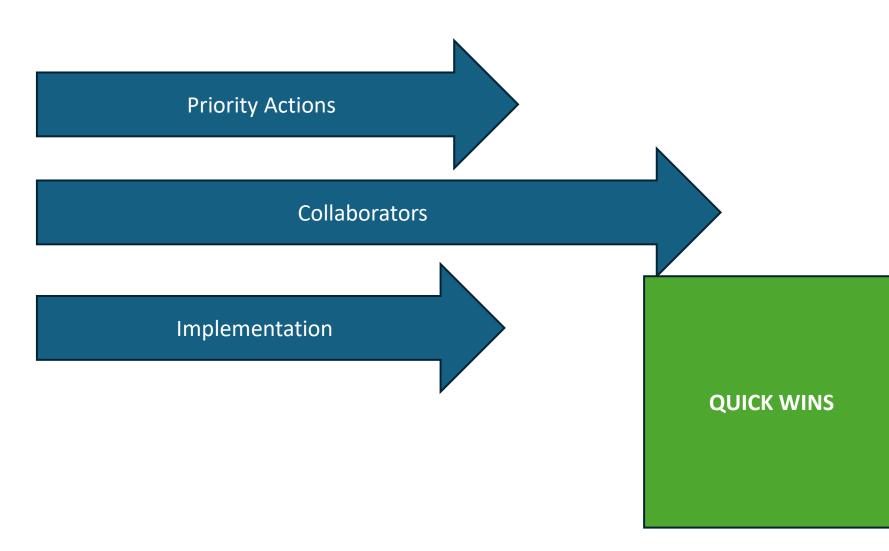


# Strategic Action Areas for Collaboration on Skills Development for a Just Transition



### Recommendations:





## Quick Win Options

Pillar	Quick Win	Lead Partner	Supporting Partners and Roles	Existing Initiatives/policy
	Map emerging/at-risk occupations	PCC	DHET (skills policy alignment), Municipalities (local data inputs),	Labour Market Analysis at sectoral level and in SETAs
			SETAs (labour market data)	
	Support integration of JT and related skills into	DHET	DFFE (climate policy), DMRE (energy policy), PCC (oversight and	Climate Change Bill, Energy Policy
	government initiatives		coherence)	
	Support PSETA to develop curricula and train	PSETA	NSG (civil service training), DHET (curricula approval)	JT Curricula, Policy Training
	government departments			
	Co-host JT task teams for key sectors	Industry	SETAs (skills planning), Unions (labour voice), PCC (coordination)	IDC working groups, SAREM, EV Roadmap, Green Hydrogen
		Associations		Commercialisation Strategy
	Fast-track solar-specific skills programmes, construction	DEE	IPPs (demand), SETAs (programme design), DHET (qualification	REIPPPP Skills Programmes, SEZ programmes, Coal Worker
	jobs and reskilling pathways		pathways), Unions (worker transition)	Transition Pilots
	Sector-level social dialogue for new value chains	PCC	Unions (worker protection), Industry (implementation), SMEs	SAREM, EV Roadmap
			(localisation), Green Matter and Green Cape (Mediation)	
Coordination and	Coordination mechanisms (linking funding streams and	PCC	UIF (funding), EPWP (placement funding), SETAs (training funds),	SA Youth, NPMN
Funding	partnerships)		NSF (alignment)	
	Define JT-specific allocation criteria	National	SETAs (grant rules), PCC (criteria development), DHET	SETA Funding Windows
		Treasury	(implementation)	
	Mainstream green career pathways	DHET	ESSA (job-matching), SA Youth (platform access), PCC (oversight)	Power Up, ESSA Portal
		PCC	( ,, ,,	New initiative
	Create RPL validation centres in coal regions	QCTO	TVETs (implementation), Municipalities (facilities, outreach)	RPL Pilots
Capacity Building	Educator and trainer capacity for JT curricula (CET,	DHET	TVETs/HEIs (rollout), Industry (internships), CETs (community	Lecturer Development Programme
	TVET, HEI)		outreach)	
	S (	DBE	, , , , , , , , , , , , , , , , , , , ,	FUNDISA for Change
Community	1	PCC	,, , , , , , , , , , , , , , , , , , , ,	JT Public Portal
	Expand/mobilise EPWP/CWP climate adaptation and	DPWI	Municipalities (deployment), NGOs (training support)	EPWP/CWP Climate Jobs
	care jobs			
	MSME incubation linked to TVET hubs and funding	TVET Colleges	Incubators (training), PCC (oversight), NT (funding support)	Nkangala/RES4Africa Models
	platforms			

## **THANK YOU**

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