

# The National Cleantech Innovation Challenge: KWAZULU-NATAL

# **Clean Port Logistics Challenge**

## **General Terminology**

**Cleantech:** Technologies that improve environmental sustainability while supporting economic growth for example, renewable energy, waste-to-resource systems, and low-emission transport.

**Circular Economy:** A system where resources are reused, recycled, or repurposed instead of being discarded.

**Industrial Symbiosis:** When one company's waste or by-product becomes another company's raw material.

**Low-Emission Logistics:** Freight and port operations powered by renewable energy, electric or hybrid vehicles, and digital route optimisation tools.

**Microgrid:** A small, localised power grid that can operate independently from the national grid using renewable sources such as solar plus battery storage.

## **FAQs for Local Communities and Residents**

#### Q1. What is the Clean Port Logistics Challenge about?

It's a provincial innovation challenge that supports solutions to reduce pollution, congestion, and waste in KwaZulu-Natal's ports and logistics systems. It encourages new technologies and small business ideas that make transport, energy, and manufacturing cleaner and more efficient.

#### Q2. How will this benefit local communities?

The challenge will create opportunities for jobs, skills training, and small enterprise development, particularly for youth and women in port-adjacent areas like Durban South Basin, uMlazi, and Richards Bay. Cleaner logistics also means improved air quality and a healthier environment.

#### Q3. Can individuals or small groups apply even if they don't have a company?

Yes, individuals, cooperatives, or research teams with innovative prototypes or ideas that can be developed into commercial projects are welcome to apply. Support will be available through local incubators such as Start-Up Culture and Innovate Durban.

#### Q4. How long will selected projects run?

Pilot projects are expected to run for 6–18 months, with opportunities for scaling if they prove successful.



## **FAQs for Entrepreneurs and Innovators**

#### Q1. What stage of development should my solution be in?

Solutions should be between TRL 5–8, meaning you already have a working prototype, a validated concept, or a near-commercial solution ready for piloting.

#### Q2. What kind of solutions are you looking for?

We're looking for practical innovations in clean logistics, port decarbonisation, renewable microgrids, circular manufacturing, or digital technologies that optimise routes, energy use, or waste systems.

#### Q3. Will funding or technical support be available?

Yes. Selected innovators will receive grant funding, mentorship, technical validation support, and pilot opportunities with municipal and industry partners.

#### Q4. Do I need to be based in KwaZulu-Natal?

Preference is given to local applicants, but innovators from other provinces may apply if their technology or service can be piloted or scaled within KwaZulu-Natal.

#### Q5. Can I apply as a student or researcher?

Yes, university and TVET students can apply, provided they have a defined innovation or prototype and a plan for development or testing.

#### **FAQs for Businesses and Industry Partners**

#### Q1. How can my company participate?

Companies can host pilot projects, provide technical mentorship, or co-invest in innovations that align with their sustainability and logistics goals.

## Q2. What are the benefits for established companies?

Participation improves sustainability performance, enables early access to innovative technologies, and strengthens compliance with national green transition and emission-reduction targets.

#### Q3. Are there collaboration opportunities with ports or manufacturers?

Yes, potential key partners include Transnet National Ports Authority, Toyota SA, Sappi, Mondi, and the eThekwini Municipality. Businesses may collaborate directly or through innovation clusters facilitated by Start-Up Culture.

#### Q4. Will intellectual property (IP) remain with the innovator?

For inquiries or application support, email <u>info@startupculture.co.za</u> or visit <u>www.asher-group.co.za</u>



Yes. Innovators retain IP ownership unless they choose to enter into a shared agreement with partners for commercialisation or scaling.

#### Q5. Who will monitor the success of the challenge?

Monitoring will be done jointly by the Technology Innovation Agency (TIA), Network for Global Innovation (NGIN), and local implementing partners. Key indicators include emission reductions, waste diversion, job creation, and enterprise growth.

# Who Can Apply: Eligibility

Applicants must be South African citizens or entities registered in South Africa. Eligible participants include start-ups, SMEs, research institutions, and innovators at **TRL 5–8** (prototype to pre-commercial). Applicants must be able to demonstrate technological feasibility, a clear value proposition, and capacity to pilot within the KwaZulu-Natal port or industrial ecosystem. Preference will be given to innovations promoting gender inclusion, youth participation, and local skills development.