



People & Green Engineering:

*Taking Stakeholders
along on the Green Path*

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“Kigali the cleanest city or Kigali the greenest city.”

“coming together to achieve a common purpose”.



Last Saturday of every month, 8:00 A.M to 11:00 A.M, people across the country commit time to projects aimed at improving the country's public spaces



If you want to
go fast, go
alone...

If you want to
go far, go
together

Karoo project...

The Government had decided to diversify the energy basket to provide "cost-competitive energy security" and to "significantly reduce the carbon footprint".

The farming community would benefit from shale gas development, while the Square Kilometer Range would not be affected.



Shell's slogan: "Engineering Earth's development, protecting Earth's integrity"

The People say No!

"It's like you coming and drilling holes in our mother, and then leaving us to look after her and take her to hospital. Leave the Karoo alone!" – *Karoo Community*.

"You know nothing about the Karoo's groundwater and how aquifers are interconnected. No one does. And you don't know what can go wrong." – *Karoo Community*.



"This is the last piece of holy nature in this country. No money is worth this. You can't replace pristine nature with money." – *Karoo Community*.

Queens GI Project

The \$2.6 million dollar investment is meant to improve the ecological health of nearby waterways and the rain gardens are also designed to reduce air pollution as well as work in conjunction with the area's traditional sewer system.

"New Yorkers often object to changes in their neighborhoods, but rebelling against the city paying to green up local streets, is really something else."

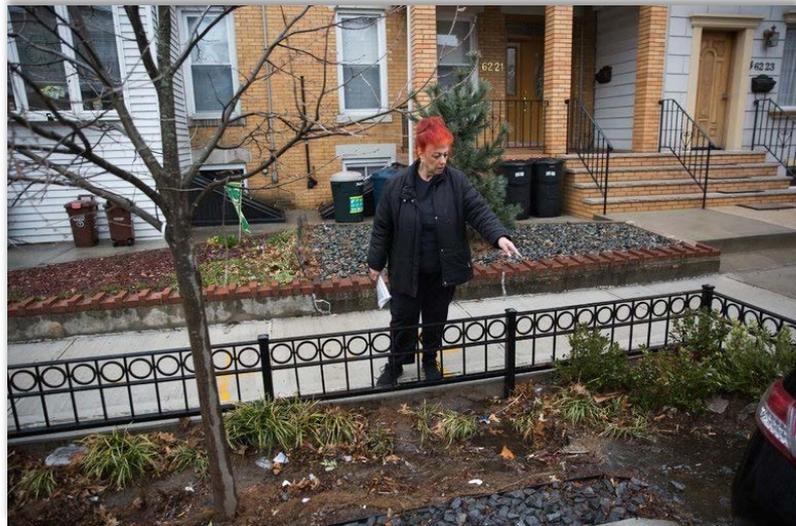


"Rain gardens aid the city's commitment to sustainability and resiliency, to help mitigate stormwater runoff into our surrounding waterways,"

Residents unhappy

"The city-installed rain gardens are an eyesore: poorly installed, under-maintained, and above all...built without community consultation". – *Queens resident*.

"I understand the logic, but that doesn't mean that anytime you think you have a good idea, you have the right to roll over everybody and do it".



"So what happened when we were kids and pollutants used to go in the East River and the Hudson? I'm still here and I'm 70 years old. Is it fair that I have to get stuck with something?" – *Queens resident*

World Federation of Engineering Organisations Model Code of Practice & Sandestin Declaration

Model Code of Climate Change Adaptation:

#5 Work with specialists and stakeholders

#8 Use risk assessment for uncertainty

Sandestin Declaration:

#7: Develop and apply engineering solutions, while being cognizant of local geography, aspirations and cultures

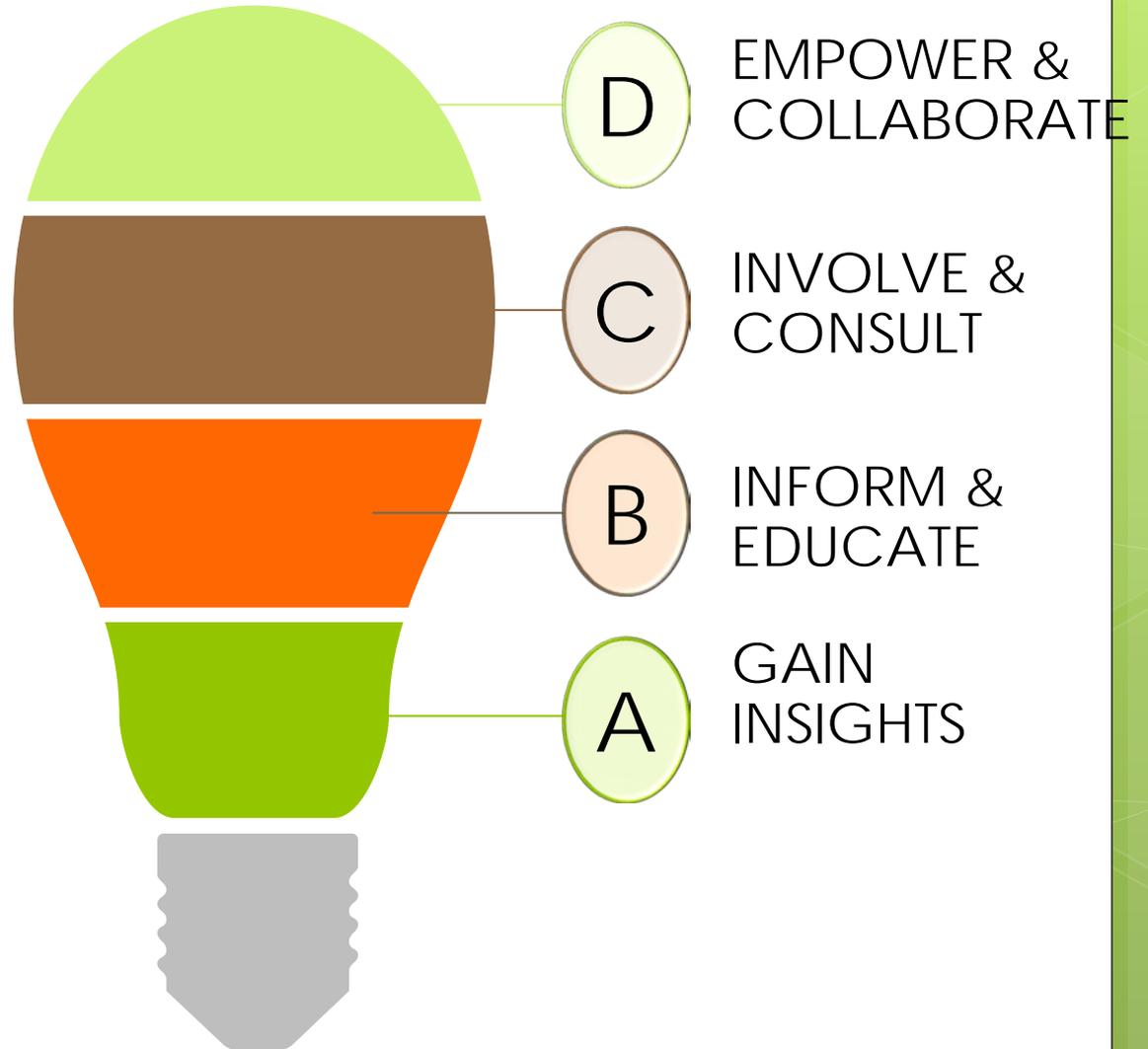
9: Actively engage communities and stakeholders in development of engineering solutions

Sustainable Development and Environmental Stewardship - “Think Global and Act Local”

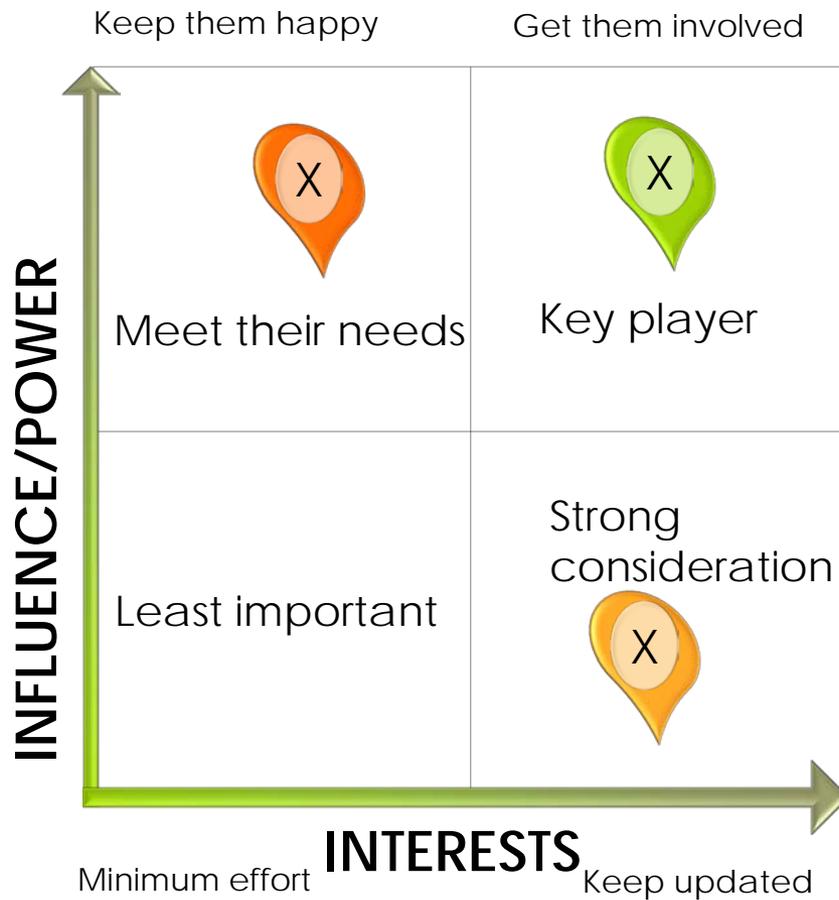
Incorporate global, regional, indigenous and local societal values applicable to your work, including local and community concerns, quality of life and other social concerns related to environmental impact....

Develop locally appropriate engagement processes for stakeholders, both external and internal, to solicit their input in an open and transparent manner, and respond to all concerns – economic, social and environmental...

Simple steps to enlighten



Know and understand the movers and shakers



Stakeholders

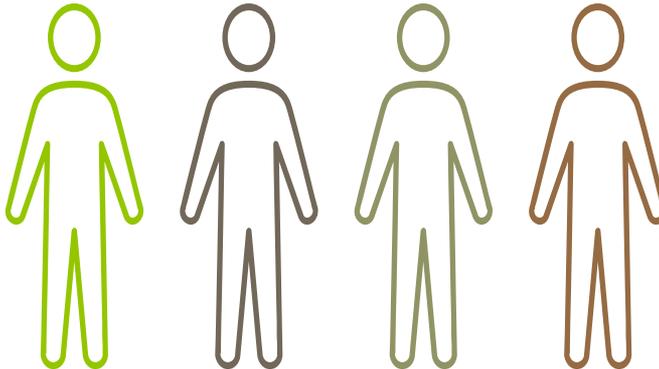
- Government
- Local municipality
- Community
- Activists
- Students
- Regulators
- Investors
- Employees
- Suppliers
- etc.

Conflicting concerns, issues, needs

"I just want
job
security"

"What does it
mean
anyway?...this
green
engineering
thing"

*"I don't trust
the
government
..."*



Triple bottom line

Social

Enhanced social unity

- Reduction in crime
- Improved health
- Recreational activities
- Increased beautification

Economic

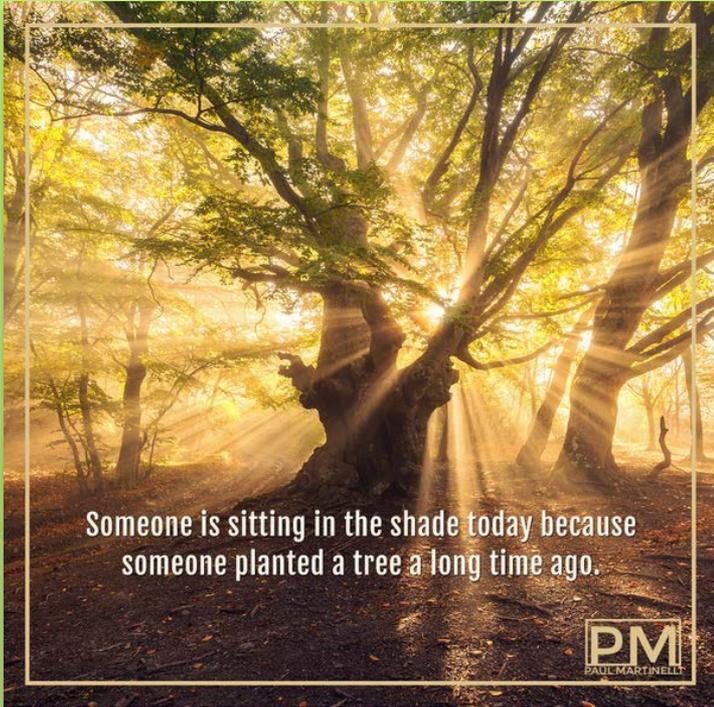
- Job creation
- Re-development
- Increased poverty values

Environmental

- Improved air quality
- Habitat Restoration
- Reduced GHG emissions

—
Let your vision be world &
**STAKEHOLDER
EMBRACING**





I Thank You

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