Sustainable Swaziland
Quick Facts

I. Power Generation

- Montigny holds 60,000 Ha. of FSC Certified Plantations – *(over 1m tons annual fibre flow)*
- Biomass from plantations & sawmills will power a 35 MW plant to be completed within 3 yrs.
- Montigny is in the process of agreeing partners to take us from pre-feasibility to bankable feasibility, & to invest in the plant’s construction & operations
- The plant can supply over **28% of Swaziland’s total electricity demand** sustainably (displacing imported thermal power)
- The proposed plant will sit at our current mill site in the centre of our plantation where biomass is already delivered today, providing a *myriad of logistical advantages*
- The program will uplift the local economy by at least **several hundred million Rand** through job creation, increased local investment and a reduced reliance on imports
- Montigny have **signed an MoU with the Utility (SEC)** and confirmed support from The Regulators
II. Community Forestry Development

• Montigny is presently piloting a **community forestry program** with our neighbours that transforms invasive Wattle Jungles into smallholder plantations.

• The invasive jungle rehabilitation program trains landowners to operate smallholder plantations, resulting in a minimum of **tripling landowners’ incomes** and a far healthier environment.

• The Wattle Jungle biomass will provide **additional feedstock to the power plant** & additional **income** to impoverished communities.

• Montigny is presently looking for **partners to invest** in the program’s development to accelerate the program’s potential growth and reach.
Moving Toward a Sustainable Swaziland

Presently we have the opportunity to unite in making bold, calculated yet swift movements that prioritise sustainable growth and close the broadening socioeconomic gap, securing our people, environment and future.
The Situation

In a population of 1.2 million, the majority live below the national poverty line in rural communities, leaving nearly 40% of the country without access to electricity.

- Nearly 80% of the country’s power is imported from South Africa under an agreement, which is likely to terminate without renewal in 2025.
- The effects of the drought crisis highlight the importance of establishing a comprehensive energy solution outside of the present hydro plants in order to build redundancy.
- Swaziland is effectively guaranteed continuous double digit annual tariff hikes for the foreseeable future if we don’t change course.
We aim to initiate momentum toward a Sustainable Swaziland starting with our resources, relationships and a compelling project.

- We can only drive toward a Sustainable Swaziland by first maximising our available resources.
- As a Swazi timber company, we have grown from humble beginnings to regional leaders by anchoring our roots firmly in progressive, local development.
- The proposed project fully utilises our assets and experiences for the benefit of the nation and region.
THE PROJECTS

I. Power Generation

II. Community Forestry Development
The 35 MW Usutu Plant can replace 28% of Swaziland’s total electricity imports, presently sourced from South Africa’s thermal plants.
Managing our FSC Certified plantations is our core business, allowing us to carefully predict and manage feedstock volumes to guarantee a consistent power supply.

Power Production from forest and sawmill biomass utilises parts of the tree not optimised today.

- Forest & Sawmill Residue
  - Wet off saw Small Sawmill
  - Wet off saw Big Sawmill
  - Structural Sawmill
  - Coal Replacement
  - Charcoal

1 million tons annual fibre flow, diversified across four species.
The **benefits** of the biomass power plant at Usutu are **exponential**. The cost of ignoring the potential would significantly impact Swaziland.

**Environment**

First African country running on 100% renewable electricity
- Reduce GHG
- Optimise Biomass Resources
- Avoid coal-fired plant imports
- Utilize existing mill site

**Economy**

Increase domestic investment opportunities
- Create investment opportunities (e.g. for SNPF holders)
  - Create ~ 500 jobs
  - Initiate new employment sector

**Energy**

Increase electrification nationwide
- Double sustainable and domestic energy production to 50% of total sales
- Potential to scale project to meet base load

<table>
<thead>
<tr>
<th>Net New Jobs Created</th>
<th>Y0</th>
<th>Y10</th>
<th>Y20</th>
</tr>
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<tbody>
<tr>
<td>Forestry Department</td>
<td>198</td>
<td>263</td>
<td>260</td>
</tr>
<tr>
<td>Plant Construction &amp; Operation</td>
<td>200</td>
<td>20</td>
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</tr>
</tbody>
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The pre-feasibility study considered past patterns and future projections for import tariff pricing. Benchmarking price against the current indicative “Megaflex” rate may be the best way to accurately reflect power production costs and benefits.
Several Hundred Million Rands presently spent on imports will now be spent within Swaziland strengthening the SEC’s investment and commitment to the nation.
Swaziland has the potential to sustainably displace 100% of imported electricity with a comprehensive renewable energy solution.

Swaziland’s Resources

- Hydro
- Solar
- Biomass
- Wind
- Energy efficiency measures
Swaziland’s Biomass Power Production Potential up to 150 MW

<table>
<thead>
<tr>
<th>Independent Power Producer</th>
<th>Internal Use</th>
<th>Grid Supplied</th>
<th>Total Capacity</th>
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<tbody>
<tr>
<td>1. Montigny Usutu - Timber</td>
<td>5</td>
<td>30</td>
<td>35</td>
</tr>
<tr>
<td>2. Nhlangano - Timber</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>3. Big Bend – Sugar *</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>4. Simunye - Sugar</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>5. Mhlume - Sugar</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>6. Piggs Peak - Timber</td>
<td>10</td>
<td>5</td>
<td>15</td>
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</tbody>
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* Reduced output due to alternative biomass commitments
Community Forestry Development

Transform an additional 30,000 Ha of invasive Wattle jungles into plantations, drastically increasing feedstock volumes and uplifting communities

Wattle to Power

- We approach communities surrounding our plantation to share our experience and resources on Wattle Jungle rehabilitation
- Interested participants with Wattle Jungles on private or community land join the program with the following agreement:
  - **Training & Loan**: Montigny provides training and an interest free loan to supplement the cost of rehabilitating the Wattle Jungles to smallholder plantations
  - **A Market**: The smallholders work with Montigny to rehabilitate the jungles with a guaranteed buying market for their timber
  - **Increased Yields**: In 3-5 years, landowner and community yields triple, meaning incomes triple
  - **Additional Support**: In the waiting period, Montigny purchases pruning timber and biomass, and provides additional support from our partners at TechnoServe, specialising in entrepreneur and SME development
Engage & Educate

- Assess land and Wattle jungles and agree rehabilitation tasks
- Agree investment from landowner and Montigny/funding partner
- Expand a pilot program working with several large land owners
- Collaborate to train trainers, who then teach the community

Empower & Transform

- Trainers teach community labourers employed by Landowner to transform jungles
- Workers are paid fairly & directly based on hectares rehabilitated
- Communities learn best practices for the long run

Support & Scale

- There is potential to expand the program across the entire western region of Swaziland

This program has the potential to nearly double the proposed capacity of 35MW
The Timeline

1. Initiate
   - Pre-Feasibility
   - Establish Partnerships
   - Timber / Sugar industry alliances
   - MoU with Utility
   - Confirm regulatory climate
   - Formalise Stakeholder & ministry buy-in
   - Attain PPA

2. Develop
   - Agree partners to complete bankable feasibility tasks
     - Technical Feasibility
     - EIA
     - PPA negotiation support
     - Legal framework for SPV
   - Secure Funding
   - Formalise Partnerships

3. Construct & Operate
   - Mill site at the center of the 50 000 Ha Plantation allows for efficient, carbon negative operations
   - 35 MW estimated from current usage and expected off-take agreements
   - Partner and enable Swaziland’s IPPs to meet base load capacity of ~ 150 MW

4. Scale
   - Industry peers establish additional biomass plants

Timeline:
- 6-12 months
- 1-3 Years
- 3+ Years