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Localisation projects aligned to the PICC's National Infrastructure Programme

The Presidential Infrastructure Coordinating Commission (PICC) was established in 2011 to develop a plan for the future development of infrastructure in the country. The National Infrastructure Plan was developed, with 18 Strategic Integrated Projects (SIPs) identified. These SIPs cover infrastructure needs in specific geographical areas, or focus on the development of a specific type of infrastructure across the whole country. The different SIPs are:

- SIP 1: Unlocking the northern mineral belt with Waterberg as the catalyst;
- SIP 2: Durban-Free State-Gauteng logistics and industrial corridor;
- SIP 3: South-Eastern node & corridor development;
- SIP 4: Unlocking the economic opportunities in North West Province;
- SIP 5: Saldanha-Northern Cape development corridor;
- SIP 6: Integrated municipal infrastructure project;
- SIP 7: Integrated urban space and public transport programme;
- SIP 8: Green energy in support of the South African economy;
- SIP 9: Electricity generation to support socioeconomic development;
- SIP 10: Electricity transmission and distribution for all;
- SIP 11: Agri-logistics and rural infrastructure;
- SIP 12: Revitalisation of public hospitals and other health facilities;
- SIP 13: National school build programme;
- SIP 14: Higher education infrastructure;
- SIP 15: Expanding access to communication technology;
- SIP 16: Square Kilometre Array (SKA) & Meerkat;
- SIP 17: Regional integration for African cooperation and development;
- SIP 18: Water and sanitation infrastructure.

Major public infrastructure projects to the value of USD360 billion for implementation up to 2023 are under consideration. 79% of this value is in the electricity generation and transport sectors. Projects at the conceptual, pre-feasibility and feasibility stages represent 48% of the total in value terms.
Apart from the direct investment expected to be generated by the infrastructure projects themselves, these investments will be used as a springboard for the redevelopment of South Africa’s industrial base. As such, prospects for the local production of inputs into these projects are being investigated which will provide a myriad of opportunities for private investors.


**Renewable energy localisation**

South Africa’s Integrated Resource Plan (IRP) of 2010 plans for renewable energy to make up 48% of new electricity generation capacity by 2030. Of this, 2 609 MW would be generated using hydro, 1 000 MW using concentrated solar, and 8 400 MW each using solar photovoltaic (PV) and wind generation technologies.

The Renewable Energy Independent Power Producers (REIPP) Programme was launched in 2011, with two of the five bidding windows having been concluded. During these two windows, bids for 47 projects aiming to generate 2 478 MW were successful. 49% of the generation capacity was awarded to wind projects, 43% to solar PV projects, 8% to concentrated solar projects and 1% to hydro-electric projects.

It is estimated that by the end of the five window bid process, the programme would have attracted project proposals to the value of USD 10 billion.

One of the conditions on which bids was assessed is the amount of local content that would be used in the project. Given bids that were already awarded and plans for future development, local production of components for these projects should be an attractive opportunity for investors.

More information on the REIPP Programme is available at www.ipprenewables.co.za.
Investment Opportunities
Title

Initiative – Platinum Group Metal (PGM) Value Chain Beneficiation, including fuel cells and fuel supply development

Project summary

The initiative objective is to increasingly beneficiate PGMs in SA, prior to exporting fabricated products. Beneficiation opportunities in the jewellery, industrial, automotive and other sectors are actively pursued, but the initiative will initially focus on the local manufacturing and implementation of fuel cells, as an alternate source of energy generation and includes:
- Fuel cell roll-out to strategic off-takers
- Local fuel cell assembly
- Local MEA and stack production
- Fuel cell fuel production and supply logistics (hydrogen, methanol, natural gas, biogas, etc.)

Project location

Individual project locations still need to be determined.

Project investment value

Local fuel cell assembly: USD 500 million
Local fuel cell production: USD 500 million (over 10 years)

Project status

The project is currently in development phase.

Existing partners and commitments

Local South African partners are currently being signed up for a local fuel cell assembly project, including fuel supply and power generation projects to enable market.

Requirements from additional partners

Development partners
Off-take agreements
Strategic Investment
Technology packages/ License agreements

Responsible institution

Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

Contact information

Raoul Goosen
Senior Project Manager: Green SBU
Industrial Development Corporation
Email: raoulg@idc.co.za
### Title
Initiative – Titanium Metal Powder Production and Beneficiation

### Project summary
The anchor project in the initiative is based on novel SA developed process technology to enable a direct and continuous process route for titanium metal powder from titanium bearing sand feedstock. Production capacity is envisaged at 20 000 t.p.a. Additionally, projects for the conversion of the metal powder into products for the aerospace, automotive and industrial sectors are being developed.

### Project location
The project location has not been fixed, but will be close to a titanium sands feedstock site.

### Project investment value
| Anchor project: USD 600 to 800 million |
| Conversion projects: to be determined (process in place to identify conversion projects) |

### Project status
The project is currently in scoping phase with pilot plant being commissioned.

### Existing partners and commitments
Department of Science and Technology sponsoring technology development through the Council for Scientific and Industrial Research
A development partner that will act as operator is in place.
Exclusive pre-emptive licensing rights are being finalised.

### Requirements from additional partners
Strategic Investment for commercial plant
Off-take agreements
Powder conversion technologies and processes

### Responsible institution
Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

### Contact information
Retief Bruwer
Senior Project Manager: Strategic High Impact Projects Business Unit
Industrial Development Corporation
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Phone: +27 11 269 3628
Title
Initiative - Multi Model OEM assembly plant

Project summary
The establishment of a 60 000 vehicles per annum assembly plant in the East London IDZ. This plant will be operated by a renowned global assembler, assembly up to 4 to 5 different models of 3 to 4 different OEMs for the local and export markets.

Project location
The project is currently being earmarked for the East London IDZ

Project investment value
USD 750 million

Project status
The project is currently engaging with identified global assemblers for "call for proposals"

Existing partners and commitments
The Industrial Development Corporation and the dti are committed partners to the project.

Requirements from additional partners
Investment and technical expertise

Incentives available
Automotive Investment Scheme (AIS)

Responsible institution
The Department of Trade and Industry – +27 12 394 9500
The Industrial Development Corporation - +27 11 269 3000

Contact information
Sake van der Wal
Investment Promotion: Manufacturing
the dti
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Phone: +27 12 3941483

Mr Joseph Sithole (Metals SBU)
The IDC
Email: josephs@idc.co.za
Phone: +27 11 269 3281
<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>Initiative - Assembly of Medium and Heavy Commercial Vehicles (M&amp;HCV)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project summary</strong></td>
<td>The establishment of an assembly plants to assemble Medium and Heavy Commercial Vehicles</td>
</tr>
<tr>
<td><strong>Project location</strong></td>
<td>Automotive Industrial Parks and IDZs</td>
</tr>
<tr>
<td><strong>Project investment value</strong></td>
<td>To be determined</td>
</tr>
<tr>
<td><strong>Project status</strong></td>
<td>The Department of Trade and Industry’s M&amp;HCV strategy and action plan</td>
</tr>
<tr>
<td><strong>Existing partners and commitments</strong></td>
<td>The Department of Trade and Industry's M&amp;HCV investment incentives, strategy and action plan</td>
</tr>
<tr>
<td><strong>Requirements from additional partners</strong></td>
<td>Investment, technical and distribution networks</td>
</tr>
<tr>
<td><strong>Incentives available</strong></td>
<td>Automotive Investment Scheme (AIS)</td>
</tr>
</tbody>
</table>
| **Responsible institution** | The Department of Trade and Industry – +27 12 394 9500  
The Industrial Development Corporation - +27 11 269 3000 |
| **Contact information** | Sake van der Wal  
Investment Promotion: Manufacturing the dti  
Email: svdwal@thedti.gov.za  
Phone: +27 12 3941483 |
| | Mr Kobus Sauer (Metals SBU)  
The IDC  
Email: kobuss@idc.co.za  
Phone: +27 11 269 3406 |
Green Valley Nuts owns 2,000 ha of farming land. The intended development will create 600 ha pecan nut orchards in conjunction with cash crops such as wheat and maize. The project contains a nut processing facility.

The project is in Prieska, Northern Cape.

The value of the new pecan development is USD 7 million (excluding existing land and infrastructure).

The project is currently in the development phase with expected maturity in 2016.

Karsten Boerdery is the operating partner

Investment

Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

Rian Coetzee – Head: Agro-Industries Business Unit
Industrial Development Corporation
Email: rianc@idc.co.za
Phone: +27 11 269 3133
## Title

Lemon Oil Project

## Project summary

The establishment of 2 000ha of lemon orchards as well as a processing facility to supply lemon oil to an US-based beverage company and juice for the international market. The production capacity of will be 120 000 tons of lemons per annum, for the production of 6 600 tons of lemon juice concentrate and 600 tons lemon oil.

## Project location

The project is currently being earmarked for the Sunday’s River Valley in Eastern Cape Province.

## Project investment value

USD 65 million

## Project status

The project is currently in pre-feasibility phase with planned commissioning by the end of 2015.

## Existing partners and commitments

A US-based beverage company will be the off-taker for the lemon juice and oil.

## Requirements from additional partners

Investment

## Responsible institution

Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

## Contact information

Rian Coetzee – Head: Agro-Industries Business Unit  
Industrial Development Corporation  
Email: rianc@idc.co.za  
Phone: +27 11 269 3133
### Title
Vaalharts Citrus

### Project summary
Development of an 850ha citrus orchard with two pack houses. The project will be within an area that has been declared free of black spot fungus disease. Citrus will be earmarked for exports to the US market.

### Project location
Vaalharts irrigation scheme in the Warrenton district, Northern Cape Province.

### Project investment value
USD 42 million.

### Project status
The project is currently in the feasibility phase with expected commissioning in 2017.

### Existing partners and commitments

### Requirements from additional partners

### Responsible institution
Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

### Contact information
Rian Coetzee – Head: Agro-Industries Business Unit
Industrial Development Corporation
Email: rianc@idc.co.za
Phone: +27 11 269 3133
Title
Rotundo Walnuts

Project summary
A 488ha walnut (with 47 000 planted trees with maturity ranging from 4 to 10 years) farm with processing plant. The project’s competitive advantage is its timing to market, as fresh nuts will be available for supply to the pre-Christmas market, which is the peak sales period for tree nuts within the northern hemisphere. This means that Rotondo will be the first supplier of nuts to the northern hemisphere market whilst its competitors usually lag six months behind.

Project location
The project is located in Aliwal North, Free State.

Project investment value
USD 18 million

Project status
The project is currently in implementation phase with expected maturity in 2015.

Existing partners and commitments

Requirements from additional partners
Investment

Responsible institution
Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

Contact information
Rian Coetzee – Head: Agro-Industries Business Unit
Industrial Development Corporation
Email: rianc@idc.co.za
Phone: +27 11 269 3133
<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>Project Blue – Scaw Metals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project summary</strong></td>
<td>Blue is a leading integrated producer of speciality steel products for the mining, construction, industrial, power and rail sectors.</td>
</tr>
<tr>
<td><strong>Project location</strong></td>
<td>The project is in Johannesburg, Gauteng</td>
</tr>
<tr>
<td><strong>Project investment value</strong></td>
<td>$500 million (R5 billion at the current exchange rates)</td>
</tr>
<tr>
<td><strong>Project status</strong></td>
<td>Blue is an established business with exciting growth and expansion projects across the various industrial sectors that it serves. A number of potential investors have shown interest to participate in this project.</td>
</tr>
<tr>
<td><strong>Existing partners and commitments</strong></td>
<td>Industrial Development Corporation of South Africa (74%), Izingwe Holdings, Shanduka and Southern Palace, Employees (jointly 26%)</td>
</tr>
<tr>
<td><strong>Requirements from additional partners</strong></td>
<td>Financial investment to fund growth projects, proven operational ability, research and development capability, global market presence and willingness to expand into the region and globally.</td>
</tr>
<tr>
<td><strong>Responsible institution</strong></td>
<td>Industrial Development Corporation of South Africa – Phone: +27 11 269 3000</td>
</tr>
<tr>
<td><strong>Contact information</strong></td>
<td>Mbuyazwe Magagula – Head: Mining and Minerals Beneficiation Business Unit</td>
</tr>
<tr>
<td></td>
<td>Industrial Development Corporation</td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:mbuyazwem@idc.co.za">mbuyazwem@idc.co.za</a></td>
</tr>
<tr>
<td></td>
<td>Phone: +27 11 269 3422</td>
</tr>
</tbody>
</table>
**Title**

Iron Ore Projects

**Project summary**

There are a number of junior miners that have done preliminary studies on iron ore projects around South Africa. Having identified the iron ore resources (magnetite), funds are required to undertake detailed feasibility studies / to undertake these projects if viable.

**Project location**

Mpumalanga and Limpopo provinces

**Project investment value**

Detailed feasibility studies ca USD 10 million, implementation, ca USD 150 million

**Project status**

Pre-feasibility

**Existing partners and commitments**

Junior miners.

**Requirements from additional partners**

Investment

**Responsible institution**

Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

**Contact information**

Dave Cousins – Industry Champion Mining and Minerals Beneficiation Business Unit
Industrial Development Corporation
Email: davec@idc.co.za
Phone: +27 11 269 3870
<table>
<thead>
<tr>
<th><strong>Title</strong></th>
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<tbody>
<tr>
<td>Lesego Platinum Project</td>
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<table>
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<tr>
<th><strong>Project summary</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The development of an underground platinum group metals (PGM) mine and a concentrator plant to produce a PGM concentrate to supply to PGM refineries. The production capacity of the mine will be about 400,000 ounces 4E PGM per annum.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Project location</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The project is located in Sekhukhune, Limpopo Province.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Project investment value</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>USD 1 billion</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Project status</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The project is currently in bankable feasibility phase (BFS).</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Existing partners and commitments</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Village Main Reef, a JSE listed South African junior mining company.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Requirements from additional partners</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity investment</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Responsible institution</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Development Corporation of South Africa – Phone: +27 11 269 3000</td>
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<table>
<thead>
<tr>
<th><strong>Contact information</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vusumuzi Dube – Account Manager Minerals Beneficiation Business Unit</td>
</tr>
<tr>
<td>Industrial Development Corporation</td>
</tr>
<tr>
<td>Email: <a href="mailto:vusumuzid@idc.co.za">vusumuzid@idc.co.za</a></td>
</tr>
<tr>
<td>Phone: +27 11 269 3676</td>
</tr>
</tbody>
</table>
Title
Titanium/Zirconium Beneficiation Project

Project summary
The establishment of chemical metallurgical complex to process and beneficiate 30 000 tpa zircon sand and 30 000 tpa titanium slag (locally mined) into zirconium and titanium metals including their derivative alloys. The processing facility will employ the proven Kroll-process technology provided by the Russian technology institutes.

Project location
The project will be based in Saldanha Bay, Western Cape.

Project investment value
USD 2bn (current estimate)

Project status
A bankable feasibility study is underway.

Existing partners and commitments
The National Empowerment Fund (NEF), Magnesium & Metals Ltd (Russian) and private SA investors.

Requirements from additional partners
Financial investment, market partners and operational expertise.

Responsible institution
Industrial Development Corporation of South Africa
Phone: +27 11 269 3000

Contact information
Hilton Lazarus – Head: Chemicals and Allied Industries SBU
Industrial Development Corporation
Email: hiltonl@idc.co.za
Phone: +27 11 269 3131
Title
Soda Ash Manufacture Project

Project summary
The establishment of a 500 tpa synthetic soda ash manufacturing plant for the South African market. All South Africa’s soda ash requirements are currently imported. It is a critical component of glass manufacturing, detergent manufacturing and other chemicals.

Project location
Potentially KwaZulu-Natal

Project investment value
USD 80 million

Project status
The project is currently in pre-feasibility phase.

Existing partners and commitments
Raw material suppliers in KwaZulu-Natal, local BEE partners and Solvay.

Requirements from additional partners

Investment

Responsible institution
Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

Contact information
Hilton Lazarus – Head: Chemicals and Allied Industries SBU
Industrial Development Corporation
Email: hiltonl@idc.co.za
Phone: +27 11 269 3131
<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>Sunrise Energy LPG Project</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project summary</strong></td>
<td>The project involves the establishment of a LPG Importation Terminal consisting of marine importation infrastructure, subsea and overland pipelines and mounded storage bullets. The expected throughput is 5 000 tons per month expandable to 52 000 tons per month. Included are rail, road and overland pipeline dispatch systems, utilities, fire fighting and safety systems.</td>
</tr>
<tr>
<td><strong>Project location</strong></td>
<td>The project will be based in Saldanha Bay, Western Cape.</td>
</tr>
<tr>
<td><strong>Project investment value</strong></td>
<td>USD 70 million.</td>
</tr>
<tr>
<td><strong>Project status</strong></td>
<td>The project is currently in a fund-raising phase.</td>
</tr>
</tbody>
</table>

**Existing partners and commitments**
Current shareholders are Ilitha Group Holdings and IDC.

**Requirements from additional partners**
Investment (equity and debt)

**Responsible institution**
Industrial Development Corporation of South Africa
Phone: +27 11 269 3000

**Contact information**
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Phone: +27 11 269 3131
<table>
<thead>
<tr>
<th>Title</th>
<th>Geratech Zirconium Beneficiation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project summary</strong></td>
<td>The establishment of 10,000 tpa zircon sand beneficiation facility to produce eight high value zirconium chemicals and range of high-grade zirconium oxides. The processing facility will employ and mix of in-house developed and Chinese technologies.</td>
</tr>
<tr>
<td><strong>Project location</strong></td>
<td>The project will be based in Krugersdorp, Gauteng.</td>
</tr>
<tr>
<td><strong>Project investment value</strong></td>
<td>USD 100 million</td>
</tr>
<tr>
<td><strong>Project status</strong></td>
<td>The project is currently in a fund-raising phase.</td>
</tr>
<tr>
<td><strong>Existing partners and commitments</strong></td>
<td>The South African Technology Innovation Agency (TIA), the Swedish Swedfund and private shareholders as well as IDC are current investors.</td>
</tr>
<tr>
<td><strong>Requirements from additional partners</strong></td>
<td>Investment and operational involvement.</td>
</tr>
<tr>
<td><strong>Responsible institution</strong></td>
<td>Industrial Development Corporation of South Africa – Phone: +27 11 269 3000</td>
</tr>
<tr>
<td><strong>Contact information</strong></td>
<td>Hilton Lazarus – Head: Chemicals and Allied Industries SBU  Industrial Development Corporation  Email: <a href="mailto:hiltonl@idc.co.za">hiltonl@idc.co.za</a>  Phone: +27 11 269 3131</td>
</tr>
<tr>
<td>Title</td>
<td>Chrome Oxide Green Pigment</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Project summary</td>
<td>The establishment of 1 000 tpa Chrome (III) oxide green pigment processing facility based on the recovered waste of chromium hydroxide from tanneries. The processing plant will be based on a newly-developed technology.</td>
</tr>
<tr>
<td>Project location</td>
<td>The project is currently being earmarked for Gauteng or the Eastern Cape with the proximity to tanneries with chromium hydroxide waste being a major consideration.</td>
</tr>
<tr>
<td>Project investment value</td>
<td>USD 8-10 million (current estimate)</td>
</tr>
<tr>
<td>Project status</td>
<td>The project is currently in a bankable feasibility phase.</td>
</tr>
<tr>
<td>Existing partners and commitments</td>
<td>No partners at the moment, only the key promoter</td>
</tr>
<tr>
<td>Requirements from additional partners</td>
<td>Investment and market off-takes</td>
</tr>
<tr>
<td>Responsible institution</td>
<td>Industrial Development Corporation of South Africa – Phone: +27 11 269 3000</td>
</tr>
<tr>
<td>Contact information</td>
<td>Hilton Lazarus – Head: Chemicals and Allied Industries SBU Industrial Development Corporation Email: <a href="mailto:hiltonl@idc.co.za">hiltonl@idc.co.za</a> Phone: +27 11 269 3131</td>
</tr>
<tr>
<td><strong>Title</strong></td>
<td>Dissolving Pulp and Chemical Cellulose Fibre Mill</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td><strong>Project summary</strong></td>
<td>The establishment of a dissolving pulp and chemical cellulose fibre plant as well as a chemical island on the site which will produce a range of chemical products including hydrogen peroxide, hydrochloric acid, peracetic acid, caustic soda and sodium chlorate. The cellulose plant will have an annual production capacity of 250 000 mtpa.</td>
</tr>
<tr>
<td><strong>Project location</strong></td>
<td>The project is currently being earmarked to be located in the Richards Bay IDZ in KwaZulu-Natal.</td>
</tr>
<tr>
<td><strong>Project investment value</strong></td>
<td>USD 400 million.</td>
</tr>
<tr>
<td><strong>Project status</strong></td>
<td>The project is currently in a feasibility phase.</td>
</tr>
<tr>
<td><strong>Existing partners and commitments</strong></td>
<td>An Indian-based dissolved cellulose producer has been earmarked as a potential operations and maintenance partner and/or off-taker.</td>
</tr>
<tr>
<td><strong>Requirements from additional partners</strong></td>
<td>Co-investors/funders</td>
</tr>
<tr>
<td><strong>Responsible institution</strong></td>
<td>Industrial Development Corporation of South Africa – Phone: +27 11 269 3000</td>
</tr>
</tbody>
</table>
| **Contact information**       | Lizeka Matshekga – Head: Forestry & Wood Products Business Unit  
                               | Industrial Development Corporation  
                               | Email: lizekam@idc.co.za  
<pre><code>                           | Phone: +27-11-269 3779 |
</code></pre>
<table>
<thead>
<tr>
<th><strong>Project summary</strong></th>
<th>The establishment of a kraft paper factory that will predominantly use waste containerboard paper and virgin pulp to produce kraft liner, linerboard, fluting and semi-extensible sack kraft. Production capacity is about 180 000 tonnes per annum.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project location</strong></td>
<td>The project is currently earmarked for Frankfort, Free State.</td>
</tr>
<tr>
<td><strong>Project investment value</strong></td>
<td>USD 130 million</td>
</tr>
<tr>
<td><strong>Project status</strong></td>
<td>The project is currently in feasibility phase.</td>
</tr>
<tr>
<td><strong>Existing partners and commitments</strong></td>
<td>Local SA paper converters are the proposed project partners. Project partners will also be responsible for the bulk of take-off.</td>
</tr>
<tr>
<td><strong>Requirements from additional partners</strong></td>
<td>Investment</td>
</tr>
<tr>
<td><strong>Responsible institution</strong></td>
<td>Industrial Development Corporation of South Africa – Phone: +27 11 269 3000</td>
</tr>
</tbody>
</table>
| **Contact information** | Lizeka Matshekga – Head: Forestry & Wood Products Business Unit  
Industrial Development Corporation  
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Phone: +27 11 269 3779 |
Title
Pulp United Bleached Chemo Thermo Mechanical Pulp Mill

Project summary
The project entails the establishment of a green-fields Bleached Chemo Thermo Mechanical Pulp (BCTMP) with a planned capacity of 175 000 air dried metric tons of baled eucalyptus pulp per annum.

Project location
Richards Bay IDZ, KwaZulu-Natal.

Project investment value
USD 250 million.

Project status
The project is currently in a feasibility phase.

Existing partners and commitments
A Chinese pulp and paper producer has been ear-marked as potential operation and maintenance partners and/or off-takers.

Requirements from additional partners
Investment and local partners.

Responsible institution
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Title
Industrial Electricity Cogeneration Projects utilising waste heat to generate electricity

Project summary
South African heavy industry, in particular the Energy Intensive Users, generate massive quantities of waste heat (in excess of 5000 MW thermal as gases). There is also potential to recover energy from hot liquid streams and tapped metals and alloys.

Project location
The projects are based predominantly at smelter operations in Mpumalanga, Gauteng and North West Provinces, as well as at cement kilns in Northern Cape.

Project investment value
USD 3 million per MW, and target projects 5 - 50 MW

Project status
The projects are currently in pre-feasibility and feasibility phases.

Existing partners and commitments
IDC has agreements with developers and with large industries (hosts)

Requirements from additional partners
Investment, Technology and Construction

Responsible institution
Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

Contact information
Raoul Goosen  
Green Industries Business Unit  
Industrial Development Corporation  
Email: raoulg@idc.co.za
**Title**
Hydro Electricity Generation Projects

**Project summary**
A number of sites are identified and regulatory matters are being addressed by South African government and SADC Energy and Water Departments

**Project location**
A number of projects in South Africa and neighbouring SADC countries

**Project investment value**
USD 5 million per MW, targeting projects from 5 MW upwards

**Project status**
Projects are currently in pre-feasibility and feasibility phases

**Existing partners and commitments**
Currently agreements with certain South African developers, that have limited balance sheets and experience

**Requirements from additional partners**
Technology, Developers, Construction and Operating Partners with hydro project experience and strong balance sheets

**Responsible institution**
Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

**Contact information**
Stanley Mupanomunda  
Green Industries Business Unit  
Industrial Development Corporation  
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Title
Waste to Energy Projects including waste recycling upstream

Project summary
Utilization of in excess of 1 million tonnes of municipal solid waste with major metros in South Africa. Focus to produce transport fuels (biogas), due to limited market for heat, but electricity also considered, with focus on mid merit generation, ie. 5am to 10pm. Focus on job creation in recycling stage with less automation.

Project location
The project is currently being earmarked for Gauteng Province, at one or more of the 3 major cities

Project investment value
USD 3 million per MW, and target 50 MW, or ca 75 mil m3 pa of biomethane cumulative from a few project sites

Project status
The project is currently in a pre-feasibility phase.

Existing partners and commitments
IDC has agreements with private sector waste companies and with City of Johannesburg

Requirements from additional partners
Investment and Technology

Responsible institution
Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

Contact information
Raoul Goosen  
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**Project summary**

Thelo Rolling Stock Leasing ("Thelo") is a rolling stock leasing company that was formed and capitalised with R1.2 billion in 2011 by IDC in partnership with Thelo Rolling Stock Partnership, a broad-based BEE entity. Thelo leases rolling stock (locomotives, wagons, and passenger cars) to rail operators and freighters in Sub-Saharan Africa. Thelo facilitates the use of top quality South African made rolling stock, greatly enhanced by joint ventures and associations with world class OEMs, such as General Electric SA, Transnet Engineering, UWC, amongst others. Thelo strives to alleviate the sizeable rolling stock backlog by providing innovative and cost effective solutions to rail operators and freighters.

**Project location**

The company is located in Johannesburg, South Africa.

**Project investment value**

The current capitalisation of Thelo is R1.2 billion. The company needs a strategic equity partner to leverage the current balance sheet.

**Project status**

The company is operational and has concluded three main leasing contracts: two in Mozambique with two blue chip companies, and one in South Africa.

**Existing partners and commitments**

The current shareholders of Thelo are IDC (50%) and Thelo Rolling Stock Partnership (50%).

**Requirements from additional partners**

The company needs a strategic equity partner to bring in expertise and funding. Thelo currently has a strong transaction pipeline of ca R10 billion.

**Responsible institution**

Thelo Rolling Stock Leasing - +27 11 290 2300  
Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

**Contact information**

Mr. Ronnie Ntuli – CEO: Thelo Rolling Stock Leasing (Pty) Ltd  
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Phone: +27 11 290 2300

Mr. Kugan Thaver – Head: Strategic High Impact Projects Business Unit  
Industrial Development Corporation  
Email: kugant@idc.co.za  
Phone: +27 11 269 3740
<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>Malaria ACT project</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project summary</strong></td>
<td>Development of the Artemesinin Combination Therapy (ACT) value chain on the African continent as a means of eradication of malaria. This entails cultivation of artemesia annua, extraction and formulation.</td>
</tr>
<tr>
<td><strong>Project location</strong></td>
<td>The project promoters are currently based in Western Cape, however various growing sites are identified around the country</td>
</tr>
<tr>
<td><strong>Project investment value</strong></td>
<td>To be determined</td>
</tr>
<tr>
<td><strong>Project status</strong></td>
<td>The project is currently in an extended pre-feasibility phase.</td>
</tr>
<tr>
<td><strong>Existing partners and commitments</strong></td>
<td>A local company in the botanical extracts industry.</td>
</tr>
<tr>
<td><strong>Requirements from additional partners</strong></td>
<td>Investment, seed suppliers, off take and World Health Organisation (WHO) accreditation</td>
</tr>
<tr>
<td><strong>Responsible institution</strong></td>
<td>Industrial Development Corporation of South Africa – Phone: +27 11 269 3000</td>
</tr>
</tbody>
</table>
| **Contact information** | Mrs Zora Madikizela – Head: Healthcare Business Unit  
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<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>African Floralush</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project summary</strong></td>
<td>African Floralush has developed and perfected a rose preservation technology, which extends the vase life of fresh cut roses to a minimum of 6 months, providing maintenance-free long-life roses that retain their fresh and pristine look.</td>
</tr>
<tr>
<td><strong>Company location</strong></td>
<td>Muldersdrift, Gauteng</td>
</tr>
<tr>
<td><strong>Project investment value</strong></td>
<td>Current IDC investment: USD2.2 million / 49.73% equity stake</td>
</tr>
<tr>
<td><strong>Project status</strong></td>
<td>Making good progress with commercialisation</td>
</tr>
<tr>
<td><strong>Existing partners and commitments</strong></td>
<td>IDC and private investors.</td>
</tr>
<tr>
<td><strong>Requirements from additional partners</strong></td>
<td>Opportunity to procure product from the company, to become an agent of the company / distributor of its products, to invest in the company to facilitate / accelerate growth into foreign markets or to acquire the company or its assets (including the intellectual property)</td>
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<tr>
<td><strong>Responsible institution</strong></td>
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</tbody>
</table>
| **Contact information** | Christo Fourie – Head: Venture Capital SBU  
Industrial Development Corporation of South Africa  
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Phone: +27 11 269 3295 |
Title
AfriTicket Systems

Project summary
AfriTicket is a bus management technology service provider that has developed a novel, reliable, theft resistant and tamper-proof bus management system suitable for the South African transport environment. The company primarily offers value through better information relating to driver management (e.g. speeding, travel times, route adherence), vehicle management (e.g. over revving, service triggers, vehicle tracking) and people management (e.g. ticket sales, unaccounted for passengers, overloading, crime monitoring). The system is the first comprehensive locally developed bus management and ticketing system. It is also the only system worldwide to cater for the demands of the local transport environment, particularly with regard to maximising ticket revenue collection.

Company location
Northriding, Johannesburg, Gauteng

Project investment value
Current IDC investment: USD1.4 million / 49.92% equity stake

Project status
Making good progress with commercialisation

Existing partners and commitments
IDC and private investors.

Requirements from additional partners
Opportunity to procure product from the company, to become an agent of the company / distributor of its products, to invest in the company to facilitate / accelerate growth into foreign markets or to acquire the company or its assets (including the intellectual property)

Responsible institution
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Contact information
Christo Fourie – Head: Venture Capital SBU
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### Title
Aman Technologies

### Project summary
Aman has developed an innovative Cable Anti-Theft Unit ("CATU") that has the potential to reduce the rate of cable theft in the country. The CATU system is a cost effective way to restrain the ease of stealing suspended cables; it is based on the premise that tying the suspended cables together by means of an innovative gripping unit, that could withstand various vandalistic extremities, would hamper the effort enough such that it is abandoned. The system features a compact design with logistical advantages and it is easy to install. Its inherent simplicity gives CATU a price advantage particularly when seen in context of the magnitude of losses incurred by various industry players due to cable theft.

### Company location
Edenvale, Johannesburg, Gauteng

### Project investment value
Current IDC investment: USD 0.9 million / 42% equity stake

### Project status
Commenced with commercialisation

### Existing partners and commitments
IDC and private investors.

### Requirements from additional partners
Opportunity to procure product from the company, to become an agent of the company / distributor of its products, to invest in the company to facilitate / accelerate growth into foreign markets or to acquire the company or its assets (including the intellectual property)

### Responsible institution
Industrial Development Corporation of South Africa

### Contact information
Christo Fourie – Head: Venture Capital SBU
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Title

Antrum Biotech

Project summary

Antrum have identified a key biomarker known as interferon gamma (which is a human-body produced biomarker that is an immune response to extra-pulmonary tuberculosis (EPTB) infection) which if present is a positive indicator of EPTB. Existing EPTB tests require laboratory based testing that have low specificity and sensitivity, are expensive and time-consuming. Currently, there are no point-of-care tests for EPTB that can be used at the patient bedside to deliver a rapid accurate result so that treatment can begin immediately and hence reduce the morbidity, mortality, cost and onward disease transmission. The products currently under development by Antrum are a rapid point-of-care diagnostic test for EPTB (Strip test) and an enzyme-linked immunosorbent assay (ELISA) kit. The strip test unit is similar to a rapid HIV or home pregnancy test and the ELISA kit is an alternate format of the product which will be a laboratory-based ELISA kit incorporating the identified biomarker.

Company location

Rondebosch, Cape Town, Western Cape

Project investment value

Current IDC investment: USD1.4 million / 49% equity stake

Project status

Finalising development of technology

Existing partners and commitments

IDC and private investors

Requirements from additional partners

Opportunity to procure product from the company, to become an agent of the company / distributor of its products, to invest in the company to facilitate / accelerate growth into foreign markets or to acquire the company or its assets (including the intellectual property)

Responsible institution

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Title

Arengo 309

Project summary

Arengo 309 (Arengo) is an SME focusing on product development in the pool cleaning industry, encompassing Automatic Pool Cleaners (“APCs”), Surface Skimmers and Inline Filters. Arengo has engaged over the past three and a half years in starting up a new business venture that seeks to commercialise products embodying various local and international patents that it has developed and owns. The venture is currently primarily in the stage of a Patent/IP holding entity. Tools have been made and the product partially commercialised (5500 units exported to Australia, and 1500 units sold locally). The global recession has hampered commercialisation activities. The strategy going forward is to license or sell IP to international majors in the automatic pool cleaner sector.

Company location

Johannesburg, Gauteng

Project investment value

Current IDC investment: USD0.8 million / 49% equity stake

Project status

Commercialisation halted; looking for new commercialisation partners.

Existing partners and commitments

IDC and private investors.

Requirements from additional partners

Opportunity to invest in the company to facilitate re-commercialisation
Opportunity to acquire the company or its assets (including the intellectual property)

Responsible institution

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**Title**  
Caperay Medical

**Project summary**
The company developed a digital low dosage X-ray mammography system to detect breast cancer. As a digital unit, the technology is technically more effective than analogue mammography systems. The technology allows radiologists the freedom to alter the contrast and brightness of the image and thus highlight regions of concern. The distinct advantages of Caperay's slot-scanning technology encompasses lower dose radiation to the patient, greater special resolution, enhanced signal to noise ratio and a technology that provides breast scanning over a faster time period. It was however decided not to compete with the large international mammography companies with a “normal” digital x-ray machine but to start the development of the Acesu machine which will host the dual modality system incorporating x-ray and ultra-sound.

**Company location**
Cape Town, Western Cape

**Project investment value**
Current IDC investment: USD2.5 million / 44.7% equity stake

**Project status**
The dual modality system has been fully developed and clinical trials are being undertaken.

**Existing partners and commitments**
IDC and private investors.

**Requirements from additional partners**
Opportunity to procure product from the company, to become an agent of the company / distributor of its products, to invest in the company to facilitate / accelerate growth into foreign markets or to acquire the company or its assets (including the intellectual property)

**Responsible institution**
Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

**Contact information**
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Phone: +27 11 269 3295
Title
Diacoustic Medical Devices

Project summary
The technology consists of a screening algorithm (arithmetic or computational procedure for solving problems) for congenital cardiac malfunctions. Although experienced cardiologists can evaluate heart murmurs (a noise generated by turbulent blood flow within the heart) with confidence, the less clinical experienced medical staff may have difficulty making the diagnoses. The technology can use a PC, tablet or smart phone as platform. Although the technology was initially targeting developing countries (locally developed handheld device), it was subsequently changed to be a software product that can use a PC / tablet and smart phone as platform, and is mainly focused at the developed world.

Company location
Stellenbosch, Western Cape

Project investment value
Current IDC investment: USD1.6 million / 49.9% equity stake

Project status
FDA approval for the use of four specific stethoscopes was received but the company can easily add another manufacturer to it. A FDA application was submitted during March 2013 to get approval to sell the software product that will be used on handheld devices such as smart phones, tablets and other electronic platforms.

Existing partners and commitments
IDC and private investors.

Requirements from additional partners
Opportunity to procure product from the company, to become an agent of the company / distributor of its products, to invest in the company to facilitate / accelerate growth into foreign markets or to acquire the company or its assets (including the intellectual property)

Responsible institution
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Title
Formfoods

Project summary
Formfoods has developed a food reconstituting technology that consists of patented machines and secret ingredients used in a food binding process. The core application of the technology is to increase the economic value of meat off-cuts that are generally sold at a lower value. The technology is completely automated and operates in a continuous production process. The ingredient formula is a trade secret that has been specifically formulated to work in conjunction with patented processing machines. The patented machines are designed to work at a high rate while maintaining food texture and integrity. As a result, the final food product is of higher quality, correctly shaped, firm and does not require time to set before it can be handled.

Company location
Stellenbosch, Western Cape

Project investment value
Current IDC investment: USD0.5 million / 30% equity stake

Project status
Commenced with commercialisation

Existing partners and commitments
IDC and private investors.

Requirements from additional partners
Opportunity to procure product from the company, to become an agent of the company / distributor of its products, to invest in the company to facilitate / accelerate growth into foreign markets or to acquire the company or its assets (including the intellectual property)

Responsible institution
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Contact information
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Phone: +27 11 269 3295
Title

I-Slices Manufacturing

Project summary

I-Slices developed a unique water-based cryogel technology used for producing quick fix cosmetic products to treat a variety of eye-related symptoms. Cryogel is a water-soluble polymer gel that functions as a dermal delivery system, i.e. a gel-like substance that can be liquefied and solidified to absorb and emit ingredients to the skin. The product comes in the form of pads (placed on both eyes) that release active ingredients and moisture into the area around the eye to treat conditions including tired eyes, puffiness, redness, irritation, dark circles and wrinkles. The products have been through a range of locally-conducted clinical trials for safety, stability, toxicology, efficacy etc. The products are also FDA approved and are fully EU compliant.

Company location

Midrand, Gauteng

Project investment value

Current IDC investment: USD 0.5 million / 40% equity stake

Project status

Making good progress with commercialisation

Existing partners and commitments

IDC and private investors.

Requirements from additional partners

Opportunity to procure product from the company, to become an agent of the company / distributor of its products, to invest in the company to facilitate / accelerate growth into foreign markets or to acquire the company or its assets (including the intellectual property)

Responsible institution

Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

Contact information

Christo Fourie – Head: Venture Capital SBU
Industrial Development Corporation of South Africa
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Phone: +27 11 269 3295
# Title
Klydon Gas

## Project summary
Klydon Gas has developed Aerodynamic Separation Process (ASP) technology. This technology is able to separate methane gas from unconventional gas sources at commercially viable prices. The gas separation process occurs inside a patented gas separator unit that has been developed by the company. Purified methane gas can be used by power generating plants and the technology is mainly directed towards these users.

## Company location
Pretoria, Gauteng

## Project investment value
Current IDC investment: USD3.9 million / 60% equity stake

## Project status
Klydon has designed a Concept Design for a Gas Separating Demonstrating Unit. Construction of the Demonstration Unit, which will be used to demonstrate the functioning of the technology to potential customers, will be completed towards the end of 2014.

## Existing partners and commitments
IDC and private investors.

## Requirements from additional partners
- Opportunity to license in the company’s technology for purposes of setting up a natural gas purification plant.
- Opportunity to invest in the company to facilitate / accelerate growth into foreign markets
- Opportunity to acquire the company or its assets (including the intellectual property)

## Responsible institution
Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

## Contact information
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Phone: +27 11 269 3295
**Title**
Lodox Systems

**Project summary**
The Lodox Statscan is a digital x-ray system that can produce clear, diagnostic whole-body x-ray pictures in just 13 seconds. The system ensures easy access to the patient with a minimum of manoeuvring and at an extremely low radiation dose (both scattered and entrance) so that trauma and emergency (ER) staff can continue to provide critical life support. The entire body is scanned, so it quickly picks up multiple injuries that do not always show up on conventional sized x-rays.

**Company location**
Johannesburg, Gauteng

**Project investment value**
Current IDC investment: USD17.0 million / 93.44% equity stake

**Project status**
Lodox Systems has built a second version of its Statscan machine, referred to as the Xmplar-dr. This model is more automated than the previous version. The company has, up to now, sold 43 units of the Statscan. Thirteen of these units are in South Africa. Other countries where the machines have been sold include: the US, Venezuela, AUE, Switzerland and Taiwan.

**Existing partners and commitments**
IDC and private investors.

**Requirements from additional partners**
Opportunity to procure product from the company, to become an agent of the company / distributor of its products, to invest in the company to facilitate / accelerate growth into foreign markets or to acquire the company or its assets (including the intellectual property)

**Responsible institution**
Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

**Contact information**
Christo Fourie – Head: Venture Capital SBU
Industrial Development Corporation of South Africa
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Phone: +27 11 269 3295
Title
Mechcal

Project summary
Mechcal has developed composite industrial fans that may be used for general industrial purposes but are especially suited for erosive environments such as coal mines. By focusing on crucial design aspects including noise reduction, aerodynamics, performance efficiency and mass saving, Mechcal has developed products that exceed client expectations.

Company location
Despatch, Pretoria, Gauteng

Project investment value
Current IDC investment: USD0.7 million / 30% equity stake

Project status
Making good progress with commercialisation

Existing partners and commitments
IDC and private investors.

Requirements from additional partners
Opportunity to procure product from the company, to become an agent of the company / distributor of its products, to invest in the company to facilitate / accelerate growth into foreign markets or to acquire the company or its assets (including the intellectual property)

Responsible institution
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Phone: +27 11 269 3295
Title
Novelquip Forestry

Project summary
Novelquip Forestry was incorporated in 2007 for the purposes of developing and commercialising the MULTIPIT product, an automated tree planting (silviculture) technology. The technology's application is in forestry, encompassing slash reduction, weeding, fertilisation, pitting, seedling deposit, seedling extraction and watering systems, which collectively result in the automatic comprehensive planting of new tree seedlings. Development of Multipit has taken ca 4 years since inception of the idea; the prototype (i.e pitting machine) has undergone field trials successfully. The comprehensive capability is expected to be complete by December 2013. The company is in early commercialisation stages with customers/stakeholders including Sappi, Mondi, their contractors etc. Currently 5 units have already been commercialised; the technology offers the capability to plant ca 18000 trees per day/per unit (24 hour shift).

Company location
George, Western Cape

Project investment value
Current IDC investment: USD1.1 million / 46% equity stake

Project status
Commenced with commercialisation

Existing partners and commitments
IDC and private investors.

Requirements from additional partners
Opportunity to procure product from the company, to become an agent of the company / distributor of its products, to invest in the company to facilitate / accelerate growth into foreign markets or to acquire the company or its assets (including the intellectual property)

Responsible institution
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Contact information
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Phone: +27 11 269 3295
Title

Omega Refrigeration

Project summary

Traditionally supermarket refrigeration is made possible by a network of refrigeration cabinets interlinked by a network of copper piping that supplies cooled gas pumped from an externally located compressor room. This arrangement of remote cabinets has numerous shortcomings. Omega has devised and patented a water cooled self-contained cabinet that addresses a number of these shortcomings. The company’s key competitive advantages are lower installation and upfront costs, lower running costs including decreased energy consumption, lower maintenance costs and lower distribution costs.

Company location

Selby, Johannesburg, Gauteng

Project investment value

Current IDC investment: USD8.0 million / 91% equity stake

Project status

Making good progress with commercialisation

Existing partners and commitments

IDC and private investors.

Requirements from additional partners

Opportunity to procure product from the company, to become an agent of the company / distributor of its products, to invest in the company to facilitate / accelerate growth into foreign markets or to acquire the company or its assets (including the intellectual property)

Responsible institution

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Contact information

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Photovoltaic Technology Intellectual Property (PTIP)

Project summary

PTIP’s Intellectual Property is for the commercial production of photovoltaic (“PV”) modules (i.e. solar modules) which use a thin film of metal alloys as the light absorbent layer as opposed to the silicon used in conventional solar panels. The core IP and know-how relates to a novel and commercially scalable process technology to produce homogeneous multiphase semiconductor alloys containing five chemical elements namely copper, indium, gallium, selenium and sulphur (generally referred to as CIS-based alloys). Various combinations of these alloys are currently considered to be the most preferred second-generation semiconductor material to replace silicon as the base material in PV modules. PTIP has both product and process patents. The core IP patents pertaining to the technology have already been granted in major territories such as the US, Europe, Canada, Mexico, China, ARIPO, Eurasia, Australia, Indonesia and Korea during the past three years.

Company location

Stellenbosch, Western Cape

Project investment value

Current IDC investment: USD10.8 million / 47.4% equity stake

Project status

Demonstration plant commissioned. Process being optimised.

Existing partners and commitments

IDC and private investors.

Requirements from additional partners

Opportunity to license in the company’s technology for purposes of setting up a new PV module manufacturing plant or for purposes of upgrading an existing PV manufacturing plant
Opportunity to invest in the company to facilitate / accelerate growth into foreign markets
Opportunity to acquire the company or its assets (including the intellectual property)

Responsible institution

Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

Contact information

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<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>Quorus Biotech</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project summary</strong></td>
<td>The Quorus technology offers a range of single-use bioreactors and related control systems that enable the growth of difficult-to-culture organisms and the efficient production of otherwise difficult-to-produce biological compounds required for the pharmaceutical and food industry. The key to Quorus’ innovation lies in its ability to harness the natural phenomenon of biofilm formation and its provision of a very natural and easily controlled growth environment for microbes and cell cultures. In essence, the Quorus bioreactor has been engineered to suit the organism; unlike most other bioreactors in which the organism is genetically-engineered to suit its production environment.</td>
</tr>
<tr>
<td><strong>Company location</strong></td>
<td>Cape Town, Western Cape</td>
</tr>
<tr>
<td><strong>Project investment value</strong></td>
<td>Current IDC investment: USD1.3 million / 48.98% equity stake</td>
</tr>
<tr>
<td><strong>Project status</strong></td>
<td>Finalising development of technology</td>
</tr>
<tr>
<td><strong>Existing partners and commitments</strong></td>
<td>IDC and private investors.</td>
</tr>
<tr>
<td><strong>Requirements from additional partners</strong></td>
<td>Opportunity to procure product from the company, to become an agent of the company / distributor of its products, to invest in the company to facilitate / accelerate growth into foreign markets or to acquire the company or its assets (including the intellectual property)</td>
</tr>
<tr>
<td><strong>Responsible institution</strong></td>
<td>Industrial Development Corporation of South Africa – Phone: +27 11 269 3000</td>
</tr>
<tr>
<td><strong>Contact information</strong></td>
<td>Christo Fourie – Head: Venture Capital SBU Industrial Development Corporation of South Africa E-mail: <a href="mailto:christof@idc.co.za">christof@idc.co.za</a> Phone: +27 11 269 3295</td>
</tr>
</tbody>
</table>
**Title**

Synexa Life Sciences

**Project summary**

Synexa Life Sciences is a local biotechnology company which conducts leading-edge biotechnology research and provides analytical services for global clinical trials and novel diagnostics tests to the local medical market. Over the past few years, Synexa has built a leading position in the provision of biomarker services to the global biopharma industry. Biomarkers are biochemical signals emitted by the body in response to a disease or drug intervention. In the context of a clinical trial for a new drug, identifying the correct biomarkers and measuring changes in their level over time can assist biopharma companies in ascertaining the safety and efficacy of the drug and therefore aid in earlier and more accurate decision making about how to proceed with the drug in question. This is a fast growing niche in the biopharma sector, fuelled by the on-going pressure on biopharma companies to improve the productivity of their new drug R&D processes and those companies' preference to outsource the specialist work that Synexa provides.

**Company location**

Montague Gardens, Cape Town, Western Cape

**Project investment value**

Current IDC investment: USD1.5 million / 42.93% equity stake

**Existing partners and commitments**

IDC and private investors.

**Project status**

Making good progress with commercialisation

**Requirements from additional partners**

Opportunity to procure product from the company, to become an agent of the company / distributor of its products, to invest in the company to facilitate / accelerate growth into foreign markets or to acquire the company or its assets (including the intellectual property)

**Responsible institution**

Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

**Contact information**

Christo Fourie – Head: Venture Capital SBU
Industrial Development Corporation of South Africa
E-mail: christof@idc.co.za
Phone: +27 11 269 3295
**Title**
Wondermed

**Project summary**
Wondermed has developed a wound management system called Wonder-Med. Wonder-Med is a comprehensive, sufficiently portable system that removes dressings, debrides wounds (cutting away of dead tissue), irrigates wounds (cleaning of wounds with either saline or ozonated water), dries the wound with warm air, applies creams or liquids with different viscosities to the wounds, and has a massage facility. Wonder-Med treats wounds, burns, tar abrasians, cleans diabetic ulcers, and provides pure air massage for the treatment of circulation problems.

**Company location**
Durban, KwaZulu-Natal

**Project investment value**
Current IDC investment: USD1.2 million / 57.47% equity stake

**Project status**
Making good progress with commercialisation

**Existing partners and commitments**
IDC and private investors.

**Requirements from additional partners**
Opportunity to procure product from the company, to become an agent of the company / distributor of its products, to invest in the company to facilitate / accelerate growth into foreign markets or to acquire the company or its assets (including the intellectual property)

**Responsible institution**
Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

**Contact information**
Christo Fourie – Head: Venture Capital SBU
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E-mail: christof@idc.co.za
Phone: +27 11 269 3295
**Title**

Yebotech

**Project summary**

Yebo Tech has developed an electronic plug and key designed to replace the pin-tumbler and wafer tumbler plugs employed in conventional mechanical locks. The plug is a cylindrical unit that can be fitted to a variety of locksets, thereby enabling a single key to access many locks and permitting a lock to be accessed by many keys. The technology has been demonstrated in prototype and patents are filed in 10 international jurisdictions. The commercial market has a compelling need for an electronic cabinet lock solution capable of servicing requirements such as auditing, time-based access, remote authorisation and multi-keying. This market is currently un-serviced due to the non-existence of suitable products, and could be substantial when taking into account significant stock shrinkage and service delivery problems currently experienced by retailers.

**Company location**

Tokai, Cape Town, Western Cape

**Project investment value**

Current IDC investment: USD1.0 million / 36% equity stake

**Project status**

Making good progress with commercialisation

**Existing partners and commitments**

IDC and private investors.

**Requirements from additional partners**

Opportunity to procure product from the company, to become an agent of the company / distributor of its products, to invest in the company to facilitate / accelerate growth into foreign markets or to acquire the company or its assets (including the intellectual property)

**Responsible institution**

Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

**Contact information**

Christo Fourie – Head: Venture Capital SBU
Industrial Development Corporation of South Africa
E-mail: christof@idc.co.za
Phone: +27 11 269 3295
<table>
<thead>
<tr>
<th>Title</th>
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<tbody>
<tr>
<td>Innovative new ignition coil - Ambixtra</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Project summary</th>
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</thead>
<tbody>
<tr>
<td>The establishment of a manufacturing plant to produce a new ignition coil that is linked to an existing OEM's engine development programme</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project location</th>
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<tbody>
<tr>
<td>The project is currently being earmarked for the Rosslyn Supplier Park in Gauteng</td>
</tr>
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<table>
<thead>
<tr>
<th>Project investment value</th>
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<tbody>
<tr>
<td>USD 35 million</td>
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<table>
<thead>
<tr>
<th>Project status</th>
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<tbody>
<tr>
<td>The project is in the process of developing commercial and industrial prototypes.</td>
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</table>

<table>
<thead>
<tr>
<th>Existing partners and commitments</th>
</tr>
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<tbody>
<tr>
<td>The Industrial Development Corporation and the dti are committed partners to the project, as well as an international OEM.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Requirements from additional partners</th>
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<tbody>
<tr>
<td>Investment</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Responsible institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Department of Trade and Industry – +27 12 394 9500</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Incentives available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Investment Scheme (AIS)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sake van der Wal</td>
</tr>
<tr>
<td>Investment Promotion: Manufacturing</td>
</tr>
<tr>
<td>the dti</td>
</tr>
<tr>
<td>Email: <a href="mailto:svdwal@thedti.gov.za">svdwal@thedti.gov.za</a></td>
</tr>
<tr>
<td>Phone: +27 12 3941483</td>
</tr>
</tbody>
</table>
# Title

Baviaanskloof Mega Reserve

## Project summary

The development of various areas within the reserve with suitable accommodation and other facilities to establish a mega reserve.

## Project location

Baviaanskloof, Eastern Cape

## Project investment value

USD 10 million.

## Project status

The project is currently in a pre-feasibility phase.

## Existing partners and commitments

Eastern Cape Parks Board

## Requirements from additional partners

Operational and Investment

## Responsible institution

Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

## Contact information

Christine Engelbrecht – Head: Tourism Business Unit
Industrial Development Corporation
Email: christinee@idc.co.za
Phone: +27 11 269 3445
<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>Blyde River Canyon Cable Car</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project summary</strong></td>
<td>The construction of a cable car in the Blyde River Canyon, the world’s greenest canyon.</td>
</tr>
<tr>
<td><strong>Project location</strong></td>
<td>Blyde River Canyon, Mpumalanga Province</td>
</tr>
<tr>
<td><strong>Project investment value</strong></td>
<td>USD 10 million.</td>
</tr>
<tr>
<td><strong>Project status</strong></td>
<td>The project is currently in a pre-feasibility phase.</td>
</tr>
<tr>
<td><strong>Existing partners and commitments</strong></td>
<td>The project will be developed on land owned by the local community and the community would also be an equity partner in the development.</td>
</tr>
<tr>
<td><strong>Requirements from additional partners</strong></td>
<td>Operational and Investment</td>
</tr>
<tr>
<td><strong>Responsible institution</strong></td>
<td>Industrial Development Corporation of South Africa – Phone: +27 11 269 3000</td>
</tr>
</tbody>
</table>
| **Contact information** | Christine Engelbrecht – Head: Tourism Business Unit  
Industrial Development Corporation  
Email: christinee@idc.co.za  
Phone: +27 11 269 3445 |
### Title

Skywalk at God's Window

### Project summary

The construction of a glass bottom skywalk at God's Window, an existing tourist attraction in the Blyde River Canyon, the world’s largest green canyon.

### Project location

Blyde River Canyon, Mpumalanga Province

### Project investment value

USD 10 million.

### Project status

The project is currently in a pre-implementation phase.

### Existing partners and commitments

The project will be developed on land owned by the local community and the community would also be an equity partner in the development.

### Requirements from additional partners

Operational and Investment

### Responsible institution

Industrial Development Corporation of South Africa – Phone: +27 11 269 3000

### Contact information

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