

SECTION 8 PRE-FEASIBILITY ASSESSMENTS ON THE ESTABLISHMENT OF AN IDZ

8.1 INTRODUCTION

In this chapter, the development zone structure, layout and cost is determined and the impact of the proposed development zone is modelled by using the internationally acclaimed Input-Output (I/O) modelling technique. The economic impact will be calculated for both the construction and operational phases of the development.

8.2 SALDANHA DEVELOPMENT ZONE STRUCTURE AND LAYOUT

According to the preceding chapters, it was identified that an IDZ within Saldanha could be feasible and economically sustainable if managed correctly. The study focussed on the land and spatial issues, on infrastructure for future development and on the long term market demand. The section will briefly recap what's been said earlier before we move on to the structure and layout.

In terms of the *spatial and land issues*, it was stated that ample land is available, but it is mostly situated in the hands of the private sector. There are various pieces of land / initiatives of land that presents various opportunities for Saldanha in terms of developing an IDZ. Preparations will, however, need to be undertaken in order to secure the land. As mentioned in previous sections, the Saldanha Bay Municipality already signed MOUs with two landowners within the proposed IDZ area.

In terms of the *infrastructure*, it was proven that there is sufficient infrastructure in terms of access to rail and roads that could be efficiently utilised; however, there will be a need for a transport development plan in future. The bulk services in terms of water, electricity, sewage etc. is currently not sufficient to sustain such a development as an IDZ and will need to be further investigated and addressed in the next phase (i.e. Feasibility phase) of the project.

In terms of the *market demand*, the industrial space demand models showed that a total demand of 572 ha will be needed by 2024 for industrial development.

However, in terms of moving towards the next phase of the project i.e. the Feasibility Phase, it is recommended that a Detailed Development Framework be undertaken. This framework should incorporate various issues, such as the legal framework, management plan, available land, number of industries allowed in the IDZ, site sizes, detailed engineering studies etc., which would be very beneficial for investors in the long term.

The Environmental Management Framework (which will be undertaken and funded by the Provincial Department of Environmental Management) will also need to be incorporated within the next phase. Detailed planning will be necessary in terms of various environmental issues, such as air quality concerns, concern of water supply, waste water management, the RAMSAR site at the Langebaan Lagoon etc. Parameters will have to be set before any further planning or development could be undertaken. The results of these findings will have to be incorporated and further refined within the current Spatial Development Framework Plan (SDF) of the Saldanha Bay Municipality.

This study will, however, discuss the layout and structure of the proposed Saldanha Development Zone only in a preliminary form. This will have to be further analysed in-depth in the next phase of the project i.e. the Feasibility Phase.

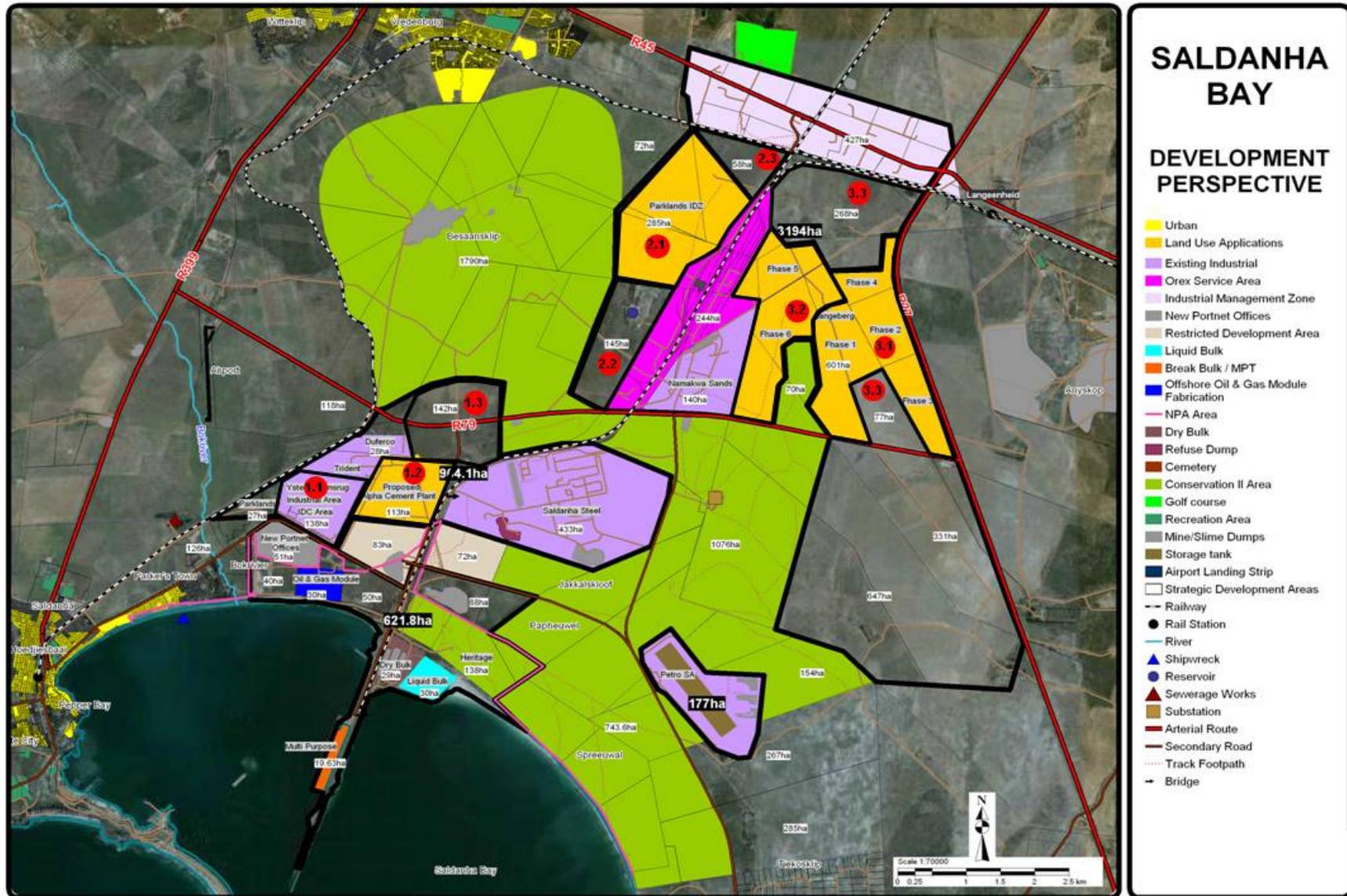
In our findings throughout the study, we suggest the following in terms of the layout and structure for the proposed Saldanha IDZ:

The proposed Saldanha IDZ must be divided into homogenous zones, where clusters are grouped together. The IDZ should be divided in terms of three different precinct approaches, namely:

- ✓ **Precinct 1** – All the noxious industries / clusters should be situated within this precinct. In other words, all the heavy industries / extensive industries (such as steel processing plants, pelletisation plants etc.) will be situated within this precinct. This is also where the bigger anchor industries will be situated. These anchor industries will need vast land space / stands for development (e.g. 80 ha to 100 ha stands). This area should be very flexible in order to handle these bigger anchor industries.
- ✓ **Precinct 2** – This precinct can consist of smaller stands (0.5 ha to 1 ha stands) and will be a combination of importers, distributors, assembly plants etc. This precinct will also consist of manufacturing and assembly, but it will not necessarily be noxious industries.
- ✓ **Precinct 3** – Keep as open space for future expansion purposes of the IDZ, in order to have flexibility in future. This precinct should be flexible and tailor made / designed according to the market demands and will also depend on the take-up of the area. This could consist of either heavy industries or lighter industries (assembly plants), but should be able to be flexible in terms of both.

As far as the establishment of the Saldanha IDZ is concerned, there are broadly **four options** available (refer to **Figure 8.1**):

Figure 8.1 Development Perspective



Option 1 – IDC / Alpha cement area:

Consolidate the existing IDC area (**area 1.1** - 138 ha), the land earmarked for the future Alpha cement plant (**area 1.2** - 113 ha), and the vacant land to the north thereof around route R79 (142 ha) into a single Industrial Development Zone.

In total this area could present about 393 ha of land for establishment of the IDZ. Other benefits associated with this option, is the fact that it is located immediately adjacent to the Port Area and it is served both by rail and road (R79).

The major constraint pertaining to this option is the fact that there are a number of different land owners that need to be brought on board. This includes Saldok (area 1.1), Holcim South Africa (area 1.2), Samancor and Anglo Operations (area 1.3). The existing proclaimed IDC industrial area (area 1.1) and its associated layout plan will then have to be incorporated into the IDZ layout, while areas 1.2 and 1.3 will have to undergo a fully fledged township establishment process as these areas currently comprise farmland.

If this option is decided upon, then area 1.1 can possibly be utilised to accommodate light industrial activities; area 1.2 which is directly adjacent to the railway line and opposite Saldanha Steel can possibly be earmarked for heavy industrial activity (113 ha), and area 1.3 to the north which covers about 142 ha of land can be possibly utilised for future expansion of the IDZ (around route R79).

Option 2 – Parklands IDZ area:

This option focuses on the western section of the northern Back of Port area immediately adjacent to the railway line. It comprises the existing Parklands IDZ initiative (area 2.1) which holds about 285 ha of land, as well as the pockets of land to the north (area 2.2) and south (area 2.3) thereof which hold about 145 and 58 ha of land respectively. This brings the total land area to about 488 ha.

The area has access to the Oryx railway line and the Vredenburg-Hopefield railway line, but road access will have to be improved significantly in order to serve a future IDZ development. The site is also located very close to Vredenburg town. Land ownership is shared between Parklands, Anglo Operations and Plasto Prop 5, and although a township establishment application has been submitted for the Parklands IDZ area (area 2.1), no township establishment has been approved yet. All three land parcels thus currently comprise agricultural land.

If option 2 is adopted, then the development approach could be to earmark area 2.1 for light industrial uses (285 ha); area 2.2 which is directly opposite Namakwa Sands and adjacent to the Oryx railway line could be used for heavy industries (145 ha), and area 2.3 towards the north which covers about 58 ha of land could be utilised for future expansion of the area.

Option 3 – Langeberg area:

The third option is to earmark the Langeberg area to the east of the Oryx railway line, south of the Vredenburg-Hopefield line, west of route R27 and to the north of route R79 as the future IDZ area. The Langeberg initiative is under single ownership (601 ha) and it could be expanded to the north (268 ha) and south (77 ha). This brings the total land area to about 946 ha.

As highlighted above, the area could be linked to both railway lines and both the two major roads linking Vredenburg-Saldanha to the City of Cape Town (R45 and R27).

This option also holds an opportunity for the IDZ to be expanded further to the south of road R79 in future (should there be a need for such expansion).

The entire area is still farmland as no township establishment application has been approved for any part of it. The most appropriate way to develop the area, should option 3 be decided upon, could be to earmark phases one, two, three and four (see area 3.1) for light industrial use (± 300 ha); phase five and six (± 300 ha) for heavy industries (area 3.2), and area 3.3 (268 ha and 77 ha) for future expansion.

In terms of this approach the heavier industries will thus be located/consolidated around the Oryx railway line and adjacent to Namakwa Sands, while the lighter and smaller industries will be located closer to the main road network in the area, and would thus be more accessible to regional traffic.

Option 4 – Inclusive of all areas (Preferred Option):

In order to make the IDZ successful in the long-term and to provide for possible future expansions, it is our suggestion that all of the developable / vacant land ($\pm 2\,500$ ha) should be secured in the short to medium term. This could prevent speculative buyers to gain hold of the land as was done in the previous years.

All four the options referred to above hold some advantages and some disadvantages:

- ✓ **Option 1** is functionally closest to the Port Area, but it could be difficult to consolidate the entire area under single ownership.
- ✓ **Option 2** is close to Vredenburg and it can be served by both road and rail. The access road will, however, have to be upgraded in order to fully unlock the development potential of this area.
- ✓ **Option 3** is well served by rail and both regional routes passing through the municipal area which are linked to the area. It is also the largest area and the 601 ha of land is under single ownership.
- ✓ **Option 4** is necessary to make the IDZ successful in the long-term and provide for possible future expansions.

8.3 COSTING

The development of the Saldanha IDZ must be seen in the context of the broader economy and investment environment in which it is located, as this environment will influence the nature and the success of the IDZ. Firstly, the establishment of an IDZ forms part of a national programme aimed at generating dedicated development in certain areas. This programme provides the basis on which any IDZ in South Africa is founded. The IDZ need to have an international investment focus – the IDZ normally has the tendency to have a strong speculative drive which will be further unleashed within the market.

The Saldanha IDZ is also influenced by the socio-economic, political and investment characteristics of the Western Cape Province, and the local economy. This milieu poses several opportunities, which can be exploited for industrial and commercial production and beneficiation activities. The development and investment opportunities are furthermore expanded by changing international markets and trading patterns and the opportunities resulting from it. These opportunities are indicative of the nature of the core and supportive industries to be established in the IDZ.

However, the development of these opportunities is affected by the enabling environment in which the IDZ will be established. This refers to aspects such as transport and freight facilities, engineering services, environmental management, financial support and institutional arrangements.

The IDZ is by nature a government-driven initiative, which means that it is a long-term initiative with substantial economic benefits over the long-term. This implies that the government will have to sponsor / fund such a development.

The Residual / Highly Simplified Initial Return Model is a conventional Land-to-Stand approach that was followed. An IDZ does not necessarily work according to this principle. The Residual / Highly Simplified Initial Return Model (refer to **Table 8.1**) is included within this section purely for illustrative reasons. There are several other models that could be followed in terms of which the IDZ can dispose of land. This Land-to-Stand model (Residual Model) was included in order to simplify the extended take-up period, but a Discounted Cash Flow Analysis must be done in detail within the next phase (i.e. the Feasibility Phase).

Table 8.1 Residual / Highly Simplified Initial Return Model

PROFORMA DEVELOPMENT INVESTMENT ANALYSIS (2009 NPV)			
Industrial Scenario - 10-15 year forecast take-up rate			
Sales Revenue			R14 220 000 000
Industrial and Automotive			
Land size (sqm)	20 000 000		
Stands 500 – 10 000sqm	50%		
Land parcel for smaller stands	10 000 000		
Rate/sqm	797		
Revenue - smaller stands	R7 970 000 000		
Stands 10 000sqm+	50%		
Land parcel for smaller stands	10 000 000		
Rate/sqm	625		
Revenue - larger stands	R6 250 000 000		
Selling Costs			R6 996 000 000
Advertisement & Commission	R1 066 500 000	7.5%	
Land cost - agricultural with industrial potential	R188		
Land & Associated Costs	R4 687 500 000		
		R5 754 000 000	
Services			

Water, Electricity, Sewerage Reticulation	R1 062 000 000		
Roads	R50 000 000		
Planning, Engineering, related professional fees	R100 000 000		
Bulk Services Contributions	R20 000 000		
Walling & Security	R10 000 000		
		R1 242 000 000	
Total Cost:			
Total Conservative Gross Profit Estimation Before Tax & Transfer Fees			R7 224 000 000
Transfer fee	5%	R344 000 000	
Total Conservative Profit Before Tax			R6 880 000 000
Return on Investment			48.4%

Source: Demacon, 2009

The Residual Model takes the extended take-up period (10 to 15 years) into account. This model illustrates that government sponsorship will be needed in terms of infrastructure, logistics etc. Working capital for port infrastructure, logistics etc. should thus be funded / sponsored by the government. In terms of the take-up period of industrial development, it will be over the long term, due to the fact that location decisions, relocation decisions etc. by the investor takes a long time.

In terms of the Model, the water, electricity and sewage services etc. is in terms of the bulk services only and internal reticulation are not included here. This Model, however, gives a first order indication of the possible cost and services needed and will need to be further investigated within the next phase – Feasibility Phase and Development Plan (i.e. financial models and strategy).

The motive behind IDZs is for the greater economic good in terms of the long-term net economic benefits and is NOT primarily about generating profit from real estate sales. Important to consider is that many targeted investors will be of a foreign nature and do not regard industrial land as an investment per se.

Nevertheless, the aforementioned model affirms that land could be released at significant discounted rates to at least cover the initial basic capital investment cost for land acquisition, bulk infrastructure, security and logistics.

Given the international investment climate and the Rand / Euro exchange rate, the cost of land in South Africa is not a major deal breaker i.e. these transactions are relatively insensitive to our fairly affordable land costs.

✓ **Current cost of land (industrial and agricultural) within the Saldanha Bay area**

In terms of the cost of land within the Saldanha Bay area, the following was determined:

- Prices for light industrial stands vary between R625m² to R969m². The smaller stands of 250m² to 2 000m² are approximately R625m² and the bigger stands of 4 422m² are approximately R969m² and higher.
- The price of raw agricultural land is estimated to be between 20% and 30% of the abovementioned prices, but it is difficult to estimate. The estimation of prices all depends on the provision of services on the specific land etc.

Demacon conducted a market report in respect of the West Coast region comprising of the towns of Saldanha Bay, Vredenburg, St Helena Bay, Hopefield, Paternoster, Langebaan and Jacobs Bay (*refer to Annexure B: West Coast Property Market Report, 2009*).

✓ **What can be expected on the investment front**

South Africa has made her debut in the 2007 Foreign Direct Investment (FDI) Confidence Index at 18th place. South Africa joins the Gulf States as newcomers to the index as corporate investment increasingly targets developing nations (*FNB, 2008*). In sum, signs for Foreign Direct Investment in the short term are generally looking much better. It does, however, recognise the following six problem areas within South Africa.

- **Uncertainty or “the confidence factor”**
This is interpreted as insecurity over property rights and is a statistically significant factor, widely reported in investor surveys. However, the magnitude of the impact of uncertainty on investment is difficult to gauge. Uncertainty over government policy is also cited – particularly in respect of small firms. Negative perceptions are by no means unique to South Africa – **country risk** is a major factor for all Emerging Markets (Ems). A survey in the Economist places South Africa in the **middle of the Ems in terms of perceived risk** – between Venezuela and India.
- **Crime**
This is found to be significant in most surveys. The World Bank survey found that 95% of firms perceive crime to be a serious constraint to growth. **South African firms were spending far more on crime prevention than even the high crime countries of Latin America**. However, a large survey of senior executives from global companies found that while they perceived that there is a problem of crime in South Africa, for the vast majority of them; crime was not the deciding factor in their investment decision.
- **Skills Shortage**
Over 80% of firms experience difficulties in recruiting skilled workers: managers, professionals and skilled technical workers. Foreign firms complain persistently about problems with regard to securing immigration rights for skilled persons.
- **High user cost of capital**
High real interest rates retard investment and, more particularly, domestic investment. However, retained earnings are more important as a source of investment finance – although this is less true for SMMEs.

○ **Labour Regulations**

Particularly larger firms are constrained by the “hassle factor”: the time and energy of “doing business” with the unions or fulfilling government requirements. For the larger firms, this is much more significant than wage levels. The **inflexibility of the labour market** – the difficulties of laying off workers and complying with employment equity legislation – is seen by global corporates as a very serious obstacle to investment.

○ **Growth**

The absence of strong growth, combined with a small market size, is almost certainly the major factor retarding investment. It is statistically a far more powerful influence on investment than the cost of capital or certainty. Market size and growth are particularly the principal drivers in the decisions of global corporates.

Amongst the factors that feature strongly in retarding investment are:

- Incidence in labour disputes
- Wage rates – this is more ambiguous and is a factor of SMMEs
- Impact of trade openness.

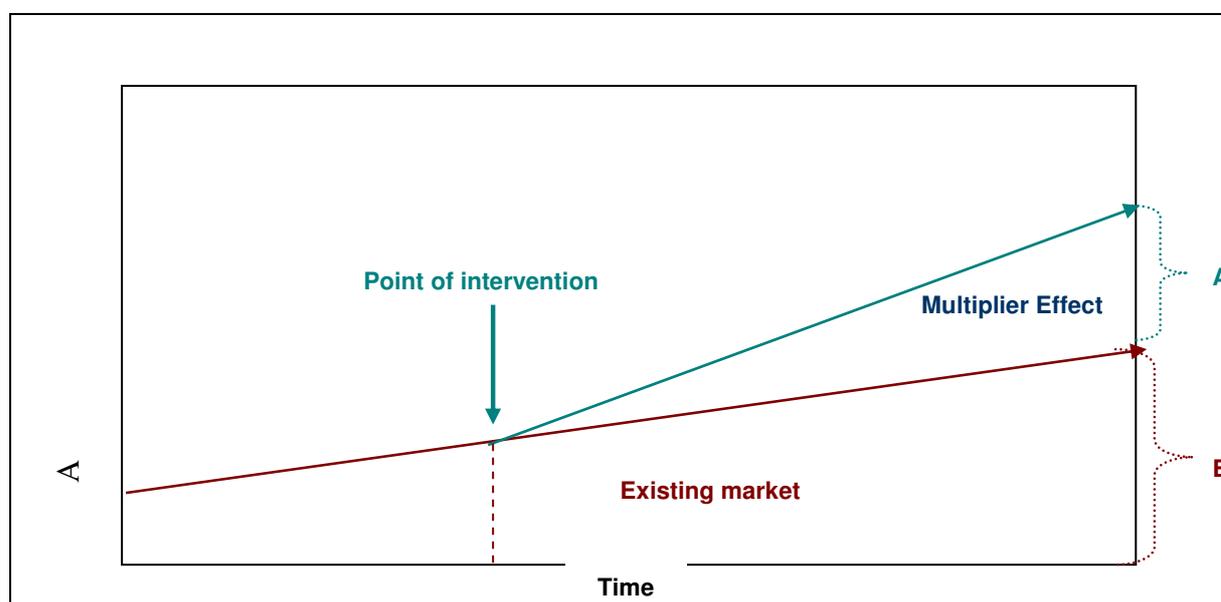
8.4 ECONOMIC IMPACT ASSESSMENT

This section provides the results of an economic impact modeling exercise performed by Demacon, based on the proposed development concept and quantities. The economic impact is shown in terms of the direct, indirect and total economic effects that the capital investment and operational expenditure of the development will induce in the economy. Economic Impact Modelling for all industries (heavy and light) as well as Economic Impact Modelling in terms of only light industries will be undertaken.

8.4.1 Economic Impact Modelling

The following figure conceptually illustrates the economic impact that the proposed development could have on the local economy in terms of additional GGP.

Figure 8.2 Economic impact of the development



The input-output model depicts economic relationships between different components of an economy by identifying monetary flows (expenditures, receipts) between various units. The relationship between the initial spending and the total effects generated by the spending is known as the **multiplier effect** of the sector, or more generally as the **impact** of the sector on the economy as a whole.

Impacts are measured in terms of the following:

- ✓ **Business Sales** refers to the value of new business sales (turnover) generated in the economy as a result of the proposed new development.
- ✓ **GDP** refers to the value of all final goods and services produced during a one year period within the boundaries of a specific area as a result of the proposed new development.
- ✓ **Total employment** reflects the number of additional jobs created by economic growth due to the proposed new development. Note that the public costs of attracting these employment opportunities, as well as the quality thereof, are not necessarily reflected.

Final demand (Y) can be presented by the following formula:

$$Y = C + I + G + (X - Z) \text{ where:}$$

- C: Private consumption expenditure
- I: Gross domestic fixed investment
- G: Government consumption expenditure
- X: Exports
- Z: Imports

Table 8.2 Schematic Presentation of the Input-Output Table

	Intermediate Outputs	Final Demand	Total Production
Intermediate Inputs	Quadrant I	Quadrant II	
	x11 x12	C1 G1 I1 IC1 E1	X1
	x21 x22	C2 G2 I2 IC2 E2	X2
	.	.	.
	xn1 xn2	Cn Gn In ICn En	Xn
M11 M12	MC MG	Mn	
Primary Inputs	Quadrant III	Quadrant IV	
	A1 A2		A
	B1 B2	VC VG VI _{VC} VE	B
T1 T2		T	
Total Production	X1 X2	C G I IC E	Z

Both the intermediate inputs as well as intermediate outputs for the different production sectors are shown in **Quadrant I**. This quadrant is usually referred to as the transaction table or transaction matrix and is an indication of the transfer of goods and services between the industrial sectors for production purposes.

The different final demand components as applied in the input-output table are shown in **Quadrant II**. Components of final demand are private consumption expenditure (C), government consumption expenditure (G), gross domestic fixed investment (I), change in inventories (IC) and total exports (E).

Quadrant III represents the demand for primary inputs by industrial sector. The elements of primary input, which are referred to are remuneration of employees (A), the gross operating surplus (B) as well as net indirect taxes (T).

Quadrant IV is that portion of primary input, which is part of final demand.

The linkage effect between the various sectors in the transaction matrix can be presented by x_{ij} , which shows the flow of goods from sector i to sector j. Subsequent paragraphs summarises results of the impact modeling performed for the construction and operational phases of the proposed project.

Construction Phase (Heavy and Light Industries):

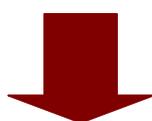
This section highlights the estimated economic impact of the envisaged R91.4 billion investment in development costs during the construction phase. These impacts are **short-term impacts**, which occur while the development is being built.

The abovementioned capital investment (approximately 2 902 hectares of industrial land with 30% coverage, equals approximately 6 094 200m² at approximately R15 000 / m², over a twenty year time period) includes the following:

- ✓ Land
- ✓ Professional fees (zoning, planning, design etc)
- ✓ Buildings
- ✓ Building services (air-conditioning, electrical, site infrastructure development, parking etc)
- ✓ Basic furnishing (excluding equipment).

Table 8.3 Economic Impact – Construction Phase, 2009 NPV

VARIABLE	DIRECT IMPACT	INDIRECT IMPACT	TOTAL IMPACT
Additional Business Sales	150,581,258,000	66,614,300,000	217,195,558,000
Additional GGP	45,207,554,000	27,331,187,000	72,538,741,000
Additional Employment	277,500	155,800	433,300



VARIABLE	CAPITAL EXPENDITURE	TOTAL IMPACT
Additional Business Sales	R91.4 billion	R217.2 billion
Additional GGP		R72.5 billion
Additional Employment		433 300

Table 8.3 illustrates that the envisaged investment in construction costs of approximately R91.4 billion, could create an additional R217.2 billion in new business sales, R72.5 billion in additional GGP, as well as an additional 433 300 once-off employment opportunities. Total impact includes direct, indirect as well as induced effects.

The following section provides economic impact modeling for the operational phase of the proposed development.

Operational Phase – Commercial Land Use (Heavy and Light Industries):

Subsequent paragraphs indicate the potential economic effect that ongoing, sustained economic activity in the area can have on the total economy after construction has been completed.

It is envisaged that these impacts can fully impact on the economy once the site has been developed to its full potential.

Table 8.4 Economic Impact – Operational Phase (Sustained Annually)

VARIABLE	DIRECT IMPACT	INDIRECT IMPACT	TOTAL IMPACT
Additional Business Sales	51,786,092,000	61,851,651,000	113,637,743,000
Additional GGP	29,325,209,000	22,426,945,000	51,752,154,000
Additional Employment	124,670	66,670	191,340



VARIABLE	OPERATIONAL EXPENDITURE	TOTAL IMPACT
Additional Business Sales	R48.8 billion	R113.6 billion
Additional GGP		R51.8 billion
Additional Employment		191 340

Table 8.4 illustrates that the estimated annual operational expenditure of approximately R48.8 billion, could create an additional R113.6 billion in new business sales, R51.8 billion in additional GGP, as well as 191 340 sustained employment opportunities. Total impact includes direct, indirect as well as induced effects.

Construction Phase – Only Light Industries:

This section highlights the estimated economic impact of the envisaged R59.2 billion investment in development costs during the construction phase, for lighter industries. These impacts are **short-term impacts**, which occur while the development is being built.

Table 8.5 Economic Impact – Construction Phase, 2009 NPV

VARIABLE	DIRECT IMPACT	INDIRECT IMPACT	TOTAL IMPACT
Additional Business Sales	97,576,655,000	43,166,066,000	140,742,721,000
Additional GGP	29,294,495,000	17,710,609,000	47,005,104,000
Additional Employment	179,800	101,000	280,800



VARIABLE	CAPITAL EXPENDITURE	TOTAL IMPACT
Additional Business Sales	R59.2 billion	R140.7 billion
Additional GGP		R47.0 billion
Additional Employment		280 200

Table 8.5 illustrates that the envisaged investment in construction costs of approximately R59.2 billion, could create an additional R140.7 billion in new business sales, R47.0 billion in additional GGP, as well as an additional 280 200 once-off employment opportunities. Total impact includes direct, indirect as well as induced effects.

The following section provides economic impact modeling for the operational phase of the proposed development, for lighter industries.

Operational Phase – Only Light Industries:

Subsequent paragraphs indicate the potential economic effect that ongoing, sustained economic activity in the area can have on the total economy after construction has been completed.

It is envisaged that these impacts can fully impact on the economy once the site has been developed to its full potential.

Table 8.6 Economic Impact – Operational Phase (Sustained Annually)

VARIABLE	DIRECT IMPACT	INDIRECT IMPACT	TOTAL IMPACT
Additional Business Sales	33,557,388,000	40,079,870,000	73,637,258,000
Additional GGP	19,002,736,000	14,532,660,000	33,535,396,000
Additional Employment	80,790	43,200	123,990



VARIABLE	OPERATIONAL EXPENDITURE	TOTAL IMPACT
Additional Business Sales	R31.6 billion	R73.6 billion
Additional GGP		R33.5 billion
Additional Employment		123 990

Table 8.6 illustrates that the estimated annual operational expenditure of approximately R31.6 billion, could create an additional R73.6 billion in new business sales, R33.5 billion in additional GGP, as well as 123 990 sustained employment opportunities. Total impact includes direct, indirect as well as induced effects. The following section provides a synthesis of preceding sections.

8.5 SYNTHESIS

The following tables (**Table 8.7 and 8.8**) provide a synthesis of economic impact modeling results, for the construction as well as the operational phases of the envisaged R91.4 billion investment, as well as the R59.2 billion investment for lighter industries.

Table 8.7 Synthesis of Economic Impact Modeling Results – Heavy and Light Industries

VARIABLE	INPUT VALUE	TOTAL IMPACT
Construction Phase (Once-off)		
Additional Business Sales	R91.4 billion	R217.2 billion
Additional GGP		R72.5 billion
Additional Employment		433 300
Operational Phase (Sustained Annually)		
Additional Business Sales	R48.8 billion	R113.6 billion
Additional GGP		R51.8 billion
Additional Employment		191 340

The proposed development could, in its first phase (assuming an approximated third of the total development), **more than double** the size of the **district economy's GDP**. If the **proposed development were not to occur**, the **above benefits** in terms of additional business sales, GGP and employment, would be **lost to the local economy**.

Table 8.8 Synthesis of Economic Impact Modeling Results – Only Light Industries

VARIABLE	INPUT VALUE	TOTAL IMPACT
Construction Phase (Once-off)		
Additional Business Sales	R59.2 billion	R140.7 billion
Additional GGP		R47.0 billion
Additional Employment		280 200
Operational Phase (Sustained Annually)		
Additional Business Sales	R31.6 billion	R73.6 billion
Additional GGP		R33.5 billion
Additional Employment		123 990

The following chapter provides development recommendations as well as the way forward.

SECTION 9 RECOMMENDATIONS & WAY FORWARD

9.1 INTRODUCTION

The purpose of this chapter is to formulate recommendations and a way forward for industrial development / establishment of an IDZ within the Saldanha Bay municipal area. The section will start off with how a region should go about developing a Development Zone.

9.2 HOW DOES A REGION GO ABOUT DEVELOPING A DEVELOPMENT ZONE?

One mechanism can be to **create a caucus group structured as an implementing authority or as an association under Section 21**. The objectives of this group are to solicit cooperation and coordination from DTI as well as establishing the basic concept and core principles behind the project. This **group would also bring together and commit the key stakeholders at all levels** (political support is necessary to make the IDZ successful). Once project interest and commitment is established, then **fund raising can be initiated** to cover the project start-up costs and feasibility determination. Additionally, a **Project Director** is named to direct the project activities.

Once the project has moved forward, then a **second step could be the formation of a development company**. This company functions as a profit oriented development holding company that establishes the developmental parameters for the project. It **applies for the Development Zone license**. The company would coordinate the development of off-site infrastructure development with the competent governmental entities at all levels.

All Development Zone operation and promotion should be done by private sector development groups. In the event that the development corporations are public sector share holdings, then they are recommended to develop concessions with private developers for the development, promotion and operation of the IDZ.

The off-site infrastructure will be the responsibility of the government through its corresponding Departments, Parastatals and Development Banks. The Development Zone developers are responsible for the respective on-site infrastructure development. The developers normally provide the following types of services to the IDZ tenants:

Normal Services:

- ✓ Security services
- ✓ Personnel recruitment assistance
- ✓ Landscape and maintenance of common areas, green areas and buildings
- ✓ Waste water treatment
- ✓ Waste pick-up and disposal
- ✓ Custom facilities
- ✓ Bank and post office

Optional Services:

- ✓ Day care child care services for working mothers
- ✓ Recruitment and screening services
- ✓ Medical clinic

- ✓ Building and office cleaning services
- ✓ Construction services
- ✓ Customs broker
- ✓ Travel agent
- ✓ Business centre facility
- ✓ Access to satellite earth station high speed communication nodes (*DTI, 2004*).

The Customs Secure Area

One of the main elements of an IDZ, which will have a significant influence on the logistic arrangements of investors, is the location of a Customs Secure Area (CSA) within the boundaries of the IDZ. This is an area in which special customs legislation applies, in which the CSA fulfils the role of an export country. The legal and operational issues will be made by the Commissioner of the South African Revenue Service in terms of section 120 of the Customs and Excise Act. The established IDZ customs office has the following responsibilities:

- ✓ Enforcement of physical security measures;
- ✓ Inspection of incoming merchandise during unloading;
- ✓ Inspection of outgoing merchandise during unloading;
- ✓ Inspection of IDZ user inventories;
- ✓ The maintenance of in and outgoing product records and
- ✓ The processing and approval of custom arrangements within 24 hours from the moment that the relevant documents are received.

9.3 CRITICAL SUCCESS FACTORS & GUIDELINES

Some of the first steps needed to be taken, in terms of the establishment of an Industrial Development Zone, are to have support networks in place. This is as follows:

- ✓ **Obtain buy-in:** The purpose is to devise the most appropriate ways and means of obtaining **buy-in and support from all the stakeholders** in a given IDZ. This is regarded as a vital aspect of any study and to ensure that acceptance and involvement is attained, the expertise and skills of a communication specialist should be utilised. The focus should be on attaining buy-in from the industry role-players, but also to attract new investment and development, thus “*selling*” the IDZ concept as a viable concept.
- ✓ **Stakeholder contact-making:** Utilising an inventory of stakeholders, representatives for a development company must be identified. Criteria applied in the identification of these representatives include sectoral specialisation and representation of sectors; technical knowledge; institutional and interest group representation; Provincial Government departments; National Government; organised labour; organised business; local authorities, development institutions and observers.
- ✓ **Sponsorship:** International case studies have shown that the success of the buy-in process is dependent on the procurement of a sponsor. This sponsor serves the purpose of driving the process until an appropriate development company is established. Thereafter, the sponsor provides financial and other support to the company. Likely candidates for the role of sponsor are the National Government, Provincial Government, Local Authority, NGO's, other development bodies, the

private sector (specifically possible investors within the IDZ), or a combination of the above in the form of Public-Private-Partnerships (PPP).

- ✓ **Participation:** In general, the development company acts as a mouthpiece where problems and challenges facing the IDZ are aired. The company must keep abreast with local and international trends occurring in similar IDZ and clusters, specifically with regards to technology advances, consumer trends, changes in demand, etc. Furthermore the company should act as the central body in identifying solutions to the abovementioned problems and challenges and it must act as implementation agent in applying new techniques and development projects within the IDZ.
- ✓ **Networking:** An additional method of creating buy-in and encouraging participation is by developing a business network program. It is generally accepted that a typical IDZ is largely comprised of a number of smaller supporting networks. These networks are usually a number of production networks, one or more marketing networks, a technology development network and a technical centre network, amongst others. **Networks** are fast becoming a key business tool for small and medium-sized companies to work together to boost their bottom line. Also known as strategic alliances or partnerships, these associations can take many forms and are used to achieve, more specifically, short to medium-term business objectives. Whether the objective is to seek new overseas markets or looking for partners to share sophisticated technology, a successful alliance can offer that extra edge in an increasing competitive world.
- ✓ A high level of **innovation** has also been identified as one of the key performance indicators marking international special development zones' success. Innovation is a concept that pervades every aspect of the economy – from education to social traditions and mindsets, employee reward systems and government support. Although it is not easy to formulate an effective prescription to stimulate innovation in the economy, some measures should be incorporated to stimulate innovative ideas.

There is thus a structural shift in the pattern of world trade away from commodity production and raw material intensive manufactured goods more towards knowledge-intensive goods and services, focusing on innovation and knowledge-based economies. This includes not only the establishment of effective information distribution and communication facilities and services, but also encouraging and supporting industries to embark on product research and development (i.e. new product applications and more efficient production methods).

Apart from creating an important economic impetus into the local, provincial and national economies, the Saldanha IDZ should be driven to achieve a strong international orientation by increasing its **international competitiveness**. This can only be done by applying international best-practice parameters to the IDZ.

The development proposed for the IDZ should contribute to economic **resilience**, by reducing its vulnerability. Investment can best be catalysed through the establishment of one or more **anchor tenants** that can contribute to the establishment of agglomeration advantages. This will result in a more conducive environment for industrial and service development.

The IDZ should be characterised by the provision of **world-class infrastructure** to investors. This infrastructure does not only include the physical infrastructure, such as roads

and the harbour, but also “soft infrastructure”, such as IT facilities and e-commerce support to industrialists and service providers.

An investment plan should be developed for the IDZ (to be developed in next phases) that identifies key issues that should be addressed in the **marketing** of the IDZ. The success of the initiative will almost entirely depend on the success of marketing the incentives and opportunities to potential investors.

Addressing the **logistical needs** of investors will play an important role in promoting the image and competitiveness of the IDZ to target markets. Strong emphasis should therefore be placed on the logistics environment as it relates to the different industries to be established within the IDZ.

Apart from becoming a possible manufacturing centre in the country, the Saldanha IDZ could also develop into an ancillary **innovation hub**, where a lot of energy is focused on the development of new or improved products and services, while catering for the existing needs of the markets. This would give the Saldanha IDZ a niche role and function.

To summarise, the following issues were identified as being crucial for the efficient implementation of any IDZ development project and initiatives:

- ✓ There is a need to streamline the relevant **procedures and regulations** for the application and implementation of projects, as well as the combination and coordination of the efforts and responsibilities of the involved institutional, facilitation and research organisations. This can be done by the establishment of an IDZ development team or task teams, headed by the development company, which will be responsible for the ongoing planning, monitoring and implementation of the different projects for the IDZ, including the securing of foreign investments, infrastructure design and building and marketing. The cooperation of the Municipality should be obtained in order to ensure more fast-tracked planning and implementation procedures (such as business registration), which will serve as incentives for potential investors.
- ✓ Any development implemented to the **Port of Saldanha** will depend on its function in terms of the national port programme. It is the view of the National Ports Authority that a sufficient, constant flow of products must exist to justify further port expansion plans. On the other hand, however, the Saldanha Port must serve as one of the main incentives for any industry and especially anchor tenants to locate within the IDZ. The port must serve as incentive for industries that require fast transport and fast delivery times as the port forms the backbone of the IDZ initiative.
- ✓ The implementation of the IDZ will furthermore have a large influence on the provision of **engineering services**, such as access and distribution roads, railway lines, electricity and water, sewerage and industrial refuse removal. The provision of services at sufficient volumes and quality will also act as major incentive for the attraction of industrial investment to the IDZ.
- ✓ The IDZ should, as far as its power and authority allows, assist potential investors in addressing their **logistical needs** to maximise and streamline production procedures. These needs include material procurement, freight transport services and contracting, the provision of state-of-the-art information technology (telecommunications, e-commerce services and IT facilities, networking services and

call centres, amongst others) and the improvement of customer care services. A contribution of IDZ management in addressing these needs is the establishment of a one-stop centre for the provision of necessary information of incentive schemes, application procedures, contractors, training services and market-related information. The centre can also provide additional services such as conference facilities for IDZ tenants.

- ✓ IDZ management will have to compile a comprehensive **incentive package** for potential investors. This package can include a mixture of incentives made available on local, provincial and national level. The nature of incentives can vary between the provision of serviced land, financial incentives, infrastructure, regulatory reform and streamlined approval processes. International experience indicated that incentives (whether it is financial or otherwise) could play a vital role in attracting industries to a specific location. The introduction of worthwhile incentives will therefore confirm Saldanha's dedication to economic growth and development, as mentioned previously.
- ✓ The **investment environment** must be favourable for the implementation of any investment initiative and to transform Saldanha into an international activity hub. It is evident that there are various development opportunities that can be exploited to the benefit of the IDZ. However, the enabling environment also needs to be developed in order to provide a foundation in which investments and commercial activities can be attracted to the IDZ.
- ✓ One of the most important factors for the success of the proposed Saldanha IDZ is **political support**. Without the required political support (provincial and national) and buy-in, one will not be able to successfully develop a project of this nature.
- ✓ Ensuring **sound environmental management** through an **Environmental Management Framework (EMF)** for the IDZ development (as discussed previously in Chapter 6).

Environmental Management Framework (EMF):

An Environmental Management Framework (EMF) should be conducted within the Saldanha Bay study area with the purpose of identifying environmental opportunities and constraints which could affect development of the IDZ and to assess the possible direct, secondary and cumulative impacts that could result from the IDZ. The EMF is ultimately seen as a method to improve integrated environmental and development planning, whilst enhancing the potential for sustainable development. It therefore does not replace planning and policy-making mechanisms. Issues addressed in the EMF will include the terrestrial environment, air quality, water supply, waste water management, impact on RAMSAR site, as well as noise and visual impact, waste and pollution impact, socio-economic benefits, historical, cultural and sporting interests and the planning and infrastructure environment.

The EMF is furthermore directed at addressing environmental issues early in the planning process of the IDZ and is thereby intended to both streamline and reduce the number and complexity of project-specific EIA's (Environmental Impact Assessments) that would be required later on in the development process. Resulting from this, an Environmental Management System / Plan should be drafted which will guide the IDZ operator and investors in the management of the processes that could have a detrimental effect on the environment. It should also be the intention of the Saldanha IDZ to be ISO 14001 compliant. As stated before, the Department of Environmental Affairs and Development Planning indicated that they have a budget of R350 000 which will be used for an Environmental

Management Framework (EMF) study to be compiled within the Saldanha Bay study area of which more focus will be placed on the specific designated IDZ area.

Several conditions could be identified under which the Saldanha IDZ could proceed. These include adherence to the principles of:

- ✓ The adoption of a phased development approach;
- ✓ Continuous public and stakeholder participation;
- ✓ The incorporation of natural and cultural features in to the planning process;
- ✓ The enhancement of water quality through adherence to DWAF guidelines;
- ✓ Adherence to No-Go areas (as identified in the SDF and EMF report);
- ✓ Visual assessments in the case where residential areas in No-Go sections are relocated;
- ✓ The result of the EMF must be examined in conjunction with other feasibility studies for the IDZ (the EMF and SDF must be aligned and integrated within the IDZ);
- ✓ A Strategic Environmental Management Plan should be commissioned to aid further detailed planning of the IDZ, and
- ✓ Project specific EIA's must be commissioned for each of the projects developed in the IDZ.

The initial indication of this pre-feasibility study is that there are no major constraining factors prohibiting further planning of the Saldanha IDZ, but further EIA's will have to be completed in the next phase in order to establish this. This is, however, based on the condition that the principles provided in the EMF are applied in the future planning of the Saldanha IDZ.

As it is required that each interested industry conduct an Environmental Impact Assessment, the provision and compilation of these individual EIA's can be considered as one of the incentives marketed to potential investors to locate within the Saldanha IDZ.

Industrial Ecology (IE):

Industrial Ecology (IE) is an interdisciplinary framework for designing and operating industrial systems as living systems interdependent with natural systems. It seeks to balance environmental and economic performance within emerging understanding of local and global ecological constraints. Some of its developers have called it "*the science of sustainability*".

IE supports coordination of design over the life cycle of products and processes. It enables creation of short-term innovations with awareness of their long-term impacts. It helps design local solutions that contribute to global solutions. Industrial ecology helps companies become more competitive by improving their environmental performance and strategic planning. IE helps communities develop and maintain a sound industrial base and infrastructure without sacrificing the quality of their environments. And it helps government agencies design policies and regulations that improve environmental protection while building business competitiveness.

Industrial ecology principles and methods can be used by service as well as manufacturing companies. Application of IE will improve the planning and performance of government operations, including local, regional, and national levels of infrastructure. While much of the initial work in IE has focused on manufacturing, a full definition of **industrial systems**

includes service, agricultural, manufacturing, military, public operations, such as infrastructure for landfills, water and sewage systems, and transportation systems.

Industrial Ecology is a dynamic systems-based framework that enables management of human activity on a sustainable basis by:

- ✓ Minimizing energy and materials usage;
- ✓ Ensuring acceptable quality of life for people;
- ✓ Minimizing the ecological impact of human activity to levels natural systems can sustain;
- ✓ Conserving and restoring ecosystem health and maintaining biodiversity;
- ✓ Maintaining the economic viability of systems for industry, trade and commerce.

Industrial ecology should promote the sustainable use of renewable resources and minimal use of non-renewable ones. Industrial activity is dependent on a steady supply of resources and thus should operate as efficiently as possible. Although in the past mankind has found alternatives to diminished raw materials, it cannot be assumed that substitutes will continue to be found as supplies of certain raw materials decrease or are degraded. Besides solar energy, the supply of resources is finite. Thus, depletion of non-renewables and degradation of renewables must be minimized in order for industrial activity to be sustainable in the long term.

A primary concept of industrial ecology is the study of material and energy flows and their transformation into products, by-products, and wastes throughout industrial systems. The consumption of resources is inventoried along with environmental releases to air, water, land, and biota.

One strategy of industrial ecology is to lessen the amount of waste material and waste energy that is produced and that leaves the industrial system, subsequently impacting ecological systems adversely. For instance, approximately 88% of the material in automotive catalytic converters leaves this product system as scrap. Recycling efforts could be intensified or other uses found for the scrap to decrease this waste. Efforts to utilise waste as a material input or energy source for some other entity within the industrial system can potentially improve the overall efficiency of the industrial system and reduce negative environmental impacts. The challenge of industrial ecology is to reduce the overall environmental burden of an industrial system that provides some service to society.

The concept of '*eco-industrial parks*' is the most immediate application, which aims to reconstruct industrial zones where waste or by-products of one company can be used as resources by another business; this is also termed industrial symbiosis. This systemic approach goes further than case-by-case waste exchange programmes. In general, the idea is to create '*industrial biocenoses*' around certain specific industrial activities, for example, thermal power plants, or the processing of agricultural products and that such industrial cluster would have diminished (gaseous) emissions and waste streams. The concept of '*islands of sustainability*' has emerged, extending this idea beyond the boundaries of industrial zones, towards regional thinking.

Much emphasis has been placed on research into '*industrial metabolism*', which is based on appropriate methods for a given socio-economic and geographical context to design sound industrial ecosystems, Environmental Implementation Plan (EIPs) or larger structures.

The characteristics of foreign EIPs do, nevertheless, manifest in the planning of South African Industrial Development Zones (IDZs), for instance, the Coega IDZ near Port Elizabeth. Although the concept of international EIPs is envisaged for the IDZs, the ideal has yet to become practice.

9.4 DEVELOPMENT PHASING

The development concept should be **developed in phases**. Historically, trends have shown on numerous occasions that the tendency to develop an industrial park / area in one phase could be potentially detrimental and it is more feasible to plan the development in phases to accommodate traditional take-up rates in such developments.

As indicated before, Mr Mustapha (Coega IDZ) mentioned that phasing (tight phasing) during the development of the Saldanha IDZ is very important, otherwise Saldanha will be in the same position as Coega (with huge open spaces not being utilised).

In terms of Coega IDZ (11 000ha in size) that's been operational since 1999, only 6 500ha are being utilised at the moment. In order for them to be sustainable, a take-up of 1 100ha annually must be sustained. In terms of East London IDZ (430ha in size) that's been operational since 2003, a take-up of 61.4ha annually must be sustained.

For the Saldanha IDZ, it is suggested that Option 4 would be the most suitable option over the long-term. The available vacant, developable land of 2 500ha should be secured for future development. It is suggested that tight phasing should take place and that the first phase could consist of approximately 500ha to 750ha. As this study is only a pre-feasibility study, an appropriate development-phasing plan should be developed in terms of the next phase (i.e. Feasibility phase).

The identified development thrusts, programmes and projects will be planned, implemented and coordinated based on a development-phasing plan. This plan should indicate the priorities of the different tasks and implementation steps that need to be taken.

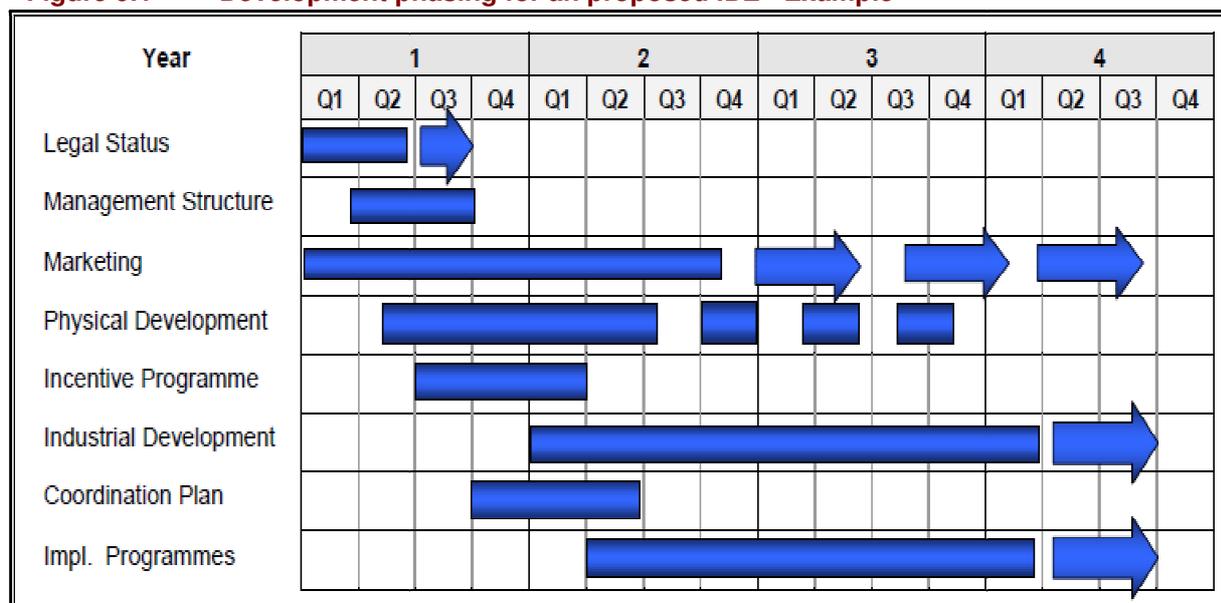
The following stages must be addressed by the development company to initiate the implementation process:

- ✓ Facilitate the **legal formalisation** of the IDZ and its management body. This includes the obtainment of a provisional IDZ permit that will provide the company with the legal status to proceed with development.
- ✓ Initiate liaison and buy-in in order to establish a formal **management body**. This will include a detailed management plan of the future company (task teams, directorates, partnership structures, etc.), the compilation of its mandate, a new development vision and objectives and the representation structure. This stage should also include the identification and securing of a financial partner for the IDZ.
- ✓ The implementation of a **marketing strategy** and lobbying process. This includes an international Investor Summit to market the IDZ in the international arena.

- ✓ The coordination and facilitation of the **physical development** of the IDZ. This process includes contracting for construction, service provision and fund securing, land allocation, ownership structures and evaluation, as well as final demarcation of the various sub-zones. This phase also includes the establishment of an Environmental Management System.
- ✓ The development of a financial support and incentive programme, as well as a streamlined and fast-tracked application and approval procedure. Zoning and land-use planning must be completed in this stage.
- ✓ The detailed planning, investigation and implementation of the **Industrial Investment Thrust**. This phase is an ongoing programme consisting of research and development, brokerage, networking and industrial planning.
- ✓ The establishment of an **implementation framework** in which the various programmes and projects can be coordinated and monitored.
- ✓ The actual implementation of the various implementation programmes

An example of the development phasing and the timeframe for a proposed IDZ is illustrated in **Figure 9.1**.

Figure 9.1 Development phasing for an proposed IDZ - Example



Source: Demacon, 2009

In order to ensure that the Saldanha IDZ will function as an integrated, unique unit, it is, however, vital that dynamic solutions be applied that promotes spontaneous development and entrepreneurship. The one or more core industries established in the IDZ will be indicative of the nature of the IDZ's economy and will determine the characteristics of the area, its location advantages and international competitiveness. This will furthermore determine the investment plan and marketing strategy to be followed (in the next phases) for the Saldanha IDZ.

9.5 RECOMMENDATIONS AND WAY FORWARD

As mentioned above, one of the most important factors for the success of the proposed Saldanha IDZ is **political support**. Without the required political support (provincial and

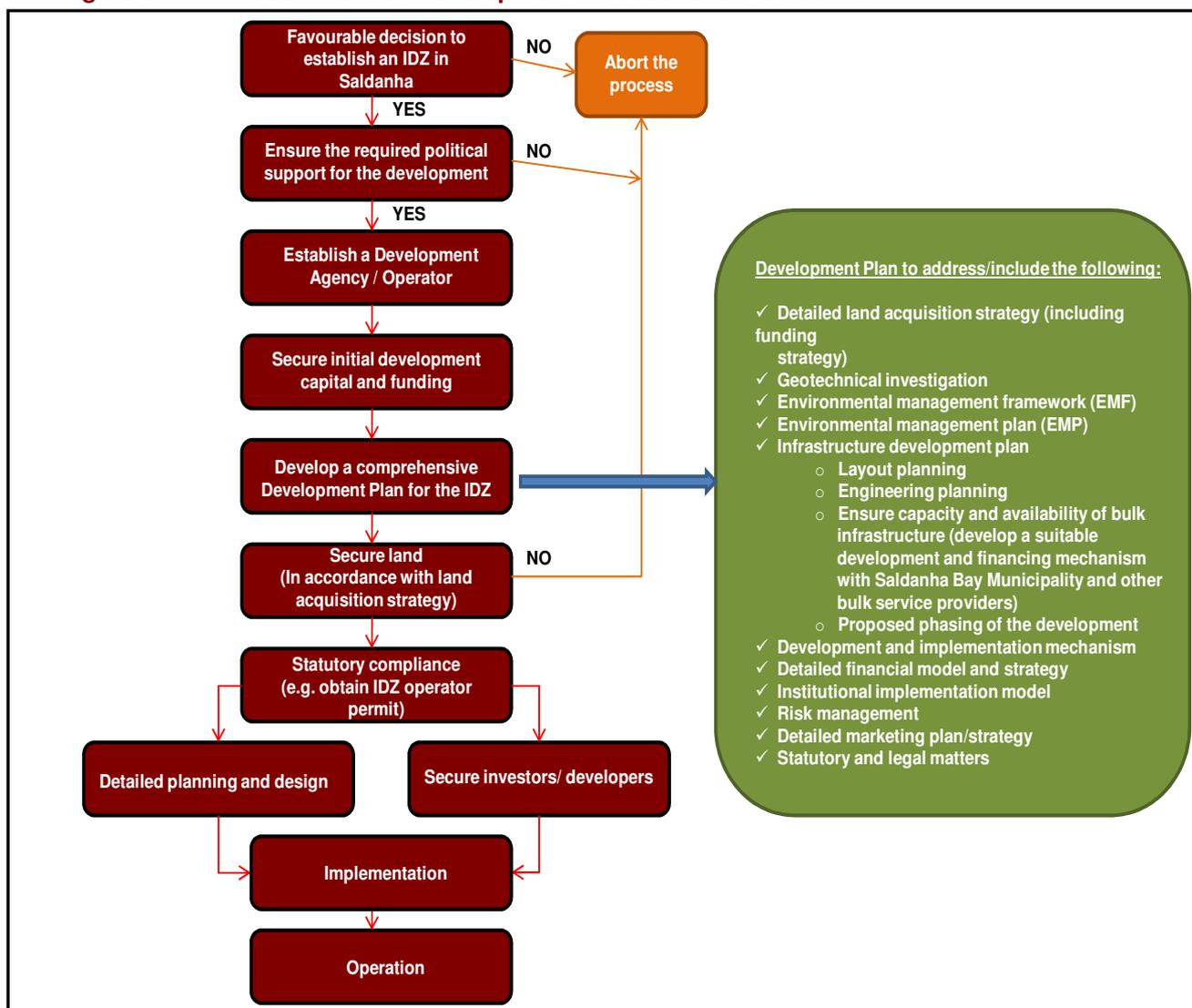
national) and buy-in, one will not be able to successfully develop a project of this nature. The most important success factors that should be in place before the Saldanha IDZ could be developed include the following:

- ✓ **Securing the required land** for development
- ✓ **Securing funding** to provide the **required infrastructure**, services and amenities
- ✓ **Securing a few anchor tenants** in the proposed Saldanha IDZ development
- ✓ Ensuring **sound environmental management** through an **Environmental Management Framework (EMF)** for the IDZ development
- ✓ Ensuring the **correct operation and management structure** and capacity

The Saldanha Bay Municipality has already started to organise themselves in terms of some of the above mentioned. Initial discussions have already taken place (between the municipality, landowners, possible investors etc.) and cooperation agreements / MOUs have been entered into, but no hard projects have been committed to yet.

The recommended development process to be followed as the way forward for the Saldanha IDZ is illustrated in **Figure 9.2** below:

Figure 9.2 Recommended Development Process for the Saldanha IDZ



The implementation of development plans relies on an appropriate enabling environment. This refers to all the development dimensions contributing towards holistic and integrated growth, investment and development.

Without the appropriate level of support structures, relating to aspects such as infrastructure, training and financial resources; economic development would not be sustainable. For this reason, the enabling environment is regarded as an important supporting, formative structure that will ensure the viability of economic investment in Saldanha. Instruments available to create an enabling environment include the following:

- ✓ The institutional framework prevalent in Saldanha;
- ✓ Land-use development in and around the IDZ;
- ✓ Supporting infrastructure (i.e. transport facilities and engineering services);
- ✓ Human resource needs and development;
- ✓ Logistics (i.e. procurement, material handling, warehousing, information systems and customer service, etc.);
- ✓ Environmental issues, and
- ✓ Available development finance.

In order to submit an IDZ application, the following requirements will be necessary:

- ✓ List of targeted industrial clusters and estimated percentage allocation of each cluster,
- ✓ A business plan of broad feasibility study, which includes broad development cost and benefit analysis of the proposed IDZ. The plan or study aims to justify the following:
 - IDZ size
 - Phasing of development
 - Funding needed
 - Operator's capability to attract target industries / sectors, investors and park locators
 - Economic and / or financial return
- ✓ Estimate the achievable value added, exports, investments, and number of jobs
- ✓ An analysis and rationale for the IDZ location
- ✓ A Master Plan including the phasing plan
- ✓ The development costs and infrastructure costs of the entire site and the phasing plan
- ✓ Anticipated issues in implementation e.g. major infrastructure issues etc. (DTI, 2004)

9.6 SYNTHESIS

Based on the pre-feasibility findings, it is clear that all indications are that an IDZ would be feasible and economically beneficial, **subject to full feasibility analysis of the identified clusters and further technical analyses**. As indicated throughout the study, Saldanha already has various significant assets that make it an ideal location for such a development, such as:

- ✓ A suitable location in terms of the Saldanha deep water port

- ✓ Vast open spaces of land suitable for development of light or heavy industry, although land is in the hands of the private sector and needs to be secured as soon as possible
- ✓ Various minerals, steel and other reserves suitable for related downstream industries
- ✓ Opportunities to develop prestige industrial sites
- ✓ Possibility to be the first IDZ within the Western Cape Province (which could consider developing and promoting green industries)
- ✓ Possibility for developing and expanding the current airport (to an international standard airport), which could lead to further opportunities and benefits of the IDZ
- ✓ The nearby areas of Cape Town, Atlantis etc., which could also provide a substantial labour force.

Saldanha IDZ would be the fourth IDZ along the South African coastline, which makes it of utmost importance in terms of various factors such as anchors, the role it will play in South Africa and on the West Coast etc. The Saldanha IDZ will be uniquely positioned and differentiated from the other IDZ's along the coastline and within South Africa. However, **political support, buy-in, funding, securing of land** and **partnerships** will be key to the successful development of the Saldanha Bay IDZ.