

Review of the Energy Demand Mapping for EGI

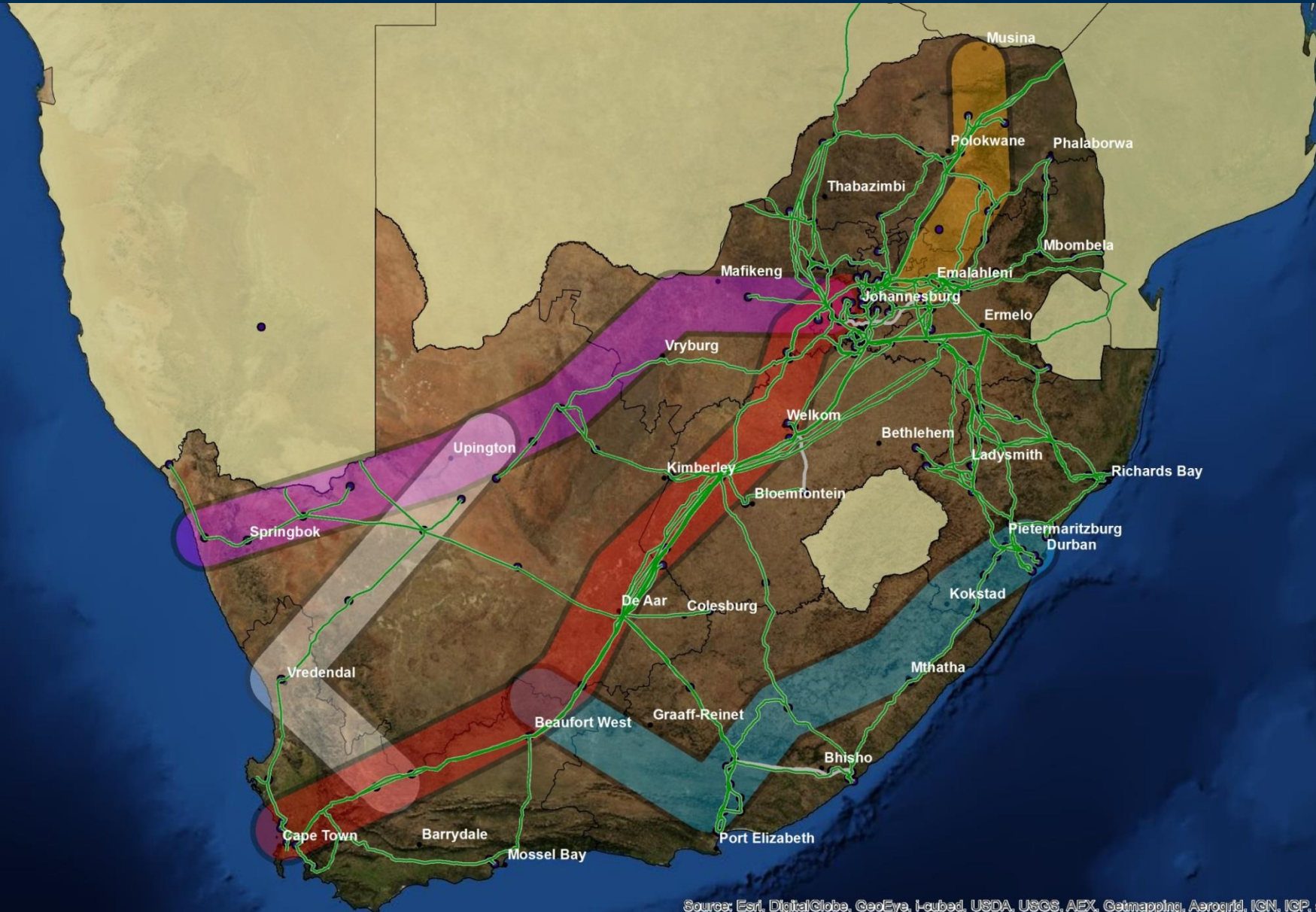
Provincial consultation: Eastern Cape Province

4 November – 28 November 2014

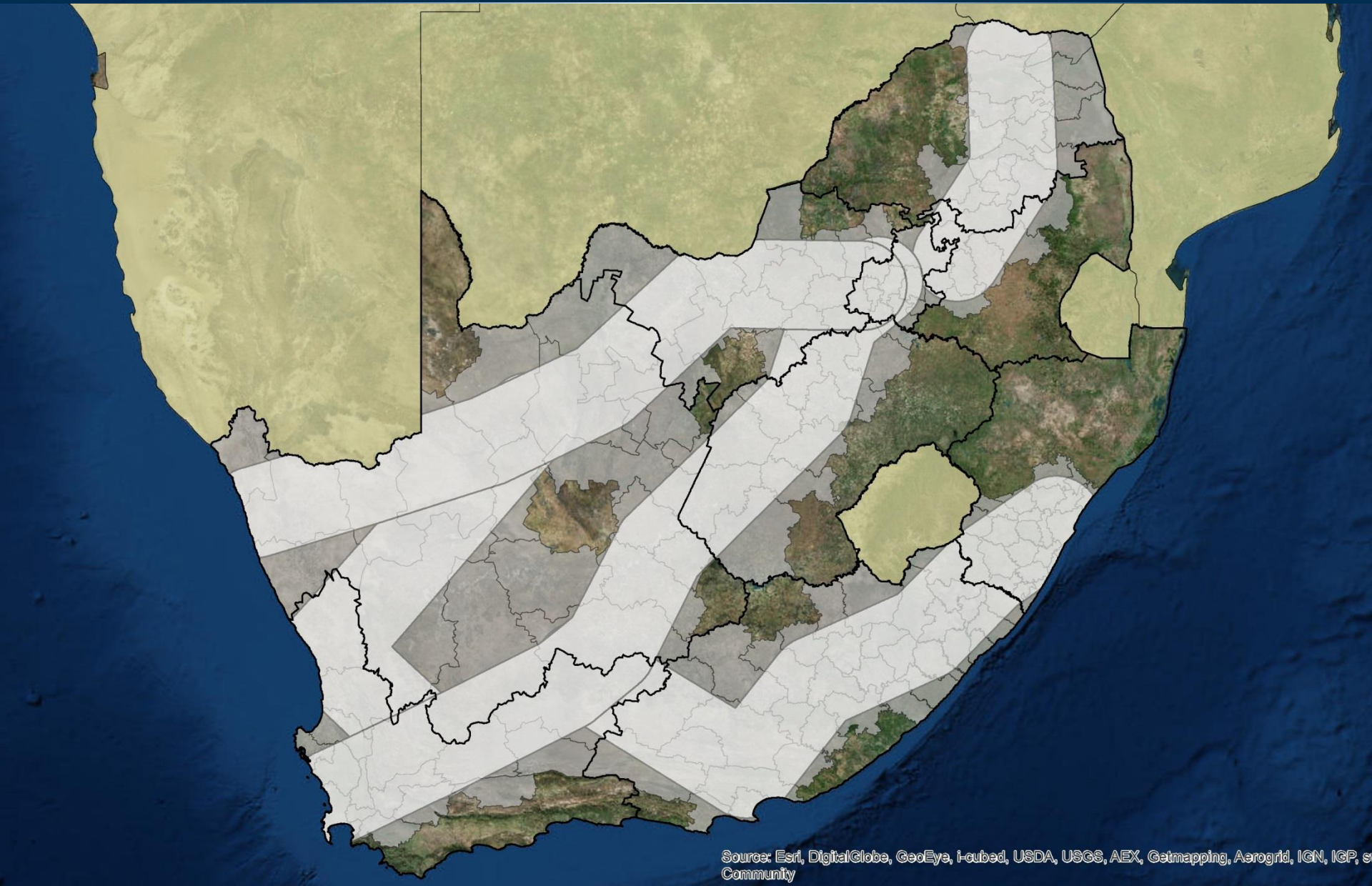
Rationale for the demand mapping exercise

- To identify future development plans and energy requirement by intensive energy users
- Strengthen and highlight the location of key proposed development areas
- To identify key economic development priorities across local, provincial and national scales
- To conduct an extensive review of municipal (local & district) and provincial planning document (SDFs and IDPs)

Current footprint and study area

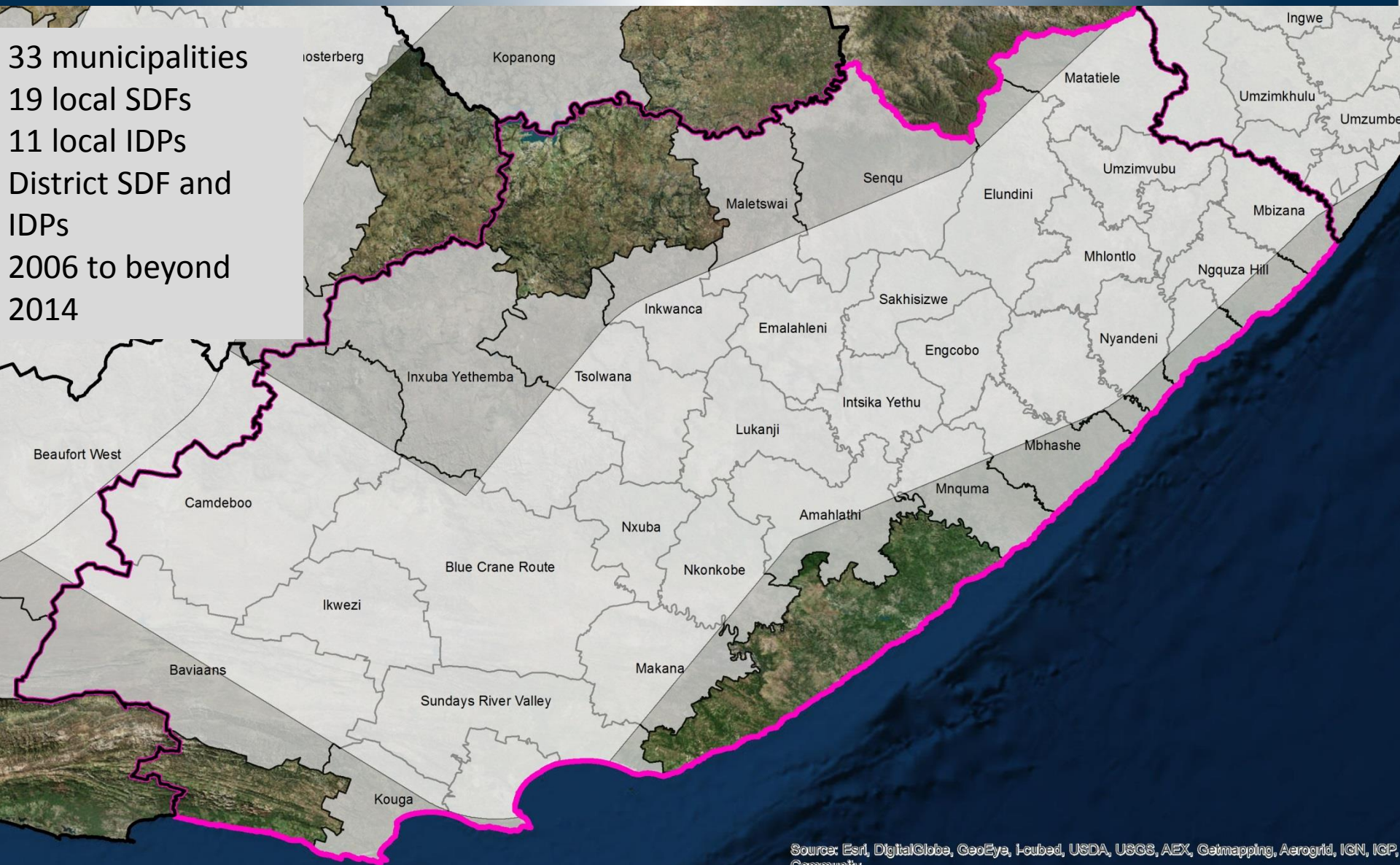


Municipalities that overlap with the corridor

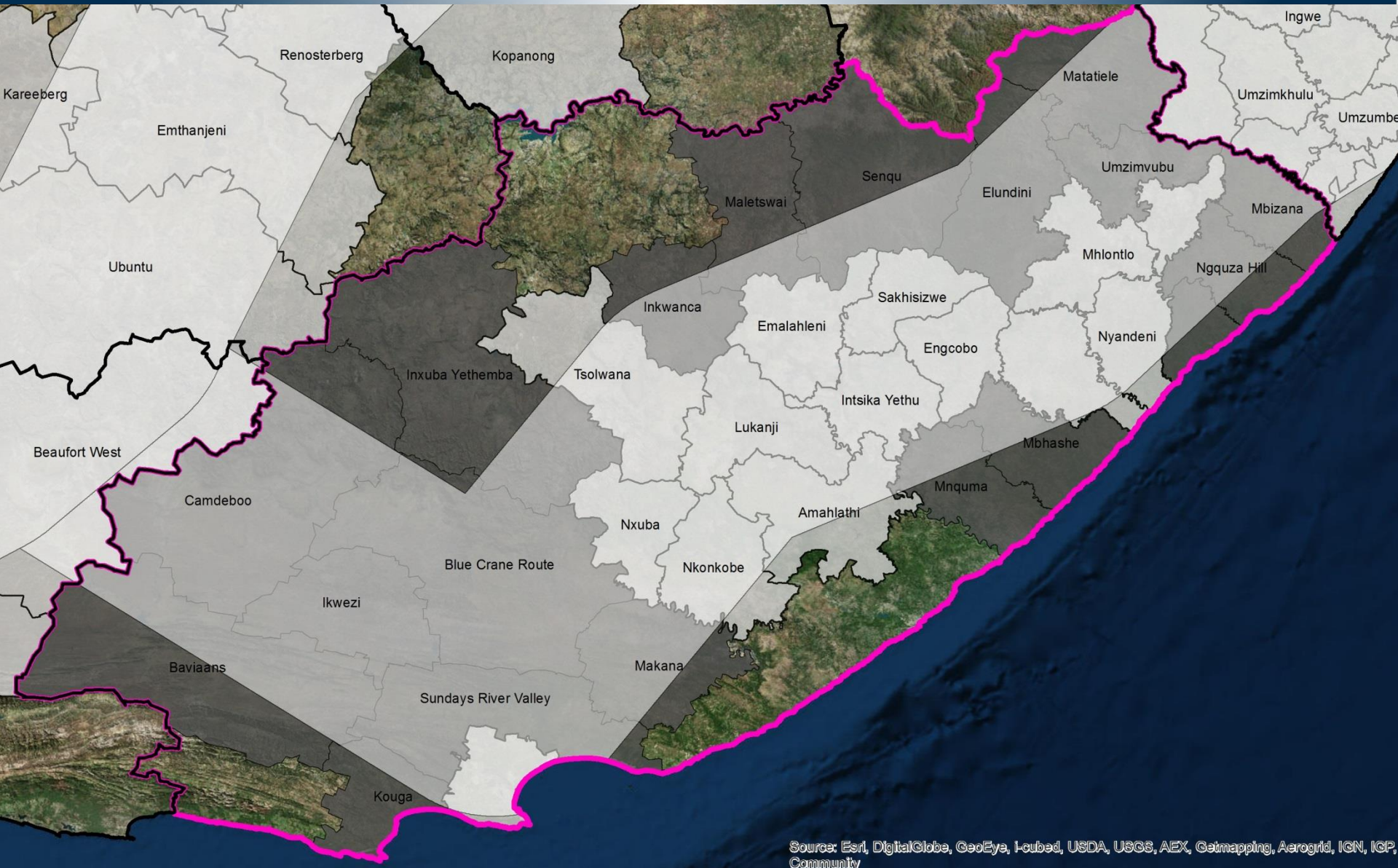


Provincial Municipalities

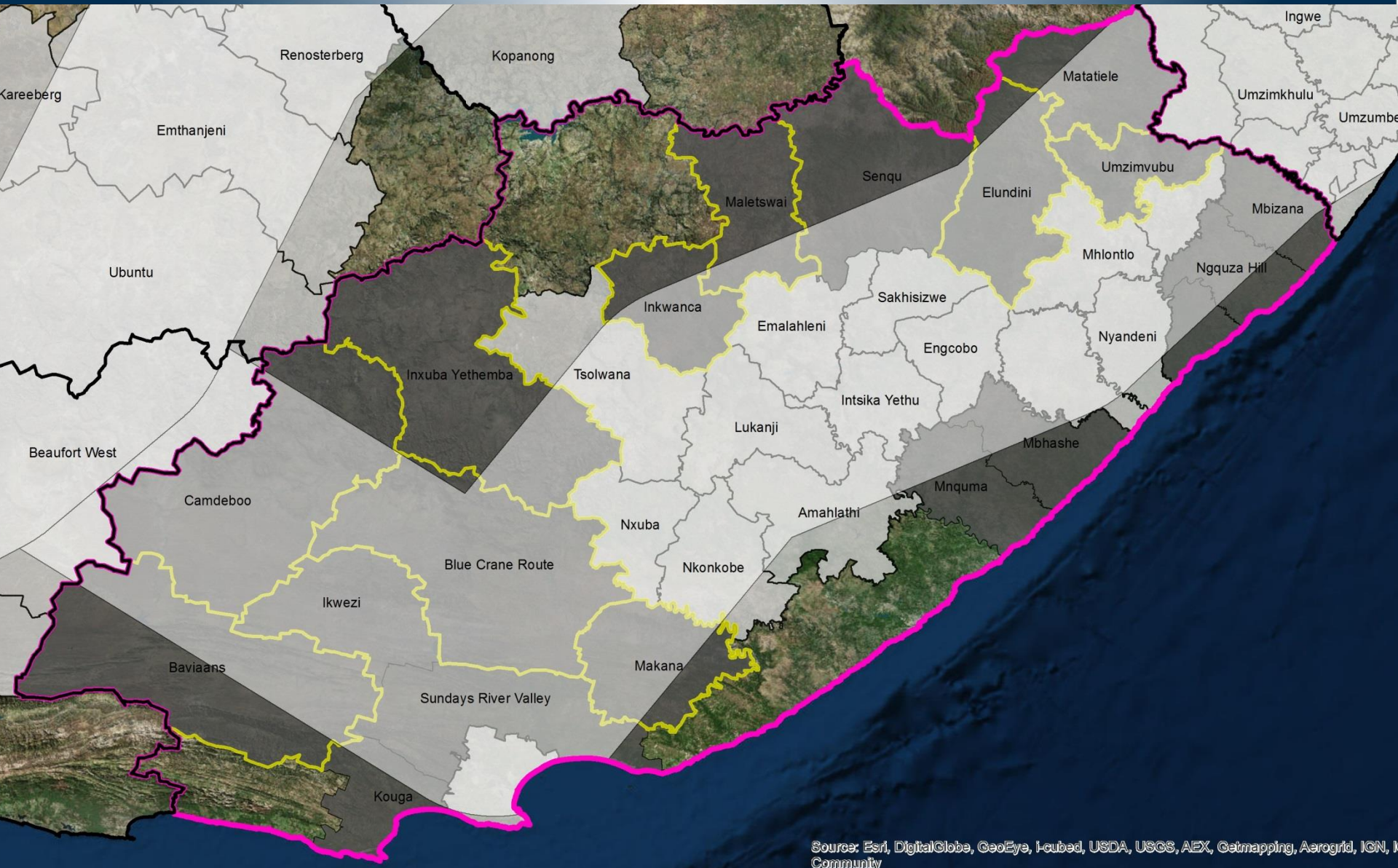
33 municipalities
19 local SDFs
11 local IDPs
District SDF and
IDPs
2006 to beyond
2014



SDF information



SDF info- no demand information



Demand mapping SDF categories

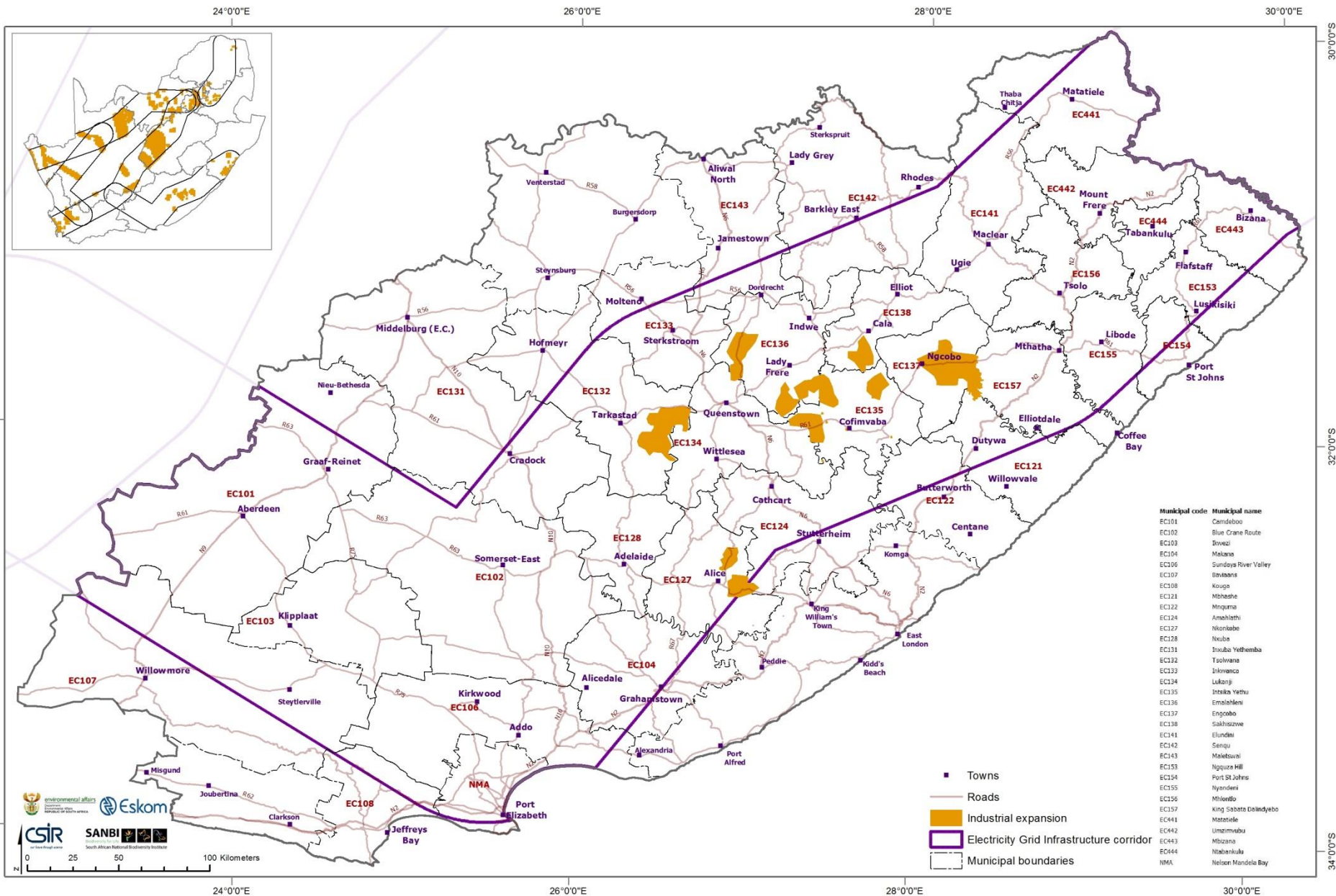
Number	Planning category	Example in SDFs	Push/Pull
2	Industrial expansion	Industrial areas-within urban edge	Pull
3	Strategic economic zones and industrial development zones	Areas outside the urban edge demarcated for special/strategic economic developments	Pull
5	Priority mining areas	Existing mining activity, proposed/potential mining activity	Pull

Metadata sheet

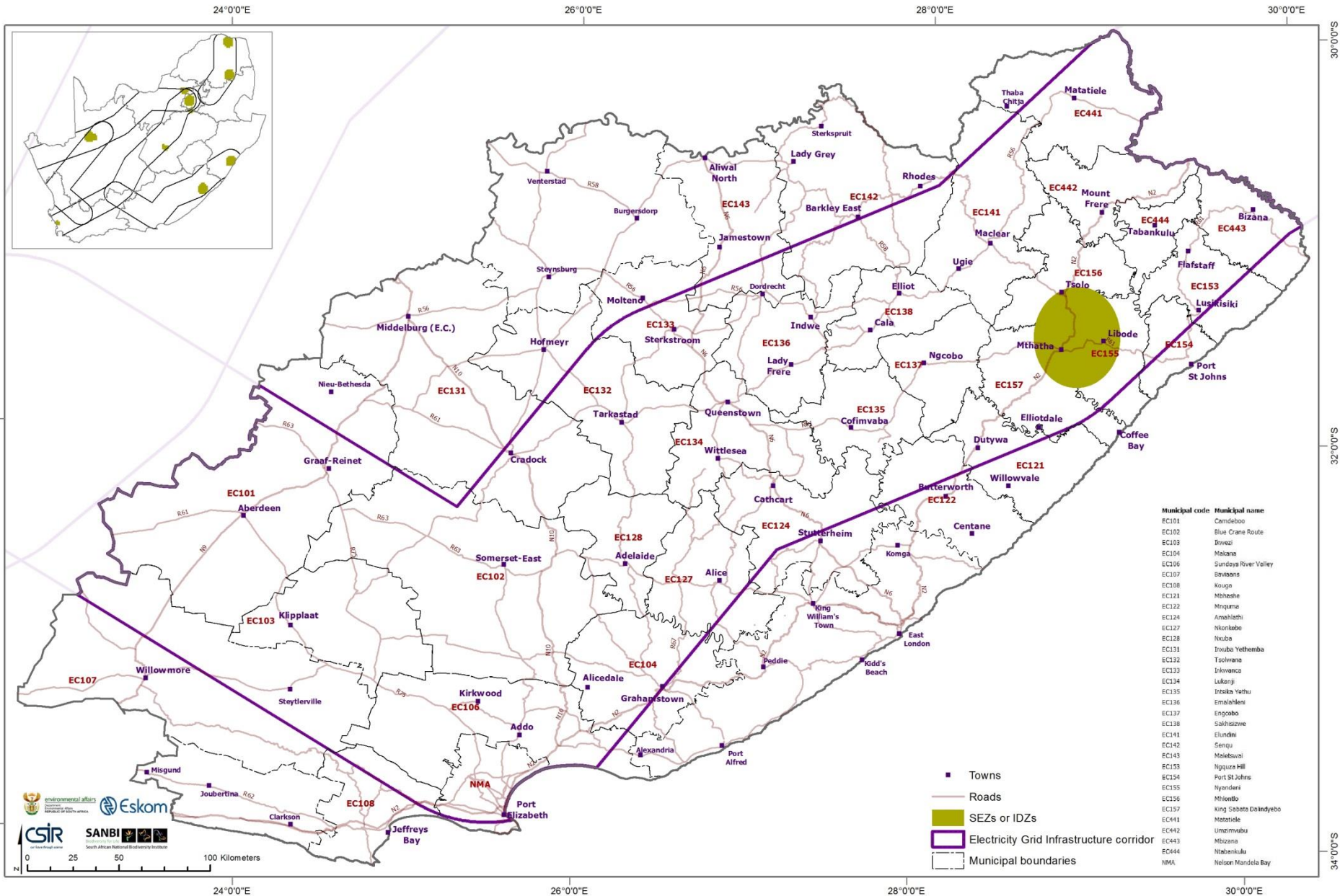
Opportunities Mapping Document-Combined 9 October - Microsoft Excel

Province	Metropolitan M	District Municipality	Local Municipality	Primary Review Document	Publication Date	Source	Secondary Review Document	Publication Date	Source
Western Cape	N/A	Cape Winelands District Municipality	Stellenbosch	Stellenbosch SDF	2010	http://www.stellenbosch.gov.za/about-us/documents/planning-and-building-	None	N/A	N/A
Western Cape	N/A	West Coast District Municipality	Swartland	Swartland SDF 2012	2012	http://www.swartland.org.za/pages/english/documents/idp-perf-management/swartland-spatial-development-	None	N/A	N/A
Western Cape	N/A	Overberg District Municipality	Theewaterskloof	Theewaterskloof SDF	2012	CONTACT MUNICIPALITY 028 2143300 083 4564064 Elizabeth de Kock; Thobeka. received via email from Thobeka Twani <ThobekaTw@twk.org.za>	Overberg District SDF	2013	http://www.odm.org.za/?page_id=85
Western Cape	N/A	Cape Winelands District Municipality	Witzenberg	Witzenberg SDF	2012	http://www.witzenberg.gov.za/publications/spatial-development-framework/	None	N/A	N/A
mpumalanga	N/A	Nkangala District Municipality	Dr JS Moroka	Dr JS Moroka Local Municipality Final Reviewed Integrated Development Plan 2014/2015	2013	http://www.moroka.gov.za/fileUpload/Final%20Reviewed%20IDP%202014-2015.pdf	None	N/A	N/A
mpumalanga	N/A	Nkangala District Municipality	Emakhazeni	Emakhazeni Local Municipality SDF Sept 2010	2010	http://www.emakhazeni.gov.za/Emakhazeni_SDF_Review_Sept_2010.pdf	None	N/A	N/A
mpumalanga	N/A	Nkangala District Municipality	Emalahleni	Emalahleni Local Municipality 2014/2015 DRAFT IDP	2013	http://www.emalahleni.gov.za/documents.html	None	N/A	N/A
mpumalanga	N/A	Gert Sibande District Municipality	Govan Mbeki	Govan Mbeki SDF 2014	2014	http://196.213.194.141/files/sdf2034.pdf	Govan Mbeki IDP	2014	http://www.govanmbeki.gov.za/files
mpumalanga	N/A	Nkangala District Municipality	Steve Tshwete	Steve Tshwete SDF 2010	2010	http://www.stevetshwetelm.gov.za/SDF/SDF_2010_DRAFT.pdf	None	N/A	N/A
mpumalanga	N/A	Ehlanzeni District Municipality	Thaba Chweu	Thaba Chweu SDF	2007/2008	Received via email from Innocent Sekgobela (townplanner@thabachweumun.gov.za; 013 235 7388). She indicates that the document is still under review.	None	N/A	N/A
mpumalanga	N/A	Nkangala District Municipality	Thembisile Hani	Thembisile Hani Local Municipality Final IDP 2011-2016	2013	http://www.thembisilehanilm.gov.za/thlm_idp_2013_2014.pdf	None	N/A	N/A
mpumalanga	N/A	Nkangala District Municipality	Victor Khanye	Victor Khanye 2011-2016 IDP final 2014-2015 review	2013	http://www.victorkhanyelm.gov.za/index.php/legislation-doc/idp	None	N/A	N/A
Free State	N/A	Xhariep	Kopanong	SDF Xhariep DM	2012	http://www.westerncape.gov.za/text/2013/April/spatial-development-framework-xhariep-district-	Free State Province SDF	2014	http://www.freestatepsdf.co.za/wp-content/uploads/2014/FSPSDF_Final_7March2014.pdf
Free State	N/A	Xhariep	Letsemeng	SDF Xhariep DM	2012	http://www.westerncape.gov.za/text/2013/April/spatial-development-framework-xhariep-district-	Free State Province SDF	2014	http://www.freestatepsdf.co.za/wp-content/uploads/2014/FSPSDF_Final_7March2014.pdf
Free State	Mangaung	N/A	N/A	Mangaung SDF	2013	received via email from Hennie Stander, GIS Administrator for the municipality (Tel: 051 405 8416; HENNIE.STANDER@mangaung.co.za)	Free State Province SDF	2014	http://www.freestatepsdf.co.za/wp-content/uploads/2014/FSPSDF_Final_7March2014.pdf
Free State	N/A	Lejweleputswa	Masilonyana	Free State Province SDF	2014	http://www.freestatepsdf.co.za/wp-content/uploads/2014/FSPSDF_Final_7March2014.pdf	None	N/A	N/A
Free State	N/A	Lejweleputswa	Matjhabeng	Free State Province SDF	2014	http://www.freestatepsdf.co.za/wp-content/uploads/2014/FSPSDF_Final_7March2014.pdf	None	N/A	N/A
Free State	N/A	Fezile Dabi	Moqhaka	Free State Province SDF	2014	http://www.freestatepsdf.co.za/wp-content/uploads/2014/FSPSDF_Final_7March2014.pdf	None	N/A	N/A
Free State	N/A	Lejweleputswa	Nala	Free State Province SDF	2014	http://www.freestatepsdf.co.za/wp-content/uploads/2014/FSPSDF_Final_7March2014.pdf	None	N/A	N/A

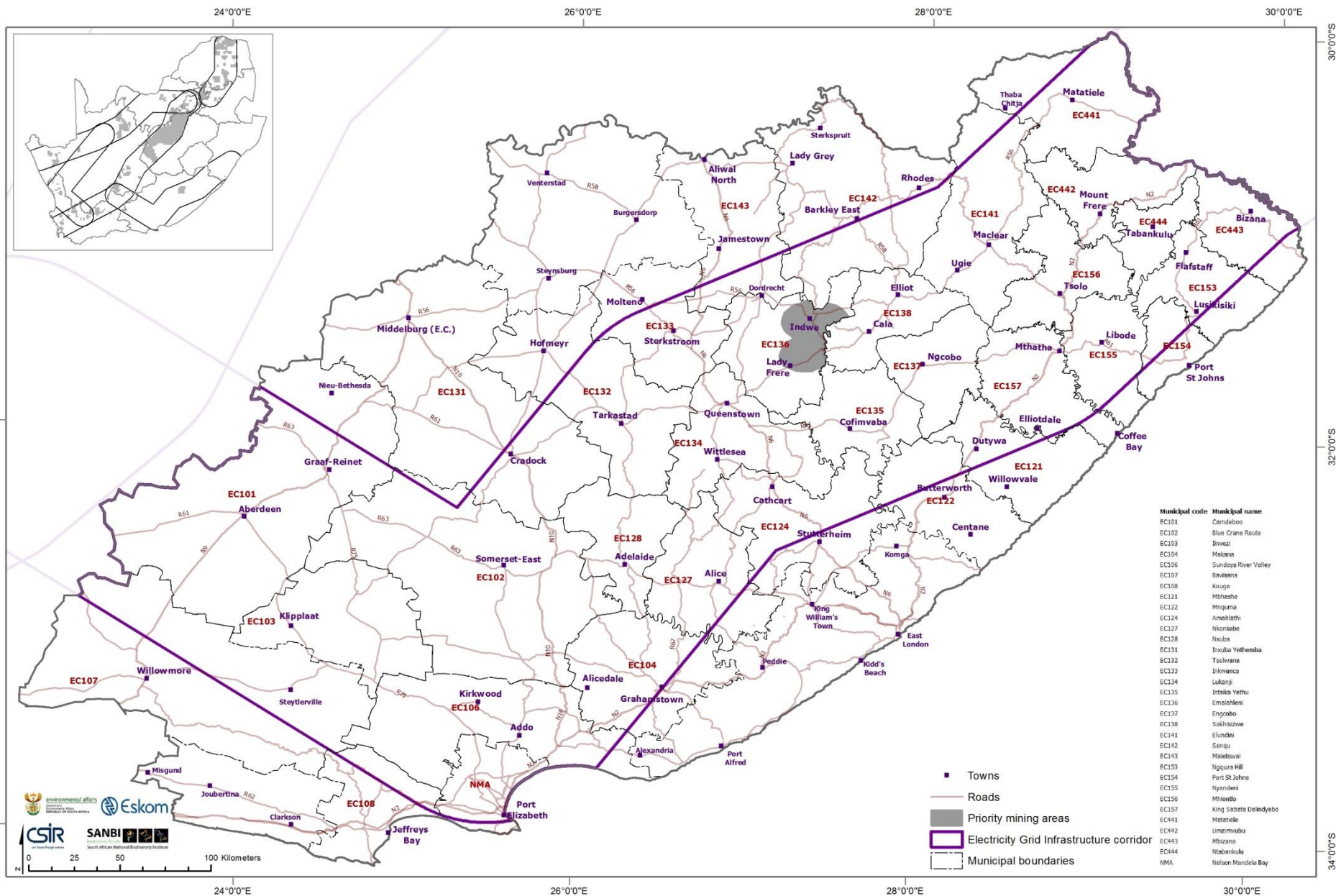
Industrial expansion



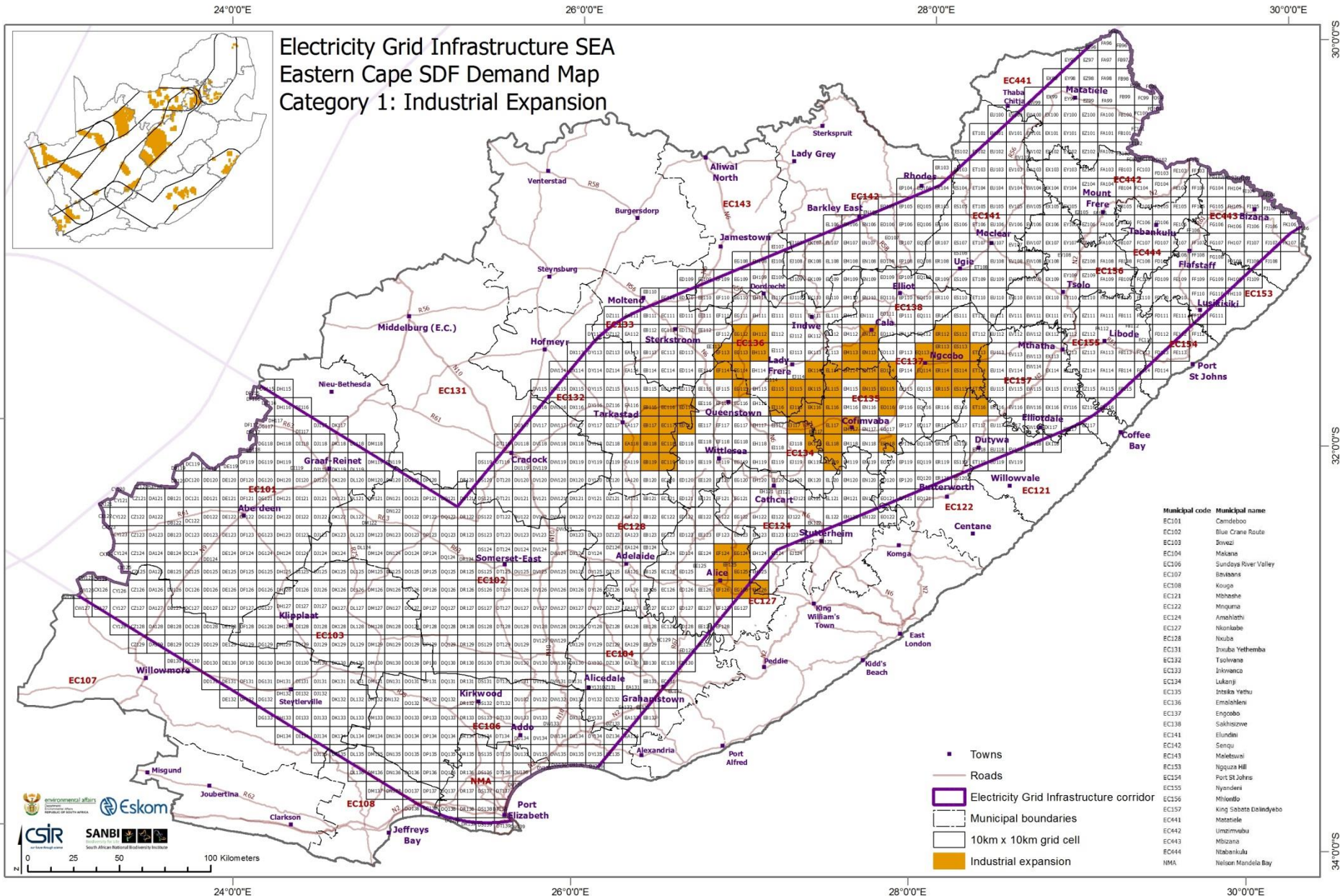
SEZs and IDZ's



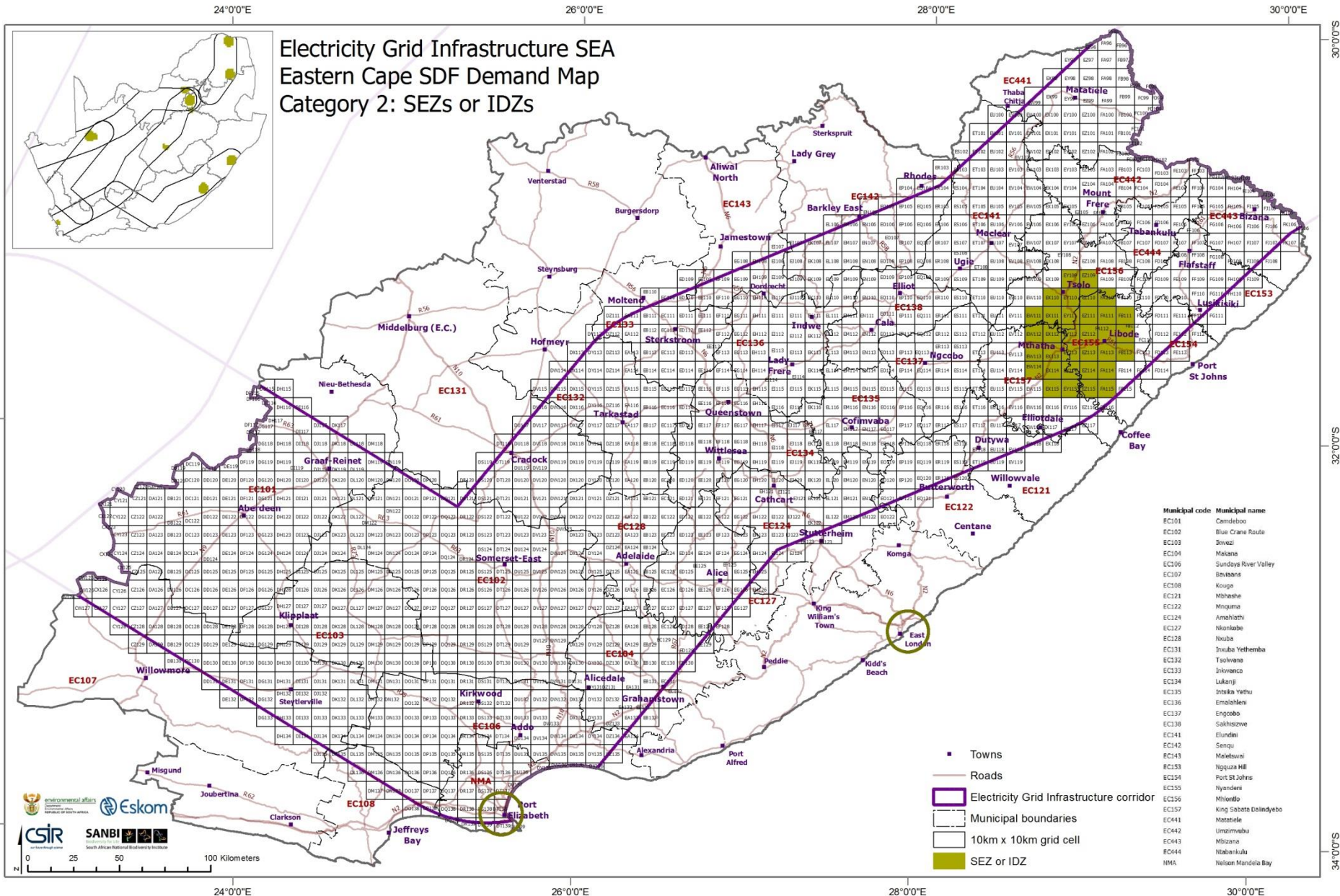
Priority mining areas



Conversion to grid: Industrial expansion

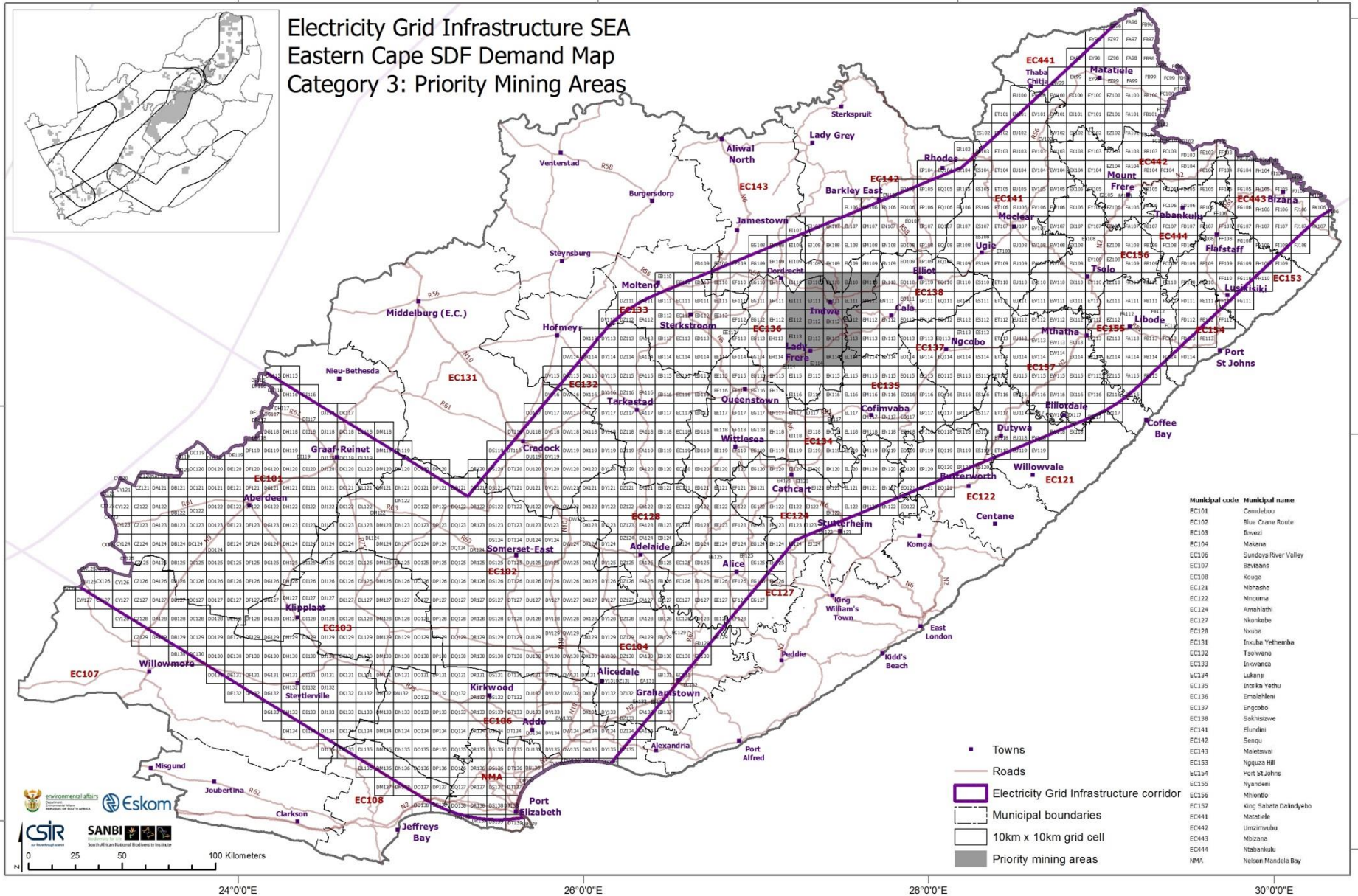


Conversion to grid: SEZs or IDZs



Conversion to grid: Priority mining

Electricity Grid Infrastructure SEA
 Eastern Cape SDF Demand Map
 Category 3: Priority Mining Areas



Municipal code	Municipal name
EC101	Camdeboo
EC102	Blue Crane Route
DOV01	Dorets
EC104	Makana
EC106	Sundays River Valley
EC107	Baviaans
EC108	Kings
EC121	Nobandhe
EC122	Mingam
EC124	Amehliathi
EC127	Nkonkobe
EC128	Nkuiba
EC131	IsiXaba Yethemba
EC132	Tsolwane
EC133	Inkwanco
EC134	Lukany
EC135	Intsika Yethu
EC136	Emolobeni
EC137	Engoboo
EC138	Sakhisizwe
EC141	Glenelg
EC142	Sensu
EC143	Meleskani
EC153	Ngqusa Hill
EC154	Port St Johns
EC155	Nyandeni
EC156	Mhlonito
EC157	King Sabata Dalindyebo
EC418	Matielie
EC442	Umtzimvubu
EC443	Mbizana
EC444	Nabankulu
NMA	Nelson Mandela Bay

- Towns
- Roads
- ▭ Electricity Grid Infrastructure corridor
- ▭ Municipal boundaries
- ▭ 10km x 10km grid cell
- ▭ Priority mining areas

environmental affairs
 SOUTH AFRICAN NATIONAL DEPARTMENT OF ENVIRONMENTAL AFFAIRS

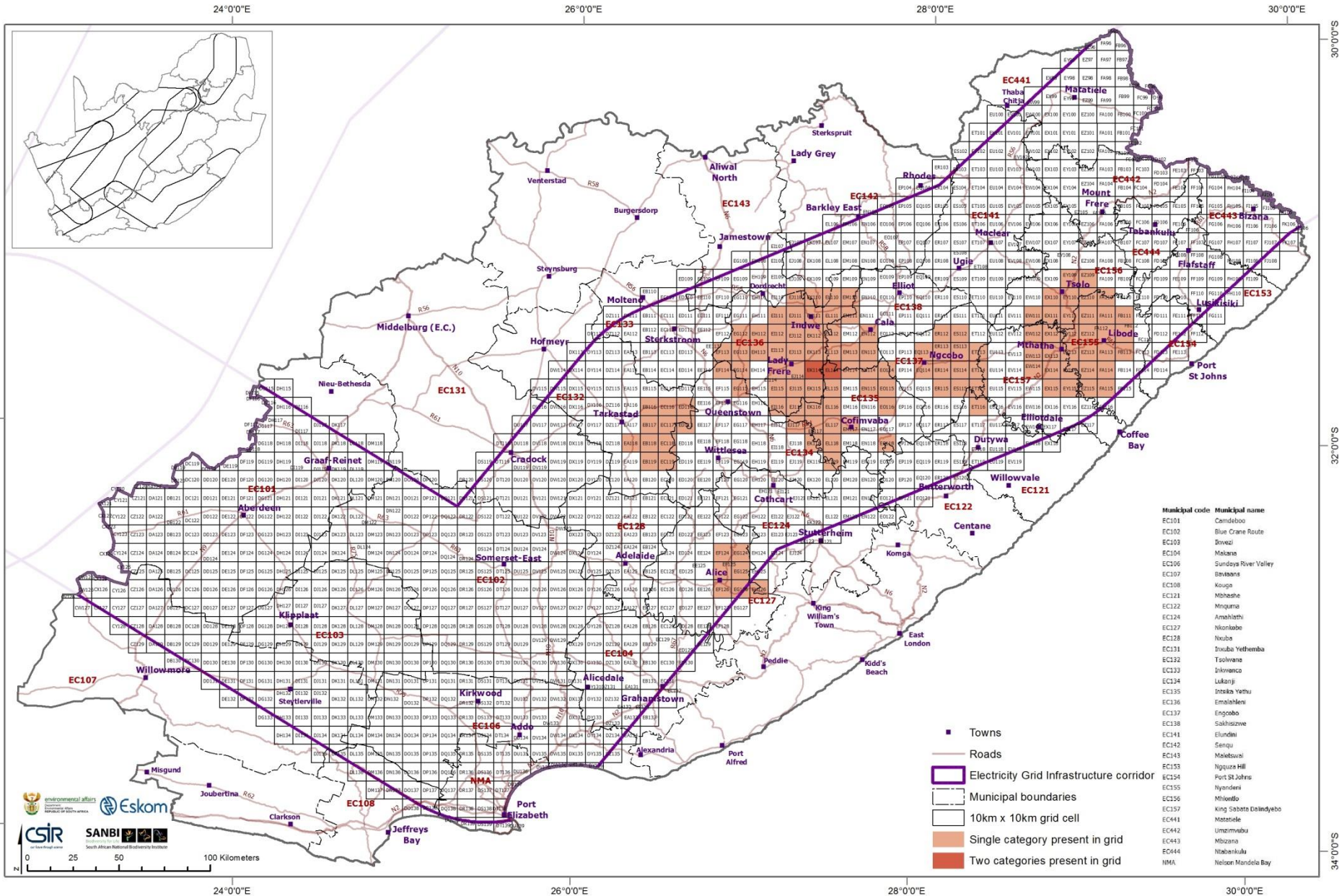
Eskom

CSIR
 South African National Research Institute

SANBI
 South African National Biodiversity Institute

0 25 50 100 Kilometers

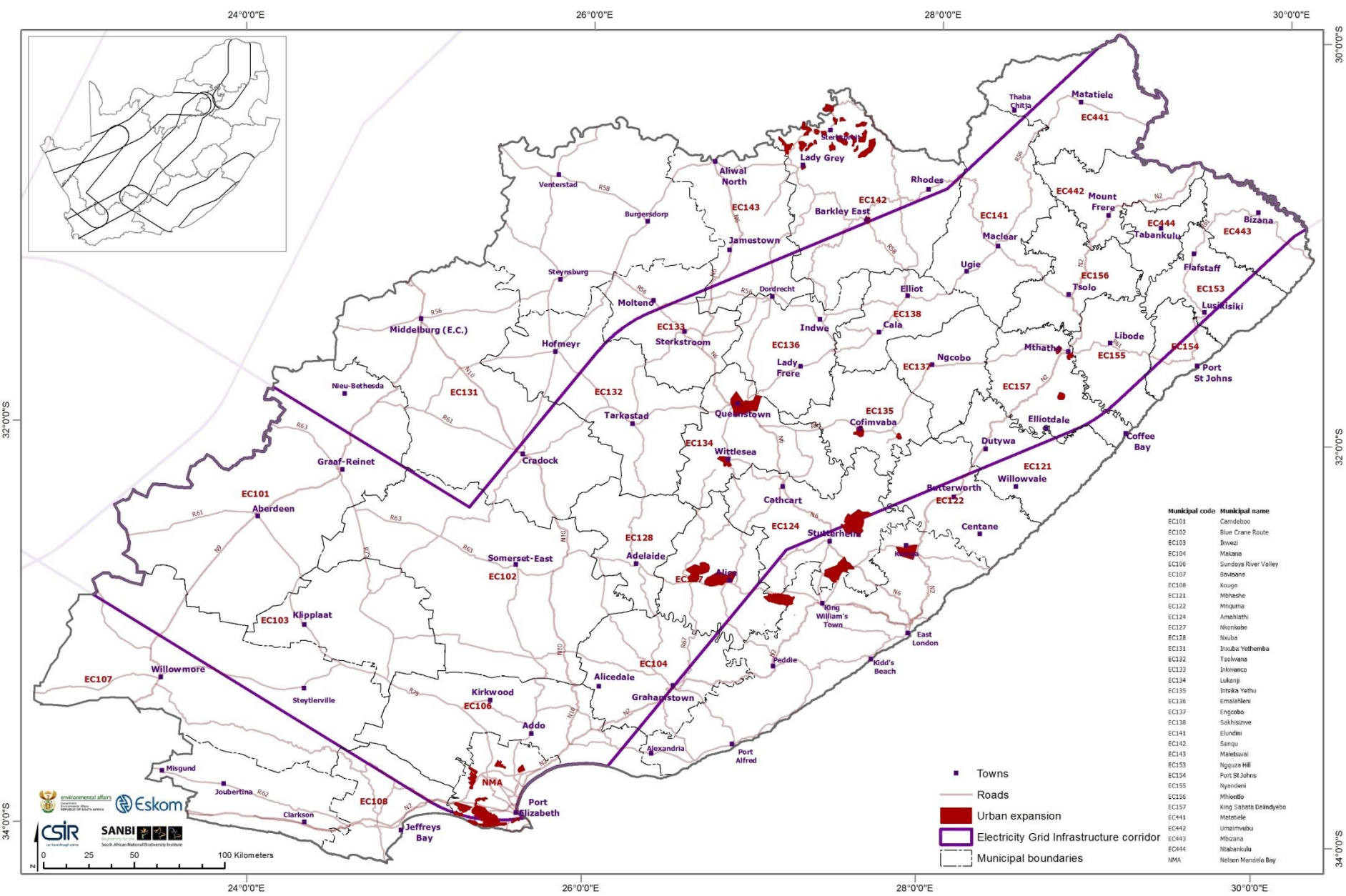
Combined grids for Bulk Energy Users



Additional Data Collected

No.	Planning category	Example in SDFs	Push/Pull
1	Urban expansion	New housing development, new shopping areas, new markets, new suburbs, existing/proposed mixed use areas	Push
2	Industrial expansion	Light industrial areas, heavy industrial areas- within urban edge	Pull
3	Industrial zone establishment	Areas outside the urban edge demarcated for special/strategic economic developments	Pull
4	Planned transportation routes	Proposed linkages; roads, taxi/train/bus stations; activity corridors	Push
5	Priority mining areas	Existing mining activity, proposed/potential mining activity	Pull
6	Priority agriculture areas	High potential agricultural areas; intensive/extensive agricultural areas; existing/proposed agricultural nodes;	Pull
7	Priority tourism nodes & landscapes	Existing/proposed game farms; conservancies; scenic routes, heritage areas; botanical gardens	push
8	Priority natural areas & open spaces	Municipal/Urban Open Space; Conservation Area; Parks, Recreation; CBA; ESA rivers; wetlands	Push/pull

Urban expansion



Municipal code	Municipal name
EC101	Camdeboo
EC102	Blue Crane Route
EC103	Dowezi
EC104	Makana
EC106	Sundays River Valley
EC107	Baviaans
EC108	Kouga
EC111	Mbashe
EC122	Mquma
EC124	Amakhasi
EC127	Nkonkobe
EC128	Nxuba
EC131	Tsulo
EC132	Tsolwane
EC133	Inkwanco
EC134	Lukanji
EC135	Intsika Yethu
EC136	Emolaledeni
EC137	Engoboo
EC138	Sakhisizwe
EC141	Ellidini
EC142	Saniya
EC143	Malesaval
EC153	Nguzwe Hill
EC154	Port St Johns
EC155	Nyandeni
EC156	Mthondo
EC157	King Sabata Dalindyebo
EC441	Matatiele
EC442	Umtzavaba
EC443	Mbizana
EC444	Tabankulu
NMA	Nelson Mandela Bay

- Towns
- Roads
- Urban expansion
- Electricity Grid Infrastructure corridor
- Municipal boundaries



32°0'0"S

34°0'0"S

30°0'0"E

32°0'0"E

30°0'0"E

24°0'0"E

26°0'0"E

28°0'0"E

30°0'0"E

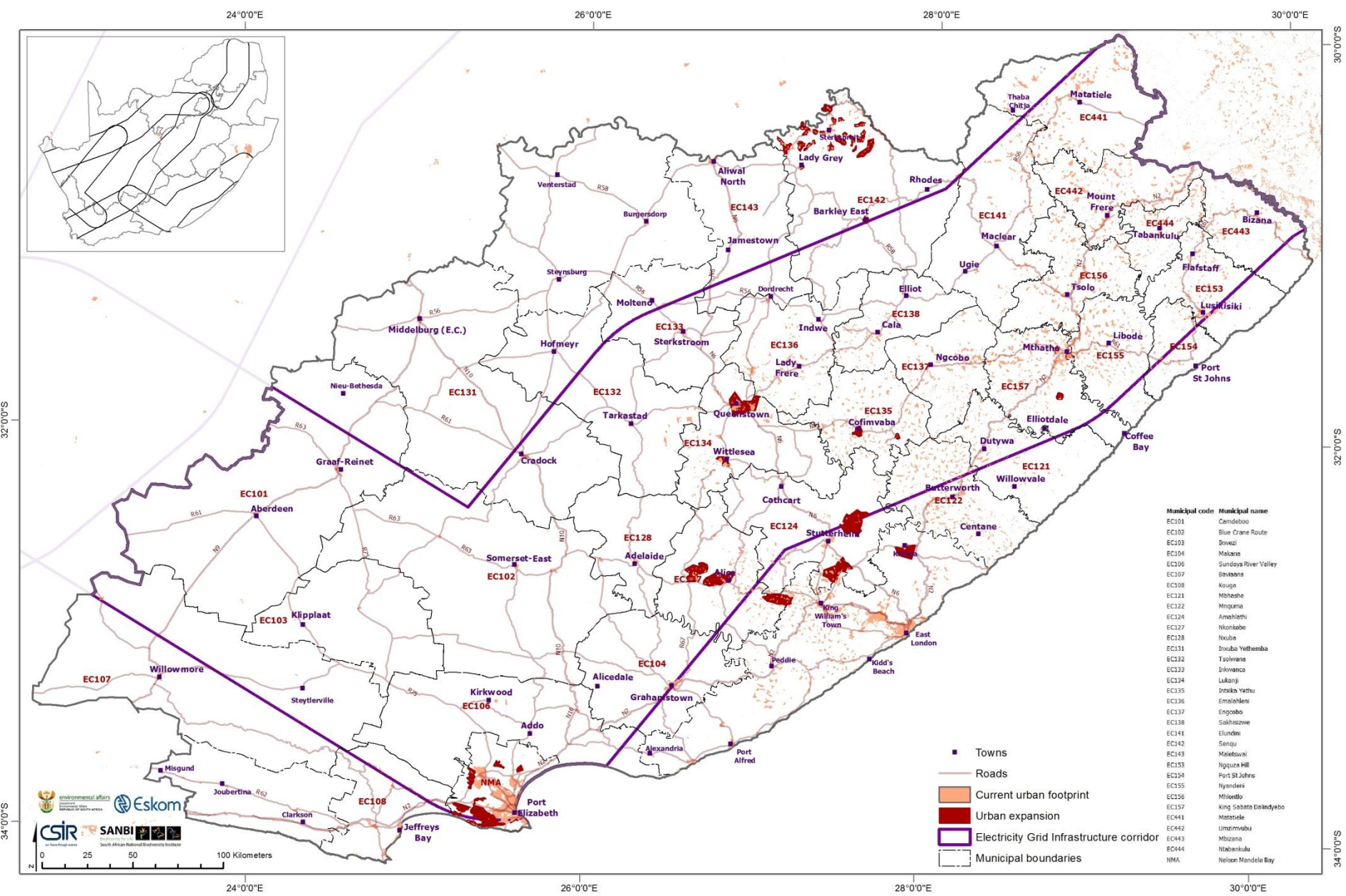
24°0'0"E

26°0'0"E

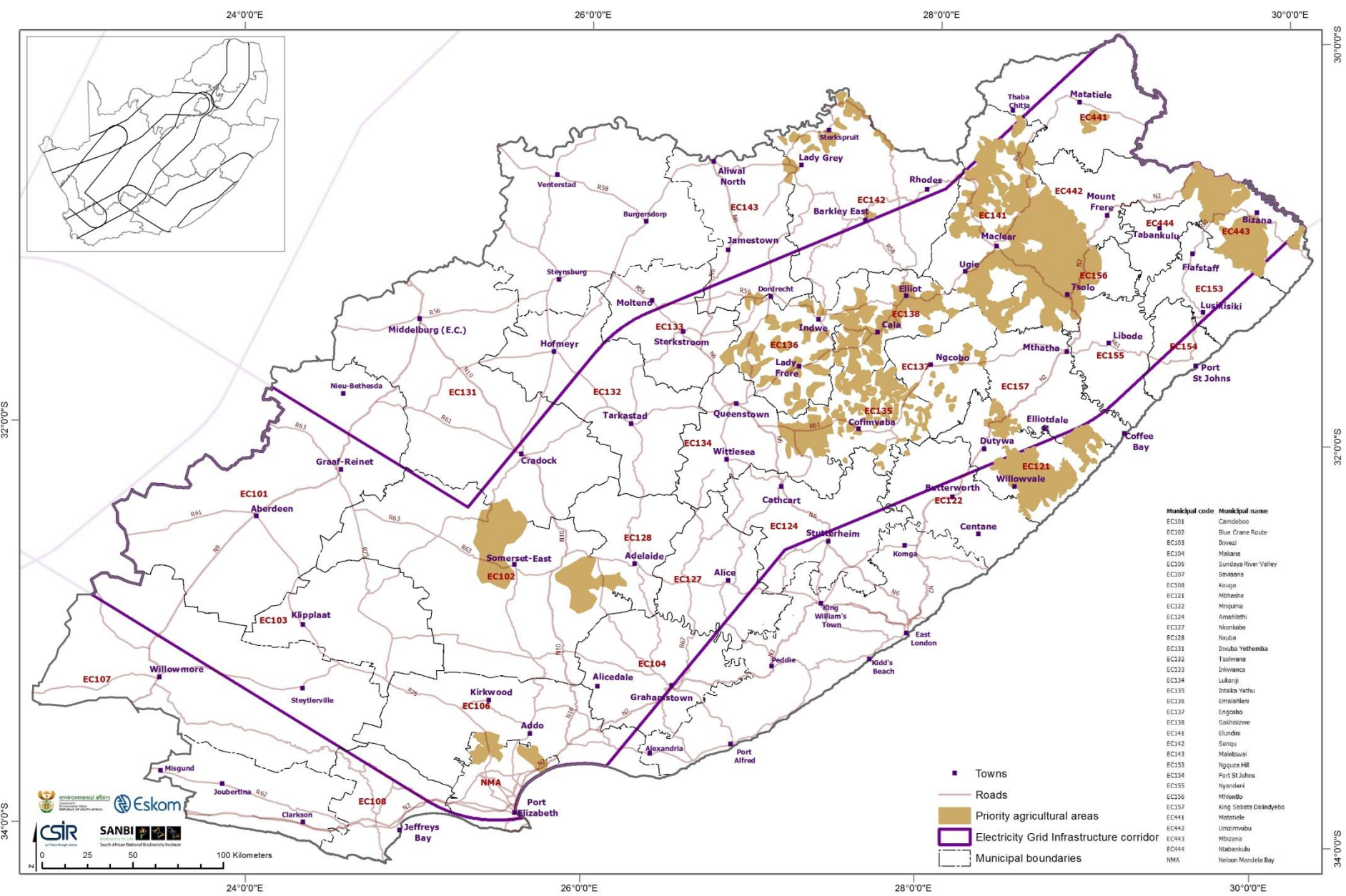
28°0'0"E

30°0'0"E

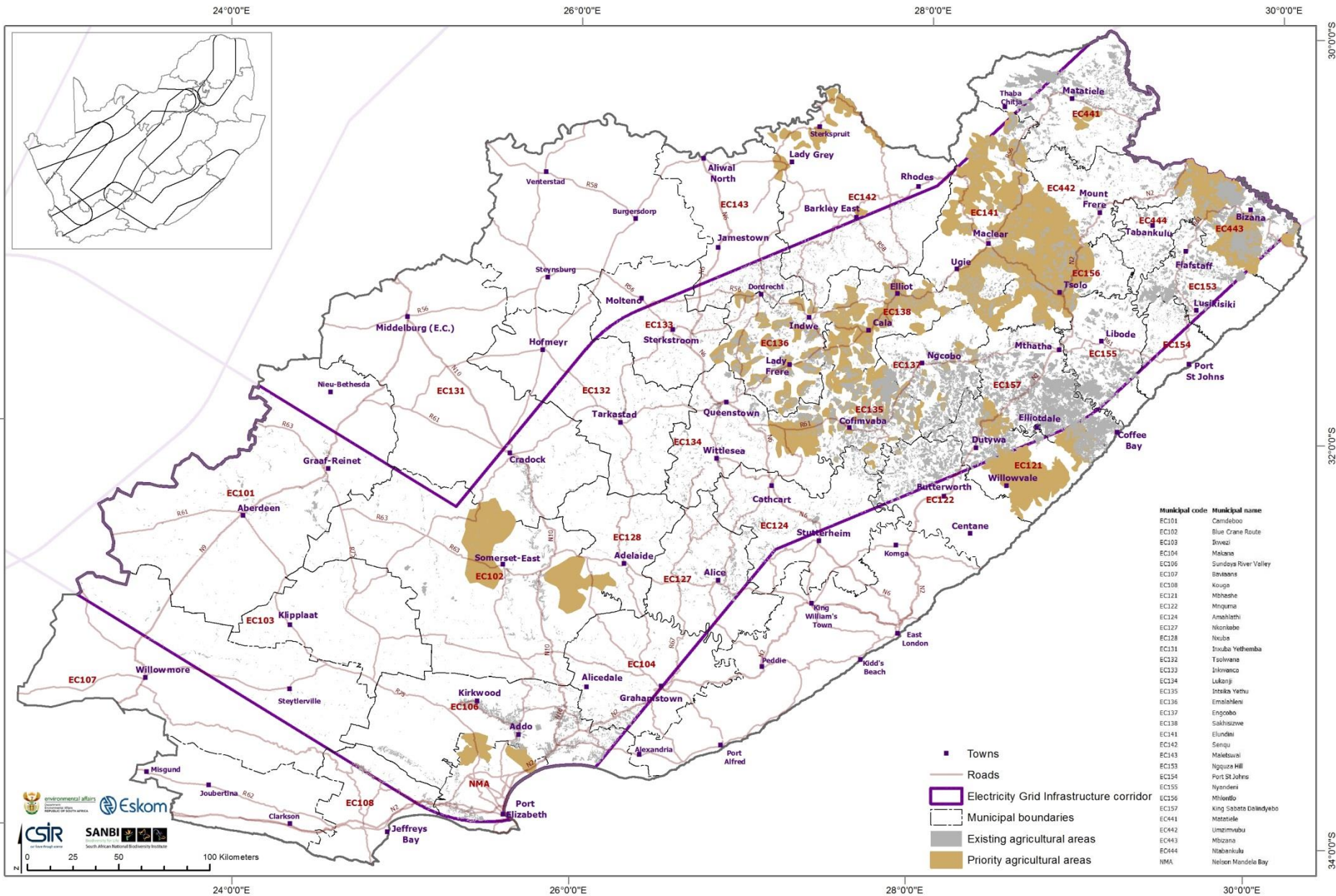
Urban expansion and existing urban areas



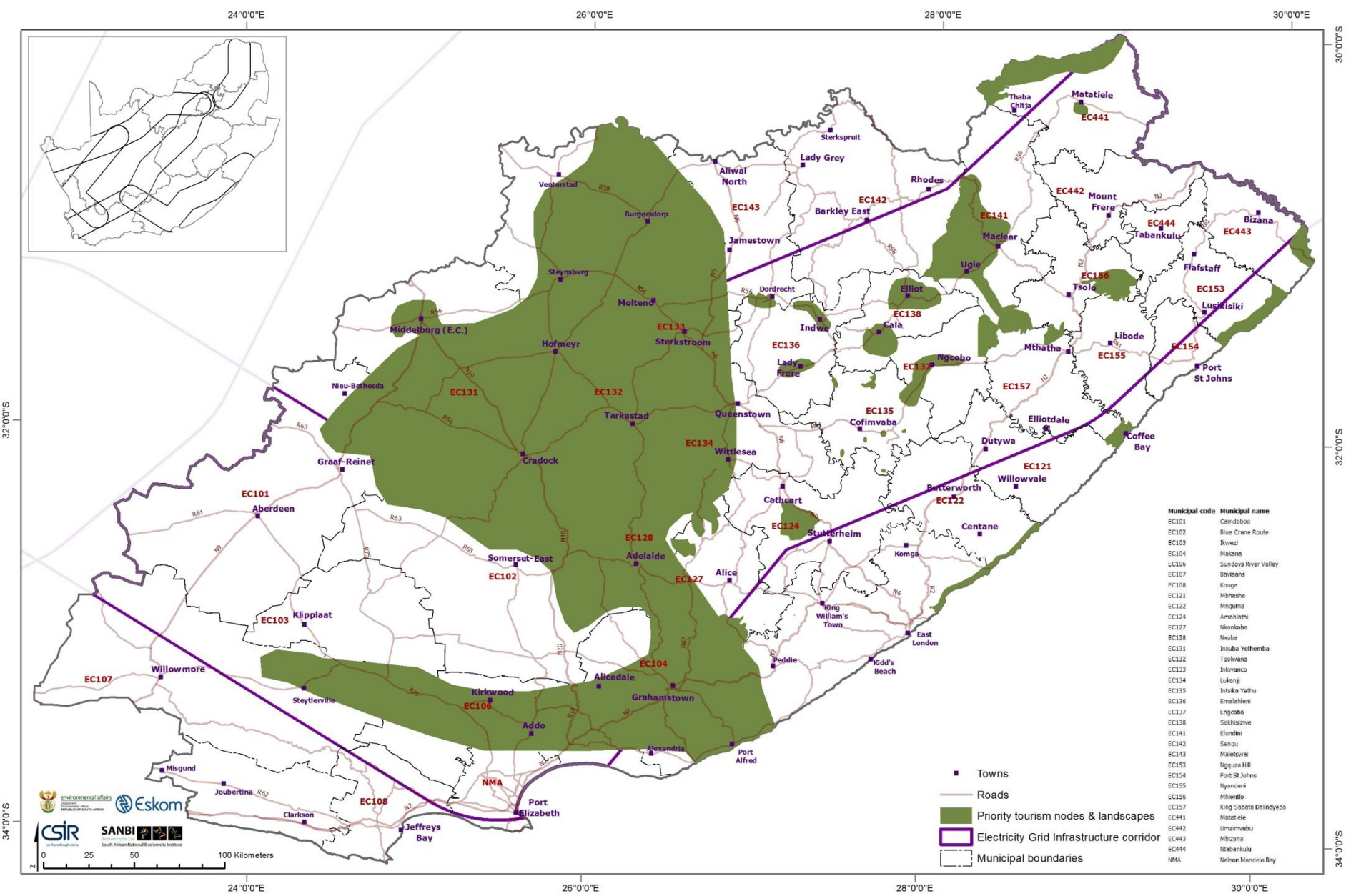
Priority agriculture areas



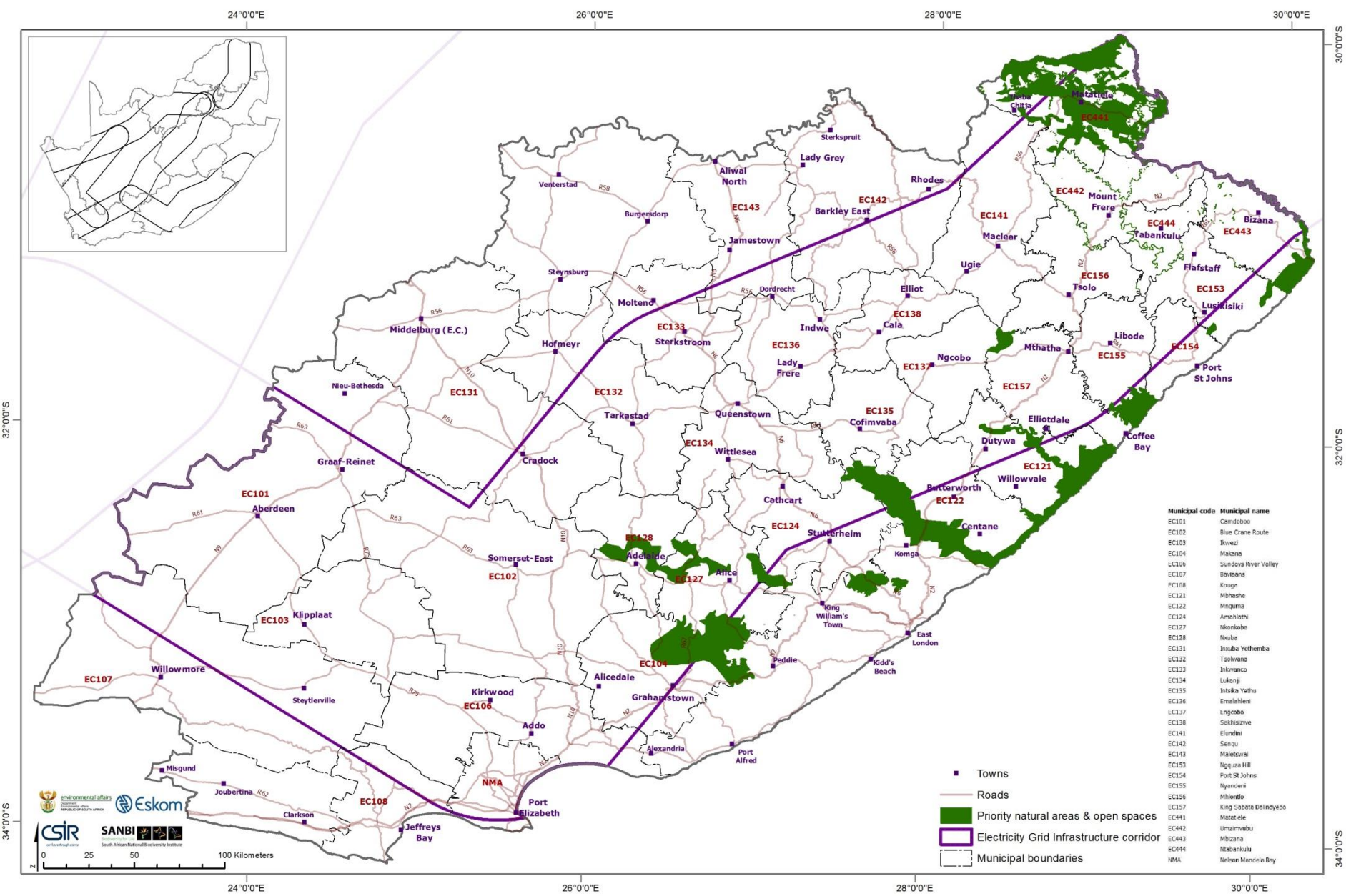
Available Priority Agricultural Areas



Priority tourism nodes & landscapes



Priority natural areas & open spaces



Municipal code	Municipal name
EC101	Camdeboo
EC102	Blue Crane Route
EC103	Dowezi
EC104	Makana
EC106	Sundays River Valley
EC107	Baviaans
EC108	Kouga
EC111	Mbashe
EC122	Mquma
EC124	Amakhasi
EC127	Nkonkobe
EC128	Nxuba
EC131	Ixuba Yethamba
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EC133	Inkwanco
EC134	Lukanji
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- Towns
- Roads
- Priority natural areas & open spaces
- Electricity Grid Infrastructure corridor
- Municipal boundaries

Conclusions and way forward

The information we were able to extract was useful for refining future demand

Ultimate use depends on feedback gathered during the consultation for refinement of the data

Questions and Discussion

