

9 March 2023

## **Annexure: Amendment to the Socio-Economic Impact Assessment, Springbok WEF.**

### **1 INTRODUCTION**

This memorandum is in response to a request by Savannah Environmental Mulilio Renewable Projects Developments (Pty) Ltd (Mulilio) trading as Mulilio Springbok Wind Power (Pty) Ltd and for Urban-Econ to amend their Socio-Economic Report conducted in 2010.

Mulilio proposes to amend the Environmental Authorisation (EA) for the Springbok Wind Energy Facility, by extending the EA validity by an additional five (5) years. Extension of the validity of the EA will ensure that the EA remains valid for the undertaking of the authorised activities.

Condition 1.7 of the First Issue Environmental Authorisation, Issued on the 27th of July 2011, DEA Reference 12/12/20/1721 states that:

*"This activity must commence within a period of three (3) years from the date of issue. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken."*

Consequent amendments to extend the validity of the authorisation have been made as follows:

- 12/12/20/1721 – authorised on the 27 June 2014 extending the validity to the 27th of June 2016
- 12/12/20/1721/AM3 – authorised on the 18 May 2016 extending the validity to the 27th of July 2018
- 12/12/20/1721/AM6 – authorised on the 3 August 2018 extending the validity to the 27th of July 2021
- The most recent 12/12/20/1721/AM8 – 28 June 2021 extending the validity to the 27th of January 2023 which states the following.

*"This activity must commence within a period of eleven (11) years and six (6) months from the date of issue of the authorisation (i.e. the EA lapses on 27 January 2023). If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken."*

Mullio Renewable Projects Developments (Pty) Ltd is requesting that the Competent Authority amends Condition 1.7 of the original EA (Page 4) as amended (DFFE Reference: 12/12/20/1721/1/AM8; dated 28 June 2021) as follows:

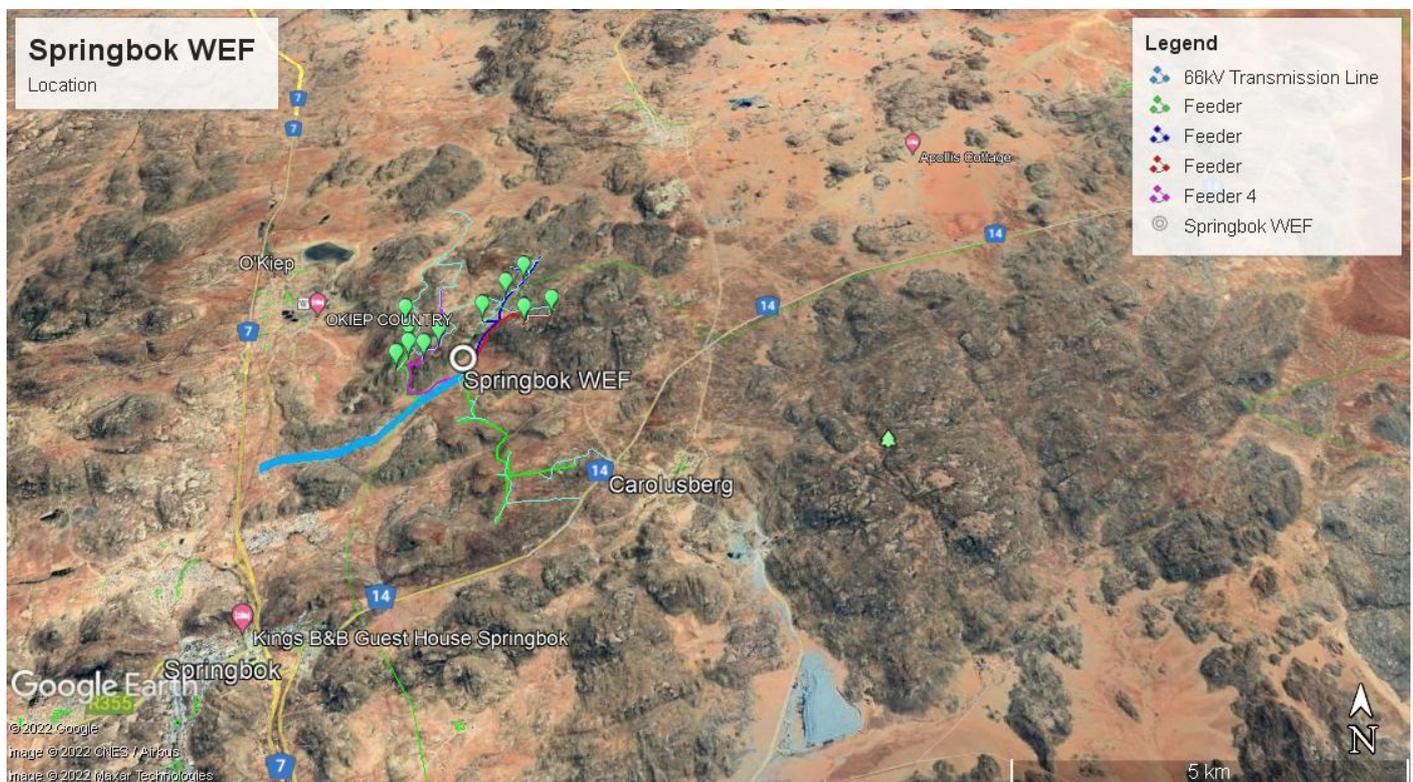
*“This activity must commence within a period of sixteen (16) years and six (6) months from the date of issue of the authorisation (i.e. the EA lapses on 27 January 2028). If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.”*

In addition, the following amendments will also occur:

1. Up to 25 (i.e., potential range of 12 turbines @ 4.5MW to 25 turbines @ 2.0MW-2.2MW) 2.0MW - 6.0MW, 55.5MW, Max 160m max of 140m (except for turbines 4, 8, 15 & 16 which have a hub height of 105m) 16 x 16 m and 3m deep.

The map below shows the proposed layout of the Springbok WEF.

**Map 1: Springbok WEF Layout**



Source: Savannah Environmental, 2023

## 2 AMENDMENT APPROACH

In line with the Environmental Impact Assessment (EIA) Regulations of 2014 as well as the new NEMA GN 320 regulations, and due to the fact that the EA validity will be extended beyond 10 years, this amendment report needs to:

- Confirm the status of the environment compared to that at the time of the original assessment in order to make a statement as to whether the environment has changed since the original assessment. Due to the fact that the original report was completed in 2010, an updated socio-economic profile has therefore been undertaken.
- Provide an indication as to whether the impact rating as provided in the initial assessment remains valid and if mitigation measures provided are still applicable or if new ones need to be included.
- An indication if any new assessments/guidelines and which were not included as part of the initial assessment must be taken into consideration and addressed in the report.
- A description and assessment of any changes to the environment that has occurred since the initial EA was issued
- A description and an assessment of the surrounding environment in relation to new developments or changes in land use which might impact the project:
  - Within a 30km radius
  - Cumulative impacts

## 3 UPDATED SOCIO-ECONOMIC OVERVIEW

This section provides the status quo of the socio-economic profile of Namakwa District Municipality (DM), Nama Khoi Local Municipality (LM) and Springbok. The purpose of this section is to provide insight into the relative size and structure of the local economy. Various demographic and economic indicators will be discussed and analysed in order to assess potential impacts that are bearing on the surrounding areas under study. This information is compared to information available in the previous report to identify any specific indicator changes that could have an impact on the socio-economic conditions of the study area.

### 3.1. Economic Baseline Profile<sup>1</sup>

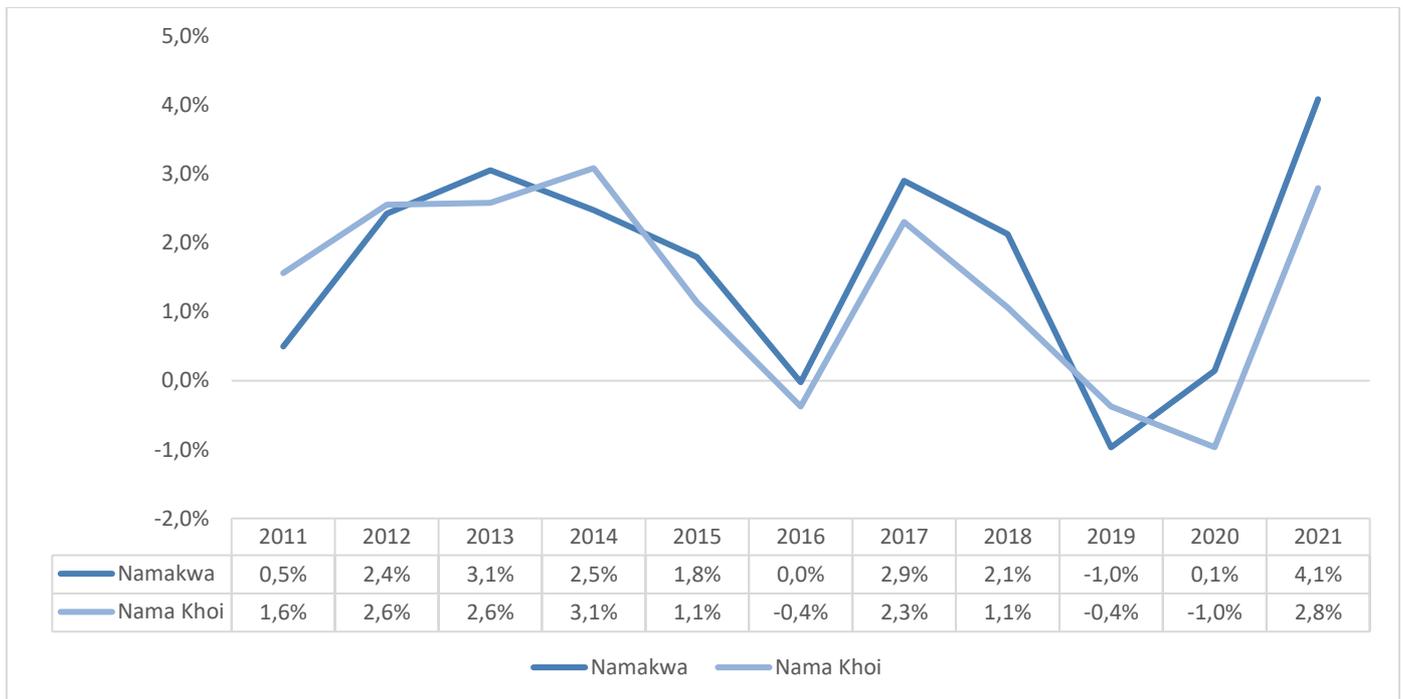
Gross Value Add (GVA) is the output of the region less the intermediate consumption, which is the difference between gross output and net output. GVA is important because it is used to adjust GDP, which is a key indicator of the state of a region's total economy.

Figure 3.1 presents the 10-year trajectory of the Gross Value Added of the Namakwa DM and Nama Khoi LM.

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<sup>1</sup> Economic data is only available at 2021 level with exception of expenditure where it acceptable to forecast to the following years

**Figure 3.11: Total GVA 2011- 2021**



Source: Urban-Econ calculated from Quantec Standardised Regional data (2022), 2023

With the 10-year period (2011-2021) Namakwa DM recorded an average growth rate of 1.4% which was higher than the growth rate of Nama Khoi LM (0.7%) for the same period. Both economies experienced a sharp decline in GVA between 2014 and 2016. While the GVA performance improved to 2.9% and 2.3% for Namakwa DM and Nama Khoi LM respectively in 2017, this was negatively affected by the COVID-19 pandemic where both economic contracted to 0.1% and -1.05 respectively for both municipalities. Moreover, activities post COVID-19 pandemic have seen an improvement in the overall GVA performance of both municipalities.

Generally, when compared with GVA figures prior to 2010, the Namaqua DM experienced an average annual growth of 2.3% (1998 to 2008) and Nama Koi LM an annual growth of 1.5%. These annual growth rates are significantly higher than past 2010, showing that the performance of both the District and Local Municipality has decreased since the previous assessment was undertaken.

Given the growth pattern of GVA performance for Namakwa DM and Nama Khoi LM it is therefore important to understand sector dynamics in order to unpack the growth performance. Therefore, the proportional contribution of the various economic sectors to the GVA of the municipalities is illustrated in Table 3.1.

**Table 3.1: Sectoral GVA contribution, 2021**

Sector	Namakwa	Nama Khoi
I01: Agriculture, forestry and fishing [QSIC 1]	10.3%	2.2%
I02: Mining and quarrying [QSIC 2]	32.3%	48.1%
I03: Manufacturing [QSIC 3]	2.6%	2.7%
I04: Electricity, gas and water [QSIC 4]	3.1%	4.2%
I05: Construction [QSIC 5]	2.0%	1.4%
I06: Wholesale and retail trade, catering and accommodation [QSIC 6]	8.7%	8.0%
I07: Transport, storage and communication [QSIC 7]	7.4%	6.1%
I08: Finance, insurance, real estate and business services [QSIC 8]	10.0%	9.1%
I09: General government [QSIC 91]	7.7%	6.0%
I10: Community, social and personal services [QSIC 92-96, 99]	16.0%	12.3%

Source: Urban-Econ calculated from Quantec Standardised Regional data (2022), 2023

In 2021, the mining sector remains the main driver of the economy for both municipalities, contributing 33.3% and 48.1% for Namakwa DM and Nama Khoi LM respectively. This may be attributed to the dominance of mining and quarrying industry that is large in scale across the region and in the Northern Cape Province.

Following the mining sector, the community, social and personal services is the second largest sector for both the District and Local Municipality, with an overall contribution of 16% and 12.3% respectively for Namakwa DM and Nama Khoi LM. Other economic sectors contributing to the economy of both municipalities include the finance, insurance, real estate, and business services (10.0% and 9.1% respectively for Namakwa DM and Nama Khoi LM), agriculture, forestry and fishing general government sector (10.3% and 2.2% respectively for Namakwa DM and Nama Khoi LM). The wholesale and retail trade, catering and accommodation sector had a total contribution of 8.7% and 8.0% respectively for Namakwa DM and Nama Khoi LM.

Lastly, the construction sector recorded the least in GVA performance for Namakwa DM and Nama Khoi LM at a proportion of 2.0% and 1.4% in 2021.

When compared with the 2008 figures from the previous study, the mining sectors remains the most dominant sector, however the sectors' contribution in Nama Koi LM has increased (33,2% in 2008 to 48.1% in 2021). Since 2008, the community, social services sector in Nama Koi has become the second most important sector (12.3% contribution), where in 2008, it was only the 4<sup>th</sup> most important contributor (11.4%). General government sector since 2008 has also reduced its relative contribution from 13.1% to 6% in 2021. These figure show that the local economy, although still primarily focused on the primary sectors, is moving to increase sector importance on sectors which support these activities and reducing its reliance on government spending.

### 3.1.1 Employment per Industry

Table 3.2 presents the distribution of employment according to the different sectors.

**Table 3.2: Sectoral Employment, 2021**

Sector	Namakwa	Nama Khoi
I01: Agriculture, forestry and fishing [QSIC 1]	21.2%	6.8%
I02: Mining and quarrying [QSIC 2]	9.5%	17.9%
I03: Manufacturing [QSIC 3]	3.7%	4.8%
I04: Electricity, gas and water [QSIC 4]	0.4%	0.8%
I05: Construction [QSIC 5]	4.9%	5.2%
I06: Wholesale and retail trade, catering and accommodation [QSIC 6]	17.0%	20.7%
I07: Transport, storage and communication [QSIC 7]	2.8%	3.4%
I08: Finance, insurance, real estate and business services [QSIC 8]	8.4%	9.8%
I09: General government [QSIC 91]	9.7%	9.5%
I10: Community, social and personal services [QSIC 92-96, 99]	22.5%	21.0%

Source: Urban-Econ calculated from Quantec Standardised Regional data (2022), 2023

The community, social and personal services was the largest employer across both areas in 2021, employing 22.5% and 21.0% of the total labour respectively for Namakwa DM and Nama Khoi LM. The Mining and quarrying and Agriculture, forestry and fishing sectors employed disproportionately in the Local and District level, where the agriculture sector employed 21.2% at district level against 6.8% at local level, while the Mining and quarrying sector employed 9.5% at district level compared to 17.9% at local level. Following these sectors was the wholesale and retail trade, catering and accommodation sector with an overall employment distributor of 17.0 and 20.7% of the labour for Namakwa DM and Nama Khoi LM. The electricity and gas sector recorded the least employment contribution in 2021. Given this backdrop, this suggests that these four sectors were the leading employers in 2021.

When compared to the previous assessment report, the importance of certain sectors has decreased since 2008. In 2008, in the Nama Khoi LM, the General Government was the most important contributor to jobs, followed by the Trade, catering and accommodation sector (18.5%) and the mining sector (16.3%).

### 3.1.2 Household Expenditure

Table 3.3 presents a breakdown of expenditure on the local and district level.

**Table 3.3: Estimated average household monthly expenditure, 2022.**

	Namakwa	Nama Khoi
CPD01: Durable goods: Furniture, household appliances, etc	1.9%	1.9%
CPD02: Durable goods: Personal transport equipment	2.8%	2.9%
CPD03: Durable goods: Computers and related equipment	0.3%	0.3%
CPD04: Durable goods: Recreational and entertainment goods	2.1%	2.2%
CPD05: Durable goods: Other durable goods	0.5%	0.5%
CPSD1: Semi-durable goods: Clothing and footwear	4.4%	4.4%
CPSD2: Semi-durable goods: Household textiles, furnishings, glassware, etc	1.1%	1.1%
CPSD3: Semi-durable goods: Motor car tyres, parts and accessories	1.5%	1.5%
CPSD4: Semi-durable goods: Recreational and entertainment goods	0.5%	0.5%
CPSD5: Semi-durable goods: Miscellaneous goods	0.3%	0.3%
CPND1: Non-durable goods: Food, beverages and tobacco	23.2%	23.2%
CPND2: Non-durable goods: Household fuel and power	5.9%	5.8%
CPND3: Non-durable goods: Household consumer goods	1.4%	1.4%
CPND4: Non-durable goods: Medical and pharmaceutical products	2.2%	2.1%
CPND5: Non-durable goods: Petroleum products	2.4%	2.4%
CPND6: Non-durable goods: Recreational and entertainment goods	0.9%	0.9%
CPS01: Services: Rent	8.1%	8.1%
CPS02: Services: Household services, including domestic servants	2.3%	2.3%
CPS03: Services: Medical services	6.8%	7.0%
CPS04: Services: Transport and communication services	9.5%	9.6%
CPS05: Services: Recreational, entertainment and educational services	7.1%	7.2%
CPS06: Services: Miscellaneous services	14.7%	14.5%

Source: Urban-Econ calculated from Quantec Standardised Regional data (2022), 2023

The non-durable goods such as food, beverages and tobacco represented the highest household expenditure in the local (Nama Khoi) and district (Namakwa) area in 2022 at a proportion of 23.2% equally of the total household expenditure. The second largest household expenditure was on miscellaneous services expenditure category with a total of 14.7% and 14.5% respectively for Namakwa DM and Nama Khoi LM. Transport and communication also recorded the third highest share in terms of household expenditure, while rent was the fourth highest expenditure.

When compared to information presented for 2008, the Nama Khoi LM spent a higher proportion of their disposable income on food, beverages, and tobacco (29.4%), followed by rent (13.8%), which is significantly higher than in 2022, which was 8.1% of disposable income. The percentage of household income spent on transport costs has also increased from 7.7% in 2008 to 9.6% in 2022.

### 3.2. Demographic Baseline Profile

The total population and household for the Namakwa DM, Nama Khoi LM, Springbok are presented in Table 3.4.

**Table 3.4: Estimated population and households, 2022**

Demographic indicator	Namakwa	Nama Khoi	Springbok
Population	117 072	48 908	13 327
Households	33 914	13 648	3 613
Household size	3	4	4

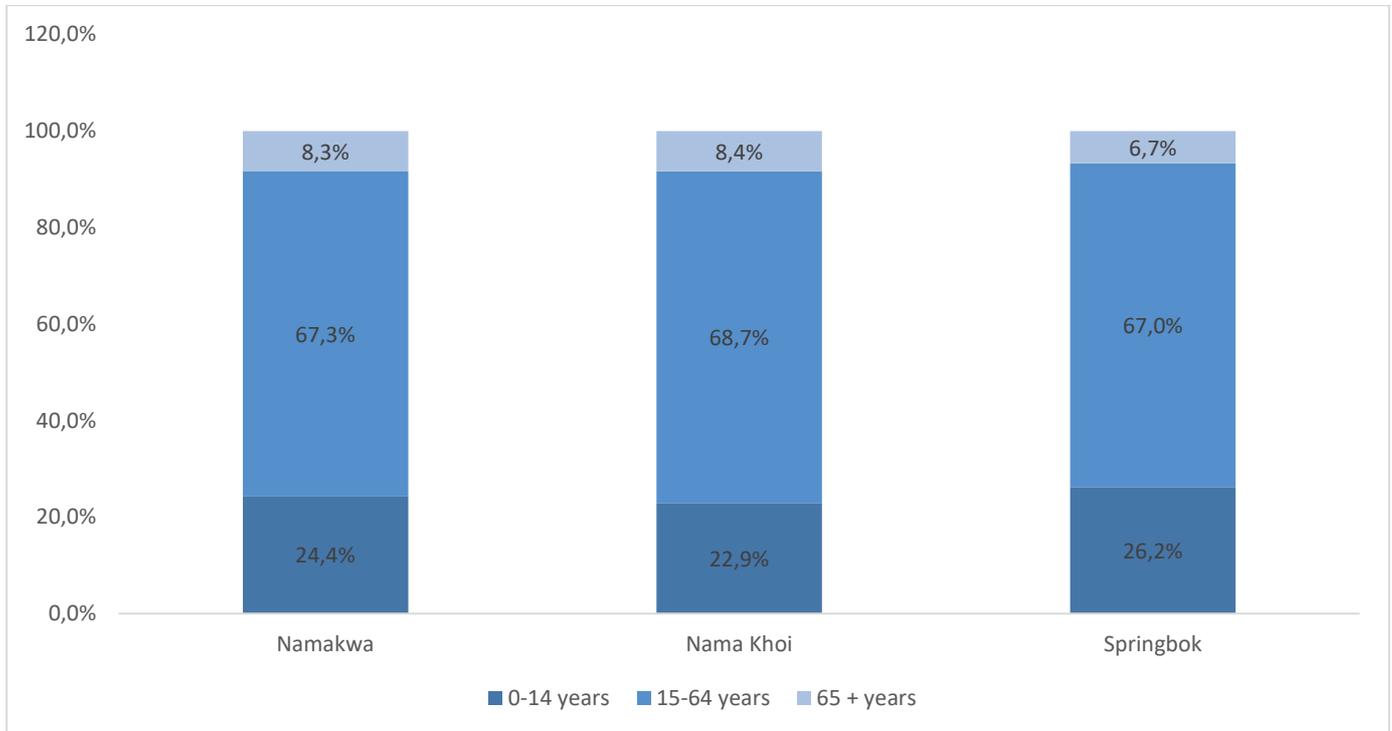
Source: Urban-Econ calculated from Stats SA Census 2011 & Quantec Standardised Regional data (2022), 2023

In 2022, the population of Springbok was approximately 13 327 with 3 613 households whereas the Namakwa DM and Nama Khoi LM have an estimated population of 117 017 and 48 908 people respectively with a total of 33 914 and 13 643 households. The district municipality's (Namakwa DM) household size is slightly lower(3) compared to both the local municipality (Nama Khoi; 4) and sub area's(Springbok; 4) household size. Moreover, the population growth rate of the district municipality and local municipality remains at 0.4% for the period 2011 and 2021.

The most notable change since 2010 has been the population decrease from an estimated 59 257 people to 48 908 people in 2022 in Nama Khoi LM, although household sizes have increased to 4 persons in 2022 from 3.2 persons in 2010. Population growth rates have also slowed from an estimated 1.1% in 2010 (Nama Khoi LM) to 0.4% in 2022.

Figure 3.2 delineates the age profile of Namakwa DM, Nama Khoi LM and Springbok.

**Figure 3.2: Estimated age profile, 2022**



Source: Urban-Econ calculated from Stats SA Census 2011 & Quantec Standardised Regional data (2022), 2023

The age distribution assists in establishing the Potentially Economically Active population. The Potentially Economically Active population is the population that falls within the working-age group, namely people between the age of 15 and 64 years. However, it does not imply that the entire population is economically active as some people falling within this age group choose not to work, i.e., are students or housewives, etc. The age structure of an area also assists in determining the potential availability of resources, but also the dependency on those who are too young or too old to work on the working-age population. It also has implications for the future need for employment opportunities within an area.

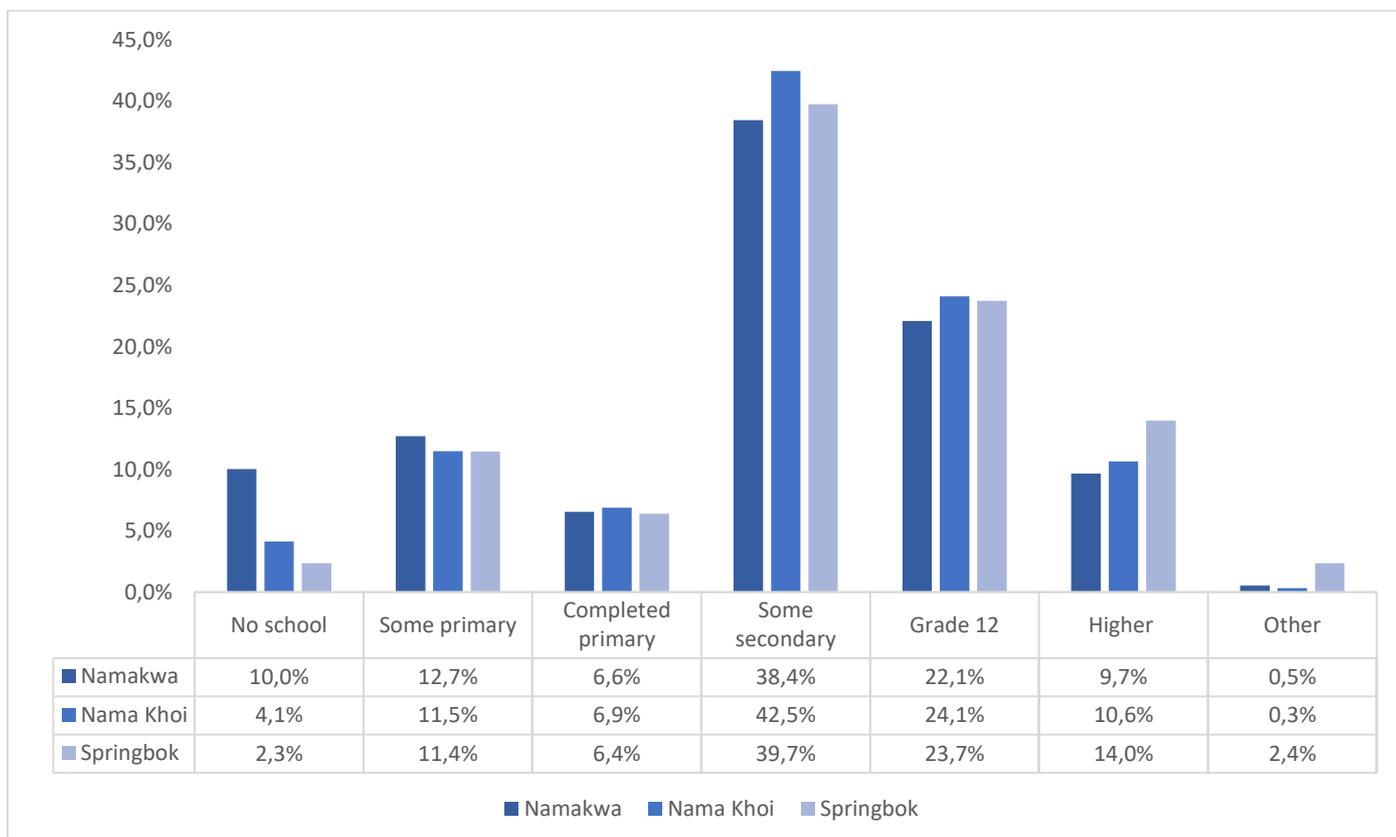
Across all areas, the potentially economic active age group represents the highest proportion of the population with more than three quarters of the population falling in the 15-64-years age range. This means that there is potential large labour force population that could benefit from economic opportunities across all three areas. The age group 65 years and above is slightly higher in Springbok (26.2) compared to Nama Khoi LM (22.9%) and Namakwa DM (24.4%). Noteworthy, the age group 0-14 years is lower in Springbok (6.7%) compared to Nama Khoi (8.4%) and Namakwa DM (8.3%)

When compared with 2010, the proportion of PEA population has remained stable, with a slight increase in Nama Khoi from 66% (in 2010) to 68.7% in 2022. What is notable is however the decrease in the younger

population between 2010 and 2022 and the increase in older populations groups for the same period. This implies that although the potential labour force has increased, there has also been an increase in an older population.

Figure 3.3 presents the education levels of Namakwa DM, Nama Khoi LM and Springbok. Stats SA (2011) notes that education attainment and labour force outcome are important when monitoring socio-economic development of an area. Various factors such as economic growth, employability and income levels of the population will be determined by education levels (Grant, 2017).

**Figure 3.3: Estimated education levels, 2022**



Source: Urban-Econ calculated from Stats SA Census 2011 & Quantec Standardised Regional data (2022), 2023

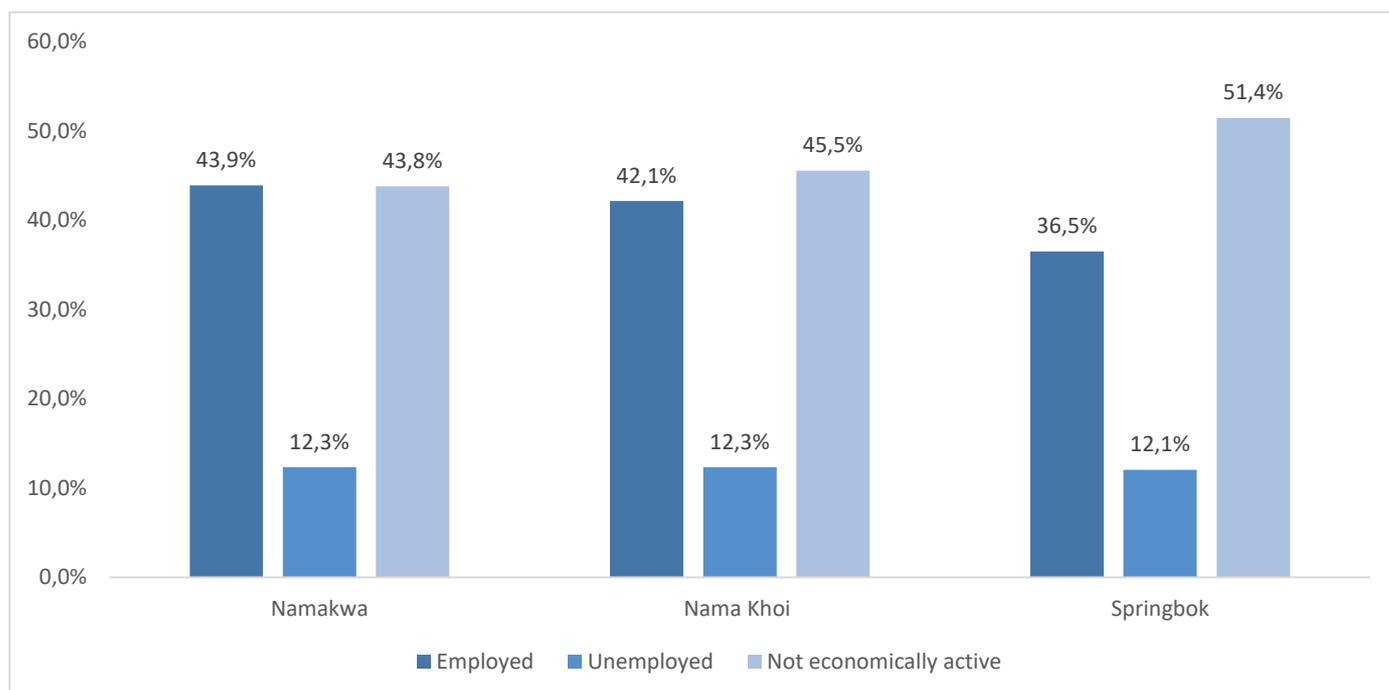
Within the adult population above 20 years old, all the areas in the category with some secondary education showed the highest proportion of people. Nama Khoi LM (42.5%) recorded that largest segment compared to Springbok (39.7%) and Namakwa DM (38.4%). Of the different education levels, the adult population above 20 years with Grade 12 was the second largest segment in terms of education attainment, with Namakwa DM recording the highest proportion of those who have Grade 12, followed by Springbok and Nama Khoi LM at 24.1%, 23.7% and 22.1% respectively. Noteworthy, Springbok had 14.0% of the adult population above 20 years old with higher education, this was higher compared to the population that has some primary

education and completed primary education. Importantly, higher education attainment for Springbok has implications for skills and ability to secure employment.

Although some secondary education was the highest percentage of education attained in 2010, a notable change has been the significant reduction since 2010 in Grade 12 levels, especially in the Namakwa District (dropped from 41% in 2010 to 22.1% in 2022). Residents with no schooling have also significantly increased from 2,8% (Nama Khoi) in 2010 to 4.1% in 2022 however it decreased in Springbok from 3.8% in 2010 to 2.3% in 2022.

Education attainments discussed previously in this report are an important predictor of labour market outcomes. In this regard, education attainment will determine employment probability as delineated in Figure 3.4. across the areas under study.

**Figure 3.4: Estimated employment levels, 2021**



Source: Urban-Econ calculated from Quantec Standardised Regional data (2022), 2023

In 2021, approximately 43.9% and 42.1% of the working-age population in Namakwa DM and Nama Khoi LM respectively were employed, this is compared to 12.3% and 12.3% respectively that were unemployed and 43.8% and 45.5% respectively, of people not economically active population. Springbok has a slightly low percentage (36.5%) of the working-age population compared to Namakwa DM and Nama Khoi LM. This is similar to the slight percentage of the unemployed working-age population in Springbok which is at 12.1%. Importantly, 51.4% of the working age-population in Springbok is not economically active.

Employment in Nama Khoi has increased between 2010 and 2022 from 31.5% to 42.1% and in Springbok from 36.3% to 36.5%. There has also been a sharp decrease in unemployment in Nama Khoi between 2010 and 2022 from 29.9% to 12.3% but an increase in unemployment in Springbok from 7.2% to 12.1%.

Household income levels are a basis for determining poverty levels in a community. The level of household income in a study area is indicative of social welfare, and the capacity to purchase goods and services and provides insight into the economic behaviour of a community. Table 3.5 presents these findings.

**Table 3.5: Estimated average household annual income, 2022.**

Income range	Namakwa	Nama Khoi	Springbok	Category
No income	8.5%	9.4%	7.9%	Low income
R1 - R4 800	2.7%	2.4%	1.4%	
R4 801 - R 9 600	5.0%	5.0%	3.1%	
R9 601 - R 19 200	19.2%	17.6%	11.3%	
R19 201 - R 38 400	22.7%	21.2%	17.0%	
R38 401 - R 76 800	17.2%	17.6%	18.6%	Middle income
R76 801 - R153 600	12.1%	13.1%	16.9%	
R153 601 - R307 200	7.5%	8.1%	12.8%	
R307 201 - R614 400	3.8%	4.3%	8.7%	High income
R614 401 - R1 228 800	0.9%	0.9%	1.9%	
R1 228 801 - R2 457 600	0.3%	0.2%	0.2%	
R2 457 601 and more	0.2%	0.2%	0.3%	
<b>Summary</b>				
Low income	58.1%	55.6%	40.6%	
Middle income	36.8%	38.8%	48.3%	
High income	5.2%	5.5%	11.1%	

Source: Urban-Econ calculated from Quantec Standardised Regional data (2022), 2023

The percentage of low-income households forms the majority of households within the Namakwa DM and Nama Khoi LM at 58.1% and 55.6% respectively. Springbok recorded the highest percentage (48.3%) of households who were middle-income earners while also recording the highest number of high-income household earners (11.1%). Moreover, 40.6% of households in Springbok were low-income earners.

In 2001 there were a significantly higher percentage of households classified as low income (72% in 2001 vs 55.6% in 2022) in Nama Khoi. In Springbok, between 2001 and 2022, the number of low income households only decreased by 0.4%.

Table 3.6 presents the tenure status of Namakwa DM, Nama Khoi LM and Springbok.

**Table 3.6: Tenure Status, 2022.**

	Namakwa	Nama Khoi	Springbok
Tenure status: Owned and fully paid off	55.2%	67.9%	61.6%
Tenure status: Owned but not yet paid off	5.0%	4.5%	9.2%
Tenure status: Rented	19.7%	14.5%	23.4%
Tenure status: Occupied rent-free	17.4%	9.5%	4.2%
Tenure status: Not applicable/ Other	2.7%	3.5%	1.6%

Source: Urban-Econ calculated from Quantec Standardised Regional data (2022), 2023

According to Table 3.6, the majority of households in the Namakwa LM (55.2%), Nama Khoi (67.9%) and Springbok (61.6%) own fully paid properties. A lower percentage (23.4%) of households in Springbok occupied rented dwellings, followed by Namakwa DM (19.7%) and Nama Khoi LM (14.5%). Moreover, 17.4% of households occupied rent-free dwellings in Namakwa DM, this was against 9.5% and 4.2% of households in Nama Khoi LM and Springbok respectively. Noteworthy, 9.2% of households in Springbok were still paying off on their own property.

Security of tenure trends have remained similar between 2001 and 2022, with the number of properties owned and fully paid off in Nama Khoi decreasing slightly from 68.3% in 2001 to 67.9% in 2022. In Springbok for the same timeframe home ownership (fully paid off) also decreased from 62.7% to 61.6%. In terms of rentals, the number of rentals increased in Springbok from 19.1% in 2001 to 23.4% in 2022.

### 3.3. Conclusion

Economic Growth in both the Namaqua DM and the Nama Khoi LM has slowed significantly since 2010 and the ten years prior to 2010. The mining sector continues to be the most important sector in terms of GVA contribution, and has increased in importance in the Nama Khoi LM, however the community and social services sector has replaced the government services sector as the second most important GVA contributor (in 2022). The economy for the study area therefore is still focused on the primary sector, but it is increasing the importance of support sectors, and reducing its dependence on the government services sector. The

community services sector has also become the most important employment sector in Nama Khoi, replacing the government services sector (which is now the 4<sup>th</sup> largest employer).

The most significant difference when comparing the socio-economic information in the previous assessment (2010) with the current status quo for the study area is that there has been a contraction in the population numbers both in the District and in the Nama Khoi LM. Average population growth has also slowed significantly and the population is growing in the 65 year plus category which could be an indication of both an aging population as well as a trend where younger residents move to other provinces in search for employment opportunities. Which a smaller population employment levels have increased since 2010 ( over 10% in the Nama Khoi LM, and 0.2% in the Namakwa District. There has also been a decrease in unemployment levels in both the District and LM. Despite these positive trends, significantly less households are classified as low income in both the LM and District.

## 4 SOCIO-ECONOMIC IMPACTS

### 4.1. Methodology

The methodology utilised to gain an understanding of the proposed amendment the same as the methodology followed in the initial assessment. Therefore, details of the utilised methodology are not required to be provided within this annexure.

### 4.2. Specialist Comment

The initial assessment of the proposed development identified several impacts both during the construction and the operational phase. These impacts are shown in the Tables 4.1 and 4.2 below.

**Table 4.1: Summary of socio and economic impact during the operational phase**

Significance of Impact before Mitigation/ Enhancement	Status	Significance
Simulation of the local economy	Positive	Medium
Increase in government income	Positive	Low
Diversification in the local economy	Positive	Low
Employment creation and associated transfer of skills	Positive	Low
Increased pressure on infrastructure	Negative	Low
Altering land use patterns	Positive	High
Increased traffic and congestion	Insignificant	Insignificant
Safety and security	Negative	Low
Degree of correspondence with development planning	Positive	Low

Significance of Impact before Mitigation/ Enhancement	Status	Significance
Loss of visual value	Negative	High
Noise Pollution and loss of tranquillity	Negative	Low

Based on an understanding of the proposed amendment and extended timeframes, it is Urban-Econ's opinion that the identified impacts for the construction phase as highlighted within Table 4.1 will not change. The construction costs might increase slightly which will have a small increased impact on production, GDP, employment and household standards of living however due to the very small changes and the extent of these impacts the significance will not be affected. The visual impacts will also not be altered during the construction phase and remain high (negative). (Check with Visual impact study).

**Table 4.2: Summary of socio and economic impact during the operational phase**

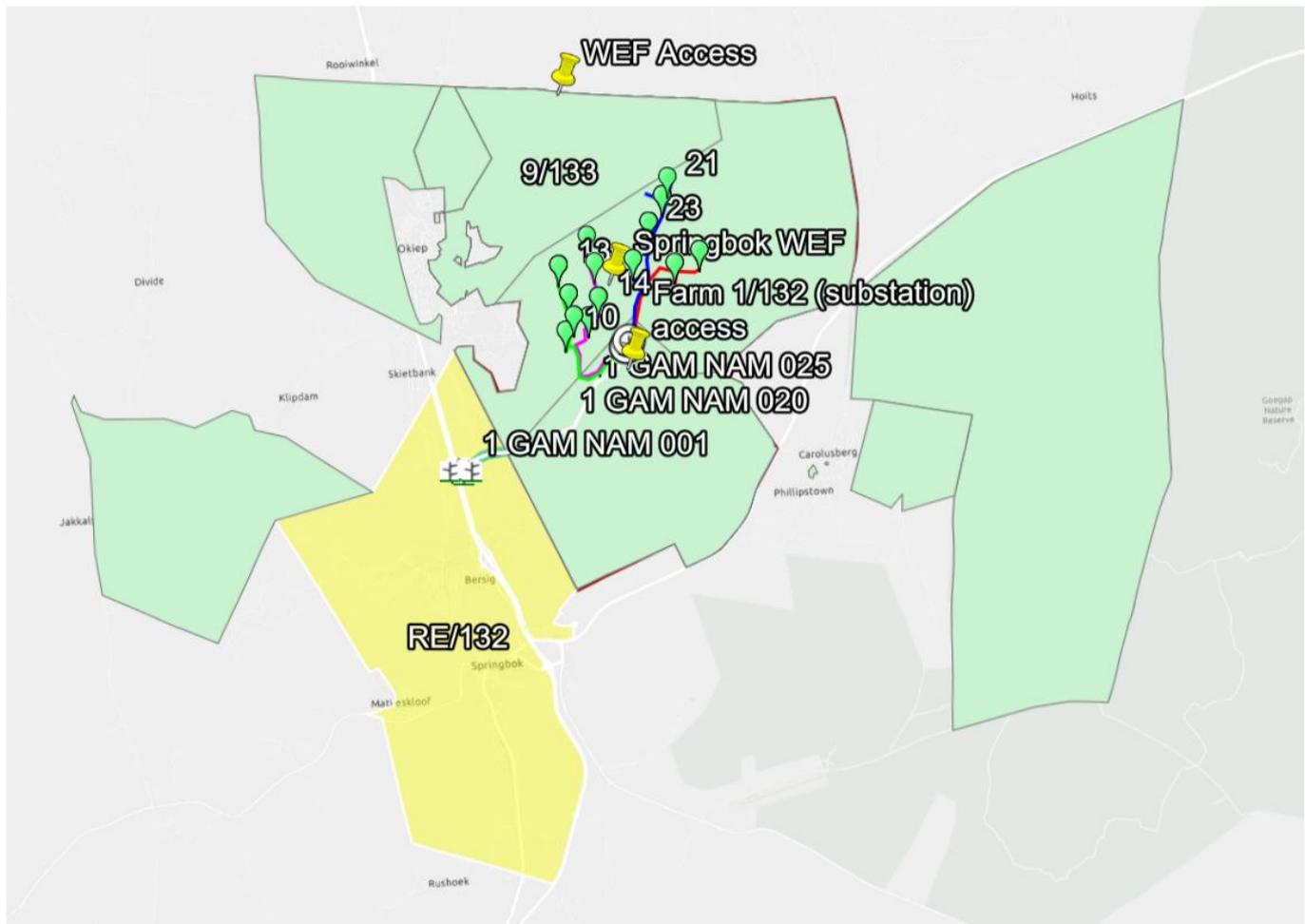
Significance of Impact before Mitigation/ Enhancement	Status	Significance
Simulation of the local economy	Positive	Low
Increase in government income	Positive	Low
Diversification in the local economy	Positive	Low
Employment creation and associated transfer of skills	Positive	Low
Increased pressure on infrastructure	Negative	Low
Altering land use patterns	None	None
Increased traffic and congestion	Insignificant	Insignificant
Safety and security	None	None
Degree of correspondence with development planning	None	None
Loss of visual value	Negative	High
Noise Pollution and loss of tranquillity	Negative	Low

Based on an understanding of the proposed amendments and extended timeframes, it is Urban-Econ's opinion that the identified impacts for the operational phase as highlighted within Table 4.2 will also not change.

### 4.3. Cumulative Impacts

There have been a number of renewable energy facilities (REF) approved. The ones in the vicinity of the proposed Springbok WEF are illustrated in Map 4.1

**Map 4.1: Approved REF**



Source: Savannah Environmental, 2022

In addition to the above, the following Wind Energy Facilities (WEF) have become operational in the Northern Cape:

- Kangas Wind Farm outside of Springbok – 140MW – operational since Nov 2020.
- Karusa Wind Farm near Loeriesfontein – 140MW – operational since Dec 2017.
- Loeriesfontein 2 WEF – 140MW – operational since Dec 2017.
- Longyuan Mulilo De Aar 1 – 96MW – operational since 2017.
- Longyuan Mulilo De Aar 2 – 139MW – operational since 2017.
- Noblesfontein Wind Farm – 73.8MW – operational since 2014.
- Soetwater Wind Farm – 140MW – operational since 2022.

- Copperton Wind Farm – 102MW – operational since Dec 2021.

The proposed Springbok WEF together with the existing and proposed REFs will assist in the enabling of efficient and effective expansion of key infrastructure to satisfy local and national grid requirements. The implementation of this project would therefore assist/ strengthen the electricity network of the South African National grid, meeting growing demand for electricity in the area and improving service quality and reliability. Reliable, i.e., uninterrupted, supply of electricity to the country is one of the prerequisites for development and economic growth as businesses.

## 5 CONCLUSION

To conclude, Urban-Econ assessed the proposed amendments and confirms that the proposed extension and changes to the proposed Springbok WEF will not change the scope, nature or level of the impacts and therefore no change to the initial assessment conducted should occur. Furthermore, from a socio-economic perspective there is no reason why the proposed development should not be authorised.



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