

**REPUBLIC OF NAMIBIA** 

# **OFFICE OF THE PRESIDENT**

NATIONAL PLANNING COMMISSION

# <u>Keynote Speech on the occasion of the Green</u> <u>Hydrogen Symposium</u>

BY

## HON OBETH MBUIPAHA KANDJOZE

DIRECTOR GENERAL – NATIONAL PLANNING COMMISSION

CHAIRPERSON OF THE GREEN HYDROGEN COUNCIL

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#### **Director of Ceremonies**

Hon Nathalia Goagoses, Dep Minister of HET&I Hon K Shilunga, Dep Minister of Mines and Energy Hon Anna Shiwedha, Dep Minister of AW&LR Hon Alufea Sampofu, Zambezi Region Hon Gov L Mcleod-Katjirua, Khomas Region; Hon B Wakudumo, Kavango East Region Hon Penda Ya Ndakolo, Oshikoto Hon Gov Marius Sikunaua Sheya Hon Gov J Uerikua, Otjozondjupa Region; Hon Gov E K. Irimari, Oshana Region Hon Gov E Endjala, Omusati Region; Hon Gov S Ndeitunga, Ohangwena Region; Mr James Mnyupe, Economic Advisor & GH2 Commissioner Mr. Stefan Müller, HoD "Provision for the Future - Research for Fundamentals and Sustainable Development" at BMBF representative from the German Federal Ministry of Education (BMBF); H E Phemelo Rankoro - Botswana High Commission to Namibia; H E Thenjiwe Mtintso - South Africa High Commission to Namibia; H E Stephen Katuka - Zambia High Commission to Namibia H E Dr Andreas Götze, Dep Head of Mission, German Embassy, Namibia H E Jovelina Imperial e Costa, Ambassador, Angola Embassy, Namibia; Prof. Gabriel Miguel, Chairperson of the SASSCAL Governing Board;

Members of the SASSCAL Governing Board;

ED Dr Jane Olwoch of SASSCAL Regional Secretariat, and your officials;

Dr Elijah Ngurare, Senior Officials Present; Members of the Media; Ladies and Gentlemen Distinguished Guest

## Evaluating the Harvest.

Ladies and Gentlemen , Good Morning

- Exposing a seed to good soil conditions, water and oxygen are taken in through that seed coat. The embryo's cells start to enlarge. Then, the coat of the seed breaks open and the root emerges, followed by the shoot that contains the leaves and stem. Sunlight supports the germination process by warming the soil.
- 2. Almost 3 years ago, Namibia disseminated its first seeds. Founded on the aspirations of Vision 2030 and our National Development Plans; The Harambee Prosperity plan II was the birth ground of Namibia's shoots of a green economy. The late 3<sup>rd</sup> President, Dr. Hage G Geingob prepared the ground for trees that bear shades and fruits for us all today. Consequently, I am privileged to celebrate and impart our first harvests and spoils to you today.
- 3. Back in August 2021, following extensive discussions and negotiations with our German counterparts from BMBF, Namibia concluded a Joint Communiqué of Intent (JCol) which availed a grant funding amounting to 40 million Euros. Though this funding, many of today's deliberations are possible. As the Bible warns, you reap/harvest what you sow - today, we shall examine three baskets that symbolize our inaugural harvest.

- 4. In the first harvest basket, we have fruits of Education. Five (5) million Euro (equivalent to 100 million Namibian dollars) from the JCoI was designated to equipping young Namibians with the necessary skills to capitalize on emerging green hydrogen related opportunities. This was accomplished through fully funded scholarships.
- 5. Two (2) academically successful scholarship cohorts have been commissioned since the JCoI program's inception. The initial cohort of 2022 successfully awarded 93 full scholarships to young Namibians across the country, in response to more than a thousand (>1000) applications. The focus of this inaugural cohort was Masters' Degrees and as such, a sizable number of the scholars are now at advanced stages of completing their studies.
- 6. In addition to the tuition fees, the approved candidates were granted a stipend allowance, laptops, and, where applicable, and travel allowances to Europe. The first cohort's achievements warranted a subsequent scholarship call in 2023. The lessons learned from the first intake prompted a more targeted approach to vocational training and wider advertisement of the program especially in the hydrogen valleys.
- 7. In pursuit of this objective, the second cohort garnered nearly four times the number of applications from each of the fourteen regions combined, with particular emphasis on persons with disabilities, youth, and previously disadvantaged individuals from the Hardap, Karas, Kunene, and Erongo Regions. The outcome of these efforts yielded 90 successful scholars from all 14 regions, some of whom have joined us today. Ladies and Gentlemen, a wise man once said, 'Knowledge is like a garden. If it is not cultivated, it cannot be harvested.' today, I challenge all our scholarship students to start cultivating in order that tomorrow we can all say that we built this industry.

- 8. Although scholarships were awarded to students from all regions, the Karas and Hardap regions—where the **first giga-scale projects** are planned—is *unquestionably underrepresented*. This was apparent in both cohorts, notwithstanding the preferences in the evaluation criteria. It is, therefore, necessary to make deliberate efforts to ensure that these two (2) regions are sufficiently represented.
- 9. To this end, Government is exploring a bespoke TVET program for the southern regions to ensure that when the SCDI projects commence, Namibia has built local capacity across all demographics to absorb the employment opportunities in an equitable across demographics. These efforts speak to Government's Robust Talent Management Strategy. The harvest from the education basket is therefore commendable and celebration worthy and I would like to congratulate all 183 scholarship recipients for responding to the call and believing in the ambitions of our leaders.
- 10. The 2<sup>nd</sup> Harvest basket contains spoils from our Pilot projects. 30 million Euros was allocated under the JCol for the advancement of pilot initiatives. After SASSCAL issued a public call for participation in 2022, more than (25) twenty-five project concepts and ideas submitted applications for funding hydrogen-related initiatives. In August 2022 and after extensive evaluations from both the Namibian and German Governments, four projects were announced, three of which have gone on to sign commencement contracts.
- 11. In the Tsiseb Conservancy, the Daures Green Hydrogen Village was the first undertaking. Most of the project's development is carried out by young Namibians in collaboration with two universities, traditional authorities, and local communities. The green hydrogen village is projected to generate an annual output of up to **100 tons of green ammonia** and more **than 400 tons of green tomatoes** during its pilot phase. The project is now 80% complete and will start producing green hydrogen and ammonia **as early as July 2024.**

- 12. As of November 2023, the project has reportedly employed more than two hundred (>200) Namibians from more than (30) thirty small and medium-sized enterprises (SMEs), the majority of which are located in the surrounding communities. (Noteworthy is that the Daures Constituency is the largest constituency in Namibia with a population of approximately 11,350 people – not factual).
- 13. Over 80% of the residents survive under 1 US\$ per day so green jobs for these communities are an mandatory welcome. The project concluded studies to develop green ammonia sulphate fertilizer and received interest from the World Food Program (WFP) and AgriBusdev to procure locally produced green fertilizer. Recent studies highlight the noteworthy future prospects of the Daures project: during its 4<sup>th</sup> phase this village has the capacity to manufacture and export up to 700,000 tons of green ammonia (approximately 30 % the size of Hyphen) at globally competitive prices by 2030.
- 14. The 2<sup>nd</sup> Pilot project is the Cleanergy Hydrogen Facility and Academy. The global shipping giant CMB.TECH and our very own Ohlthaver & List Group (O&L) are collaborating on the development of this innovative project. At the heart of Cleanergy Solution's groundbreaking venture lies a 5MW solar park spanning 10 hectares, accompanied by a hydrogen production facility equipped with a 4MW Electrolyzer and 5MWh battery. The project aims to establish a one-of-a-kind hydrogen facility that directly harnesses self-generated solar energy to produce hydrogen, which is then publicly available at a refueling station.
- 15. Furthermore, in-house fleet and trucks will be converted to dual-fuel technology, utilizing locally produced hydrogen. Preliminary statistics on the Cleanergy project show that over 100 Namibians are currently employed on site and many of the large, long lead items such as high-pressure hydrogen storage tanks and buffer tanks are already on site. All indications point to hydrogen production from this project starting in the 3<sup>rd</sup> quarter of this year! The Erongo valley will be elevated to the status of a global hydrogen hub in the subsequent project phases,

courtesy of Giga-scale hydrogen production and bulk ammonia terminals on land that has already been identified.

- 16. After extensive negotiations, we are delighted to confirm the contract finalization of the HyRail project. The project is spearheaded by TransNamib, Hyphen Technical and CMB Tech. and includes UNAM as an academic partner. This project will demonstrate the 'use case' of hydrogen in the rail transportation sector, in the form of dual fuel converted train. The locomotive conversion is anticipated to commence in the latter part of the year, and initial timelines suggest that it will be commissioned before the end of 2025.
- 17. These three (3) projects are not just spoils from the 2<sup>nd</sup> harvest basket

  they are symbolic of what the future looks like: well, established local
  conglomerates coexisting with previously dis-advantaged Namibian
  youth; to jointly lead the green revolution, through research and
  tangible development.
- 18. The third harvest basket is perhaps the most strategic. In December of 2022, the late 3<sup>rd</sup> President Dr. Hage G Geingob launched our National Green Hydrogen and Derivatives Strategy. This important roadmap was a product of the 3<sup>rd</sup> component in the JCoI program and was successfully completed after an international procurement call for consultants.
- 19. The strategy was founded on the ideology that "Namibia would set up an effective operational structure, embedded in a strong network of partners, to create shared prosperity for Namibians." This ideology was then broken down into a 12-step action plan that guides many of the activities of the hydrogen program.
- 20. Some notable recommendations and subsequent outcomes include.
  - the establishment and capitalization of the SDG Namibia fund with
     40 million Euro from the Dutch Government

- 2) The establishment of the green hydrogen Program and the subsequent recruitment of 8 full time executives in February this year
- 3) Various engagements and efforts to develop a National strategic and legislative framework.
- 4) Ongoing efforts to commission the pilot projects to ensure that Local industry and ecosystems are integrated.
- 5) Ongoing green hydrogen diplomacy efforts to explore and agree on collaboration opportunities to foster cross-border green ecosystems.
- 21. These efforts are not exhaustive but are a testimony of the inherent outcomes of the concluded strategy. The Green Hydrogen Council's steadfast dedication, as evidenced by their fortnightly meetings, provides additional proof of the significance of this strategic bet.
- 22. Ladies and Gentlemen, at this stage, its safe to say our harvest baskets are overflowing. This account is testimony of our collective efforts. The objectives of the JCoI agreement signed in August 2021 have undoubtably been met and exceeded. Hundreds of scholarships have been awarded, hundreds of green jobs created, a national strategy has been developed and is under execution and in just a few months from today – Namibia will produce its first green hydrogen and green ammonia.
- 23. The visionary leadership of our leaders cannot be under stated. Under their guidance, funding was mobilized from our German counterparts at BMBF and effectively utilized across these three harvest baskets. The 'call to action' for us all is where to from here?
  - How do we ensure that all 183 successful scholars have a sustainable green job in a few years from now?
  - How do create more scholarship opportunities for thousands of Namibian waiting for a similar opportunity?
  - How do we begin to discuss the possibility of JCoI 2.0 with additional partners to build on the successes of the first JCoI?

- How do we ensure that the Daures Green hydrogen village develops the next phases with many of the graduates supporting the engineering & design teams?
- how do we ensure the Cleanergy project reaches its next phase and houses the largest bunkering facility in the region to facilitate ammonia exports?
- How do we ensure that Namibian green hydrogen exports to Germany are realized before 2030?

These are difficult questions, that perhaps cannot be answered right away and at this forum but should keep us all awake at night.

As we celebrate the spoils of our publicizing, today, let us tomorrow, get back into the fields and keep sowing.

### I thank you for your kind attention.