PRESIDENTIAL
CLIMATE COMMISSION
TOWARDS A JUST TRANSITION

COMMENTS ON THE SOUTH AFRICAN RENEWABLE ENERGY MASTER PLAN (SAREM)

18 August 2023

1. Summary

1) The Just Transition Framework and SAREM should be viewed as complementary, consistent and enabling of one another.
2) Building on the four pillars, SAREM should strengthen its coverage of relevant regional (African) aspects.
3) The draft SAREM lacks numerical targets, and it must be stressed that it is important to engage stakeholders on them.
4) There is a need to make explicit the theory of change that informs the set of indicators included in SAREM. Clear categories are needed for the set of indicators included in the draft SAREM.
5) The section on monitoring, evaluation, and learning (MEL) needs further strengthening.
6) Consistent and predictable demand should be the foundation of SAREM, which should indicate the quantum in GW / annum that government intends to procure through REIPP and other mechanisms.
7) SAREM and associated large scale energy infrastructure projects should be linked to the Strategic Infrastructure Projects (SIPs).
8) The expansion of the local and regional mining sector to provide steel, aluminium and critical minerals should be emphasized in SAREM.
9) SAREM needs to place more emphasis on supporting logistical infrastructure.
10) SAREM needs to place greater emphasis on local, community and worker ownership models.
11) SAREM has an added responsibility of actualizing the “just” element of the just transition. As such, the focus on skills development needs to more clearly articulate the required workforce (skilled, semi-skilled and unskilled). In the current draft, the matching of skilled competent artisanal workers to vacant posts nationally, is missing.
12) With regard to women's participation, setting ambitious and measurable targets for the participation of women in training opportunities is an important way of building the pipeline of women to enter the workforce in the RE value chain.
13) The SAREM needs to focus more on how the plan could be mainstreamed into the plans of other government departments and identify related synergies.

2. Introduction

The comments below are made within the context of securing the country's energy needs while transitioning to a net-zero carbon economy. The installation of renewable energy technologies and batteries, with peaking support, has proven to be the most expedient and cost-effective technology to ramp up the supply of energy onto the grid. The outcomes of the investment in energy systems must be just. The PCC therefore welcomes the release of the SAREM for public comment. It signals a significant commitment by government and social partners to building the local renewable manufacturing industry. The PCC supports the aims of SAREM to grow investment, local content and employment in the renewable energy value chain and build the in-country skills to achieve this. Key to achieving this is getting more participation by black-owned businesses, young people and women, and incubating and building the capacity of emerging suppliers.

3. Vision, key objectives and pillars

The PCC supports SAREM's vision of industrialising the renewable energy value chain to enable inclusive participation in the energy transition. The objectives are clearly spelt out, but we note that contributing to a just energy transition is listed as one of the objectives, whereas we would consider this to be an overarching goal which encompasses all the objectives listed. The Just Transition Framework, which has been adopted by Cabinet as the countries overarching policy to inform, amongst others, the Just Energy Transition, and SAREM should be viewed as complementary, consistent and enabling of one another.

The PCC considers the four pillars (creating sustained demand; driving industrial development; fostering inclusive development; and building skills and capacity) to be the correct building blocks for the strategy.

There are some aspects which are not sufficiently covered by the four pillars, for instance regional and international aspects. The SADC integrated trade strategy, targeting the acquisition of new minerals supported by the African Renewable Energy Manufacturing Initiative, will be a powerful game changer for the region as South Africa transitions. The BRICS also provides a forum in which leading developing and middle-income countries can collaborate to secure their trade, investment and geopolitical interests in the climate transition.

4. Indicators and targets

There are no numerical targets included in the draft SAREM, so the comments below are confined to the indicators themselves (Table 1). The selected indicators mix up input, output and outcome areas. It is not clear what theory of change informs them, and it would be useful to make this explicit. The indicators do not fully encompass the ambitious aims and actions plans contained throughout the SAREM. There is also a predominance of "end-stage" indicators, meaning there is a long lag between the first action and final outcome, which misses the opportunity for learning and recalibration. The SAREM should contain early-stage indicators to know whether the country is on course towards the end goals. The indicators are also project focused, rather than focused on growth of the overall sector.

The PCC suggests a reordering along the lines of:

Input indicators	Output indicators	Outcome indicators
• Annual new investment in value chain. • Number of technicians trained per annum in sector. • Annual value of funding provided for incubation and capacity building.	• Capacity (GW) of new projects registered and installed. • Number of people employed in sector, disaggregated by age, gender and race. • Share of project total expenditure procured locally.	• Total market value of sector. • Annual sector output less value of imports • % black and women ownership of sector. • % worker and community ownership of sector.

In general, monitoring, evaluation, and learning (MEL) is addressed in the SAREM in a fairly limited manner. If done well, MEL can bolster the implementation of the SAREM, by (1) providing an environment of regular feedback and learning, (2) advising on course corrections where needed, (3) identifying what's going well, what isn't, and why, and (4) building trust that all stakeholders are taking actions in support of the SAREM.

Many government departments track pertinent data relating to the goals and action plans of the SAREM, which should be tapped into for effective tracking of the SAREM, including DFFE, dtic, DEL, StatsSA, DMRE, DHET, and DPE.

Many factors, outside of the SAREM, could impact the goals of the SAREM, which could warrant further investigation, and subsequent tracking thereof. These include political support, capacity of the state to implement, vested interests, resources available (financial, technical, skills, and education).

5. Fostering demand for RE and storage technologies

The PCC supports the measures for driving market demand through regular REIPPPP rounds; public procurement (public works & industrial parks); upgrading the grid to accommodate new generation capacity; addressing regulatory issues (such as registration and licensing, wheeling, trading and a power exchange); and tracking this through quarterly updates on the pipeline of projects.

However there needs to be greater certainty provided with respect to demand measures and greater specificity of demand projections. The primary obstacles the market faces are inconsistent government messaging about the role and place of renewables, and highly variable and sometimes delayed procurement rounds in the REIPPPP. Government should indicate that it aims to achieve a consistent rollout of renewable and battery technologies at a rate of between 6 to 8 GW per annum. The aggregate figures per five-year period should be reflected in the updated IRP, the Integrated Energy Plan and the Eskom Transmission Development Plan. In the absence of certainty of demand, investment will be difficult to attract. Market and pricing issues need to be resolved to support the certainty needed by the private and public sectors (including municipalities). Targets should specifically focus on GW registered with NERSA and installed.

Further measures to boost demand should include supply of electricity to areas that have not been electrified (primarily rural) through the use of local technologies such as mini grids, bolstering demand and spurring the development of additional sub-sectors. There is significant growth potential of such technologies within the SADC region as well.

SAREM and associated large scale energy infrastructure projects should be linked to the Strategic Infrastructure Projects (SIPs) in order to aid the Invest SA one stop shop in unblocking administrative, systemic and funding risks.

6. Driving industrial development

The PCC concurs that the rapid roll-out of renewable energy (wind and solar) and battery storage, with the accompanying BOP (balance of plant) programme provides significant opportunities for localisation. Localisation must be in terms of an industrial strategy that advocates a thorough-going industrial transformation for the long term.

In addition to the civil and electrical engineering and services required for wind, solar and battery installations, SAREM correctly identifies opportunities where local content can be developed over time e.g. towers, rotors and nacelles for wind turbines; and module assembly, mounts, trackers, cables and inverters for solar PV. Manufacturing of equipment for the transmission sector could have greater emphasis, for instance SAREM could consider the manufacturing of inverters, transformers and transmission pylons and cables and other transmission components.

Beyond raw materials and finished products, many export opportunities lie in intermediate sub-components that are assembled locally. The working team should consider mapping the renewable energy manufacturing landscape with a flow chart of required components and services clearly articulating the different stages and highlighting where South Africa may be competitive, given that different stages (such as assembly) require different types of skills and support. Articulating and illustrating these requirements, even if not quantified within SAREM, can help other planners.

The expansion of the local and regional mining sector to provide steel, aluminium and critical minerals is an additional dimension that should be emphasized.

The PCC supports the proposed measures for industrial development by phasing in local content targets, building local certification capacity, setting up a one-stop shop through InvestSA, building linkages with sectors such as steel and batteries master plans, using trade policy, and extending tax incentives for the sector.

However, these measures are not sufficient on their own, and in the absence of additional measures, South Africa will not achieve the deep and sustained industrialisation, localisation and competitive technology objectives that the global shift to renewable energy enables. The strategy needs to advocate for harmonisation and integration of existing tax, SEZ, policy and other incentives, including SMME support, policy environment and scaling up technology development to leverage the existing financial facilities to promote investment in the sectors of focus for SAREM. Trade, while alluded to, needs to be more prominent in the analysis of required incentives.

The USA's IRA, the EU's Green Industry programme (following on from the EU Green Deal and CBAM), and China's continued domination of the supply chain for inputs – requires careful consideration of more substantial policy and fiscal support for a deeper "green economy industrial transition". Failure to do this could put the SAREM objectives at risk.

In the context of fiscal constraints, the PCC understands the inability to have a substantial fiscal support programme – this means that market signals, certainty of the RE roll-out programme, and the pricing mechanism will have to be the strategies that stimulate the investment required.

There needs to be more emphasis on supporting logistical infrastructure. While the SAREM make the point on Pg. 21 "...the quality of infrastructure (such as roads, railways and ports) ...also has an impact...", this is acknowledged but falls beyond the scope of SAREM. The strategy needs better integration with policy governing infrastructure and logistics, without which SAREM may fail. It must be noted that there are significant employment opportunities in road, rail and port upgrades along routes to the main installation areas.

SAREM needs to quantify the requirements for its plan which can then be used in broader economic planning (e.g. estimated tonnages, types of raw materials required, types of raw materials available, availability of materials (e.g., unlimited, limited, very scarce, etc.), types of components to be imported/exported, key geographical locations, envisaged timelines, key market participants, etc.). A spatial plan of where these renewables will be is critical and the Eskom / SAPVIA / SAWEA survey is an important place to start.

7. Fostering inclusive development

The interventions to foster inclusive development are supported, with the catalytic interventions being most critical. At the forefront of catalytic interventions is the development of the Broad Based Black Economic Empowerment (BBBEE) sector specific scorecard for the renewable energy and storage sector. The PCC is concerned about the imbalance that exists between the social empowerment obligations in REIPPPP and the absence of any empowerment obligations for embedded generation projects. This can be addressed by a sector wide industry charter committing all developers and suppliers to a minimum set of transformation objectives.

SAREM should explicitly recognise the importance of gender equality, and the opportunity it offers to ramp up the participation of and benefit sharing by women in the renewable energy value chain. At the very least, SAREM must chart a process for setting measurable targets for women's participation in all its components and interventions, beyond the BBBEE scorecard.

Sector scorecards rarely transcend the minimum regulatory requirements and often serve as an additional level of reporting rather than a bona fide instrument for economic transformation with constructive social outcomes. The BBBEE scorecard for the renewable energy and storage sector could offer a departure with distributive justice weaved into the scoring elements, and community ownership, skilling, and local economic development elements of the scorecard aiming to realise the just transition.

SAREM needs to place greater emphasis on local, community and worker ownership models, and spell out incentives that will enable socially owned renewable projects and companies to go to scale. Integrating local communities into the supply chain will broaden economic participation (including by women) and strengthen support for SAREM. The Social and Solidarity Fund is well positioned to catalyse such initiatives.

8. Building capabilities

Scaling up the renewable and battery storage sector (and those sectors proposed for inclusion) requires a new generation of technical and managerial skills specific to the rapidly evolving technologies. This is a central component of the just transition, which aims to grow decent work and livelihoods in new energy sectors. Amongst others, reskilling and upskilling of existing workers is crucial to realizing the “just” element of the transition. Unlike previous master plans which focused on creating the enabling environment for industrial growth, SAREM has an added responsibility of actualizing the “just” element of the transition.

The focus on skills development needs to more clearly articulate the required workforce (skilled, semi-skilled and unskilled) to enable the achievement of the objectives of developing a deep, sustainable and competitive localised industry for renewable energy. The enumeration of specific demand targets for the sector will enable more accurate labour force planning. Knowing what level of skill will be needed across manufacturing, installation and maintenance will enable the design of reskilling, skilling and education programmes as well as planning the location of training facilities in the vulnerable regions.

While SAREM matches skills demand and supply between education providers and the private sector, and through Yes4Youth provides internship and training, the matching of skilled competent artisanal workers to vacant posts nationally, is missing. A centralized location for renewable energy and storage vacancies will enable skilled and competent workers from across the country to apply for jobs, in the event of a localized skills shortage.

Skills represent a major barrier to building out the renewable energy infrastructure that form the basis of demand for the SAREM. Skills development therefore needs a focus at the scale that will unlock both the development of infrastructure and of SAREM specific localisation initiatives. By setting ambitious and measurable targets for the participation of women in training opportunities is an important way of building the pipeline of women to enter the workforce in the renewable energy value chain.

While DHET have been given responsibility for skills mapping and curriculum development it would be ideal for a specific intervention on scaling up training provided in existing TVET colleges, perhaps in partnership with the private sector.

9. Integration and alignment

The SAREM needs to focus more on how the plan could be mainstreamed into the plans of other government departments and identify related synergies. This will also significantly broaden the scope for employment opportunities. Amongst others, SAREM needs to be aligned with and integrated into:

- National Development Plan
- Integrated Resource Plan
- Integrated Energy Plan
- South Africa's NDC
- Just Transition Framework
- Medium-Term Strategic Framework (MTSF): 2019 – 2024
- Eskom's JET Strategy
- Eskom Social Compact
- Industrial Policy Action Plan (IPAP) and other Sector Master Plans.
- National Employment Vulnerability Assessment (NEVA) and Sector Jobs Resilience Plans (SJRPs)
- National Skills Development Plan, 2030
- The Human Resource Development (HRD) Strategy Towards 2030

10. Timeframes for comments

The PCC thanks the DMRE for the opportunity to provide its comments on SAREM and for the extension of the comment period. However, even with the extension, the PCC does not consider the tight deadline for comments on the Master Plan to be sufficient for meaningful public consultation. This is the first opportunity that stakeholders, outside the steering committee, have had to comment on SAREM.