

***“Contrary to common perception, South Africa is doing amazingly well in small hydro at the moment.”***



Every year, we always look forward to getting the views of Wim Jonker Klunne, Senior Researcher Renewable Energy at the CSIR, hydropower expert, session chairman at the upcoming Clean Power Africa – in fact Wim has been a longstanding supporter and contributor to the event since its inception.

**1) Let's start with some background about your work at the CSIR?**

At the CSIR I am involved in a wide range of projects in the field of renewable energy and energy efficiency. All around the implementation of these technologies, either looking at policy development, capacity building or technology integration or improvements.

**2) Your particular expertise is hydro, how important is hydro for Africa?**

Hydropower, and in particular small scale hydro, has huge potential in Africa and can play an important role in bringing development to rural areas. Whereas large scale hydro can boost grid connected electricity, small scale hydro is an ideal technology for remote rural areas.

**3) How can small hydro benefit small communities?**

Small hydro has the capacity to bring the same quality of electricity to small communities as is enjoyed by the people in the urban areas. It can enable local entrepreneurs to start small businesses and local households to enjoy the comforts of modern life, but also enable local health facilities to bring better service to the community and schools to make use of modern teaching methodologies.

**4) Can you give some practical examples of success stories or case studies?**

There are actually quite a number of examples of such small hydro systems that did help rural communities to develop. A lot of countries in eastern and southern Africa do have numerous systems up and running. Like for example Tanzania where in particular church missions have done amazing work, but also the Eastern Highlands of Zimbabwe and Manica province in Mozambique where villages are electrified using small hydropower systems.

**5) Is small hydro a viable investment for someone interested in financing energy projects?**

Financing small hydropower is still a bit of a challenge, in particular if we are talking about off grid systems that cannot benefit from selling power to the national utility. Small hydropower requires, even more so than other renewables, a substantial upfront investment. Combine this with a long lifespan of more than 30, 40 or 50 years, finding a feasible investment model is still something we are battling with. This is not to say that it is impossible to have small hydro as a viable investment, but it certainly needs long term thinking and in most case some kind of financial support by either government or donors.

**6) What are the main challenges to getting small hydro projects off the ground?**

One of the main challenges is that the technology, although mature and successfully applied in numerous projects, is relatively unknown to policy and decision makers. The limited available technical skills to design and implement small hydro and limited local manufacturing do hamper the uptake of the technology.

**7) How is South Africa doing in small hydro?**

Contrary to common perception, South Africa is doing amazingly well in small hydro at the moment. A substantial number of systems are currently under development. The fact that a recent hydropower training by SAICE did attract full houses in Bloemfontein and Durban is a good indicator that this sector is really getting attention at the moment.

**8) You have been associated with Clean Power Africa for years now, how do you benefit from this event?**

For me, the Clean Power Africa events have proven to be an excellent opportunity to be in contact with my peers in the industry and get updated on the latest developments, through the presentations, the exhibitors and meetings with like-minded people.

**9) What will be your message at this year's AUW and CPA?**

The recent developments in South Africa and neighbouring countries have put the renewable energy sector on the cards. Let us please keep this momentum and ensure collaboration in the industry towards a common goal of increased uptake of all types of renewables.