

Workshop on National Councils for Sustainable Development and Similar Multi-stakeholder Platforms

July 8, 2019, United Nations, New York

'The role of NCSDs and other similar multi-stakeholder platforms in Financing for Sustainable Development'

Comments by Rik van Hemmen, P.E.

The following comments were prepared prior to attendance and prior to the preparation of the PowerPoint presentation to assist in organizing thoughts by the author on the posed questions. The workshop provided a much wider insight in the subject and many of the below thoughts were superseded by more knowledgeable insights by more knowledgeable participants. Regardless the below comments may provide insight with regard to the point of view of engineers who are not deeply engaged in the non-engineering aspects of sustainable development on a daily basis.

Question 1: What role could national and subnational development banks play in cooperation with NCSD?

Everything comes down to coordination, and, with regard to sustainable goals, CO2 knows no boundaries and therefore coordination needs to be worldwide. Having said that, niche development at a national level can be quite attractive. Development of technologies can be extremely wide-ranging in costs. Many years ago, a smart businessman told me that a business needs to select the right size bank. Too big a bank and the bank will not fight for you. Too small a bank and the bank will not have the resources to sustain your business. It is no different for development banks. Some projects are just right for large development banks (fusion) and some projects are just right for small development banks (solar stoves)

In all technology development, it is also important to get a handle on technology development cost v. commercial payoff potential v. social payoff potential v. risk.

Sometimes the risk is high and even the payoff may be marginal, but the social benefit may be sufficiently high to almost require a development bank to make the leap when a commercial investor is not interested.

This becomes very interesting and is often poorly analyzed. While development banks are important in the development of new technologies, it should never be forgotten that policy goals and standards lead over money. Only when communities compel industry to do the right thing can there be expectations for proper outcomes.

Often the biggest hurdle that technological progress faces is the inability of development banks to refuse to finance technological projects that are aggressively driven by industry but do not truly comply with community goals and long-term technological benefits. Development banks are aware of this but from an engineer's point of view need to really develop better mechanisms to fight this. As such, oil production development in a poor country may seem like a good idea because it immediately increases the wealth of a country, but it really introduces too many long-term instabilities and problems for it to

be a worthwhile development investment. As such, projects that promote local (micro) energy production over large scale national level energy production may be much more beneficial in the long run even though they may not be as apparently cost-effective in the first analysis.

Local small development banks, in coordination with local policies, can occasionally even leapfrog larger countries if they really engage technology and the underlying sustainable math. An interesting example relates to the width of car lanes and cars. If a developing nation strongly promotes a universal (relatively narrow) car width, the entire car infrastructure becomes much more efficient. This is a complex issue, but if you imagine that with a universal car width all parking spots will have the same width, it is easy to imagine that a universal car width is actually an example of adopting the efficiencies of shipping containers in land transportation. This is particularly useful in dense developing country megacities. Once this more efficient infrastructure is in place developing countries actually can outcompete developed countries with their infrastructure. See: <https://martinottaway.com/technical-resources/maxi-taxi/>

This is where development banks come in, they need to support such visions.

The same goes for energy. Countries that presently have expensive energy become much more competitive when their energy costs go down. Today there is a real possibility that small island nations will produce energy at a lower cost than larger more developed countries. If those island nations focus on increasing infrastructure efficiencies (narrow cars), and reducing energy cost (sustainable energy at a cost lower than developed country non-sustainable energy costs) at the same time, they will be able to join the fully developed countries on a competitive level no matter how far from the market they are.

If I have to provide a concise bit of advice to development banks I would say: Curbside promoters and freeloaders exist at every level of society. Arm yourself against them in any way you can. We waste too much money on wacky poorly thought out technology projects. Force your policymakers to set good long term, iron bound, goals with proper penalties and incentives and stick with them, and ignore the complaining of engineers claiming the goals are too difficult to achieve. Real engineers don't complain; they like tough well-defined goals. Complaining engineers (and their corporate handlers) are probably curbside promoters or freeloaders. Real engineers are never anti-progress, progress is nothing else but pro better. Real engineers are pro better. (The glass is not half full, or half empty; it is 50% too big) As a development financier, follow Admiral Wayne Meyers' maxim: "Build a little, test a little, learn a lot". Building a little, testing a little and learning a lot allows society to weed out the freeloaders and curbside promoters. And make sure you pay close attention to the tests so you actually learn a lot.

What is the role of the Multi-stakeholder partnerships and NCDS?

Too many people do not know that engineering is a communication exercise that needs to take place at all levels. A problem cannot be solved (engineered) until all the variables have been defined. Engineers love it when the hard work of the community policy development variables has been firmly established by the community (hopefully with reliable input by engineers and scientists). Clear goals and clear communications provide technologists with the ability to develop technology solutions. Make it difficult and the great engineers will rise to the top. Make the goals weak, and the freeloaders and curbside promoters will rise to the top. Going to the moon is the clearest example. That was as strict no curbside promoters and freeloaders zone.

We could have developed alternative car propulsion methods decades ago if Reagan had withdrawn Carter's CAFE standards. I lived with the engineers who through clever design and investment met the standards and they were betrayed by the engineers and lobbyists who compelled Reagan to withdraw the CAFE standards.

I was deeply involved in the Exxon Valdez disaster. I am not calling Exxon a bad company, but one dirty little secret on the Exxon Valdez is that Exxon waited for the double bottom requirement to be dropped by Reagan and then built single skin tankers for the Valdez trade when BP and others were running double bottom tankers in that trade already. A double bottom would have reduced the oil outflow by 50%.

Multi-stakeholder partnerships and NCDS need to exist to keep us all honest and avoid shifts of the playing field arranged by freeloaders and curbside promoters.

What is the role of national industry coalitions to deliver the SDGs, and how they might engage with national platforms?

All technology development is a collaborative exercise that requires coalition development. Coalitions should engage with national platforms in two ways.

First: They should engage in the goals and policy development, but each participant in a coalition should be extremely harshly vetted on the submission of their comments.

A national platform developer should absolutely destroy any contributions that even make a minor effort at data skewing, slant, or obfuscation. It is appalling that giant companies and small companies alike are not brought to task for the presentation of obviously dubious data and conclusions.

As a bystander, I have been absolutely flabbergasted by the incredibly poorly developed background data on the development of corn ethanol fuels in the US. The whole argument can be defeated by simply stating that a plant can never produce as much energy as a PV solar panel occupying the same square meter of land. That by itself should have been sufficient to simply not start on the whole corn ethanol thing including almost everlasting subsidies for a technology that does not reduce CO2.

In effect, we created a subsidized industry with about as much societal benefit as Styrofoam. People, organizations, and coalitions that provide shady input in goal setting should be excluded from the national platform goal discussions for life. There is nothing easy about vetting data and opinions, it is exhausting, but it can be done and we do need to have national and international conversations about truth and the destructiveness of untruth.

Second: Once clear goals are set; national platforms should pay very little attention to coalitions at the trenches level and only focus on coalitions' ability to achieve the stated goals. Let coalitions do their job. Again, do not change national platforms simply because there is some level of complaining. Somewhere out there, there are smart and hardworking technologists, scientists, inventors, entrepreneurs, investors, and engineers who are willing to take the long shot because society will ask for their solutions and will not change the game for the convenience of curbside promoters and freeloaders. Nobody invests in goals that can be changed at any time based on a random whim.