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Dear Mr.Evangelopoulos,

I'm willing to explain you the brief counclusion of my AFROGREN (Africa-Greece-Energy) RECOVERY APPROACH against GREXIT problematic, with this letter. I had already told logframe of this approach previously both in my virtual connections and emails to Greek ambassador in Edirne where you received as cc. Let me summarise please:

A. Identification of the problem before naming the solution?

Actually Greek economy is not sick. The income and cashflow structure is sufficient to circulate national economy in normal conditions. But since previously obtained loans had spent unnecessarily and/or uncorrectly, the current national cashflow and income circulation can not being enough to pay these debts, sustainability of the economy and growth. Simply Greek debts are higher than Greek economy. Therefore the solution must both consider the payment of the debts and working of the economy like before.

B. Why Greece need an unique structural recovery plan?

The first target is to rescue from heaviness of the debt loads and lender pressures like already Greek government wants. Because Greece need breathing. We know that private lenders loan amount is € 110,9 billions, Official Eurosytem's is € 96,1 billions, Greek public sectors' & banks' are € 82,2 billions, world governments' is € 40 billions and European Banks' is € 24,1 billions, in total € 353,3 billions debt load. The common interest of these creditors is to rescue their monies with max benefit as much as they can get. So none of their plans can be honestly for sustainable recovery of Greek economy. Unfortunately also Greek economy technotrats focalise on rescue of the day but not recovery of the future. We observe it even both at their official budget maps and reactions against the offers of the creditors; like surplus of 3,5 % of GDP by 2018.

So before else Greece must offer a structural repayment plan which should relax the creditors. Even convince them to open new credit lines while frozen the previous ones. Money likes profit. It's the clue.

The second target is actuating the national economy like before but with a logical growth strategy.Surely this strategy must convince and gratify the lenders too.Obviously, both repayments and growing can be possible only with this approach.

Then, Greece must create an unique structural recovery plan immediately.

C. Why AFROGREN can be a realistic recovery plan for future also?

Please note that AFROGEN approach includes all concepts of new global economy regime; like Low Carbon Circular Economy, Clean Development Mechanisms-Climate Finance and Impact Investing. You know that global financial crisis' actual reason is regarding the transformation progress to this new age systematic based on these methodological concepts. Therefore AFROGEN is a structural-futuristic plan. Even also includes real economy and financial methodologies in same basket. Furthermore it's connected with Inclusive Market Development approach.

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D. What are the main characteristics of AFROGREN?

1. Involving in renewable energy plant construction market (CONSTRUCTION)
2. Involving in electricity supply deal markets (PPA)
3. Involving in Emission Trading Systems (ETS)

E. Whats is the financial capacity of AFROGREN?

We have to answer this question according to each characteristics in above.

1. **CONSTRUCTION:** Africa's total electricity need has been calculated as 182,500,000 MW; due to 0.50 kWh per person absolute daily usage. Please note that this is the urgent parameter with considering the Africa as BoP-Base Of the Pyramid. (Attention Please: Due to IM-Inclusive Market approach it should be 3,358,000,000 MW)

All calculations in below figures are done according to Hybrid Solar Updraft Tower (H/SUT) technology formation. Then :

82,207 MW power H/SUT plants annually produce 182,500,000 MW electricity (BoP approach) and 1,509,335 MW power H/SUT plants produce 3,358,000,000 MW electricity (IM approach). So:

The nominal commercial value for BoP approach is $82,207 \text{ MW} \times \text{€ } 2,000/\text{kWh (cost)} = \text{€ } 164,414,000,000$

The nominal commercial value for IM approach is $1,509,335 \text{ MW} \times \text{€ } 2,000/\text{kWh (cost)} = \text{€ } 3,018,670,000,000$

*** Note: I didn't consider the commercial value of component mfg markets and related equipments*

2. **PPA:** Generally the African governments prefer Build-Operate-Transfer method and issues Power Purchase Agreements as guarantee with 20 years maturity.

[BoP] => $182,500,000 \text{ MW} \times \text{€ } 0,18 \text{ kWh} = \text{€ } 32,850,000,000/\text{year} \times 20 \text{ years} = \text{€ } 657,000,000,000$

[IM] => $3,358,000,000 \text{ MW} \times \text{€ } 0,18 \text{ kWh} = \text{€ } 604,440,000,000/\text{year} \times 20 \text{ years} = \text{€ } 12,088,800,000,000$

3. **ETS:** The calculation done according to comparison of diesel consumption and related Co2 emission. Also the volume of derivative instruments of climate finance are not calculated here. Only Emission Trading System/Offset approach is considered.

[BoP] => 182,500,000 MW power produced by H/SUT plants cause 145,543,750 MT Co2 saving. In other meaning; 145,543,750 ERs (emission reduction certificates) which market value due to current prices (€10) is € 1,455,437,500

[IM] => 3,358,000,000 MW power produced by H/SUT plants cause 2,678,005,000 MT Co2 saving. In other meaning; 2,678,005,000 ERs (emission reduction certificates) which market value due to current prices (€10) is € 26,780,050,000

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So the total financial volume of AFROGREN is € 822,869,437,500 due to BoP Approach; and € 15,134,250,050,000 due to IM Approach (Note1: 20 years old calculation Note 2: Futuristic values of ETS have not been calculated)



F. Basic recovery plan scenerio due to AFROGREN logframe

The first calculation is related escaping from almost € 360 Billion worth of debts. Lets start the calculation with main characteristics of Afrogren.

- **CONSTRUCTION:** The calculation for H/SUT power plant technology has been done due to globally accepted 1 kWh cost= € 2,000 approach. However this is (€2,000/kWh cost) min. % 40 higher than real cost. So, we accept that there is 40% profit here. According to this:

Each 50 MW power H/SUT plant's construction profit is roughly € 40,000,000. It means that 8,832 unit 50MW Power-H/SUT plants' construction profit pays € 353,3 Billion debt.

***The cost of 8.832 unit 50MW Power-H/SUT plants is € 883,200,000,000. So, the question is that " how can creditors convinced to cover this cost although they have been convinced to freze € 353,3 Billion . Please look below:*

- **PPA:** 8,821 unit 50MW Power-H/SUT plant produces 982,480,522 MW/annual electricity. Each year's income is € 176,846,492,000.

** So, € 883,200,000,000 new credit line will be paid to creditors with 5 years maturity of PPA after activation of the plants (circa 3 years). So, 8 years will be enough.

- **ETS:** This section gives us external incomes to calculate must be offered interest/profit to creditors against € 353,3 Billion frozen debt (3years)+ € 883,2 Billion new credit lines (8 years) = € 1,236,500,000,000

8,832 unit produces 783,528,208 ERs which market value is (currently €10 per ERs) € 7,835,282,080. Sure this income will not satisfy the creditors since they expect higher profits/interests against € 1,236,500,000,000.

So the main idea is hidden here. Please read below now!

<< Remaining 12 years (PPA is 20 yrs) the total income from PPA section is € 2,122,157,904,000. So, this money will be enough to cover remaining profit/interest expectation of creditors and most importantly sourcing the re-development of Greek economy >>



Finaly;

Greece can both pay it's current debts incuding profit/interest and realised the sustainable economical growth with this 20 years structural program. € 1,236,500,000,000 (inc.€ 353,Billion current debt stock) may look very high amount but the carefull eyes see realism of the related figures. Already, € 353,3 Billion debt can not be paid to creditors with current balance of Greek budget. Indeed it is impossible. But hereby, AFROGREN approach targets both repayment of the loans; even with negotiable profits; and also sustainability of the national economy. The only issues are technicaly harmonizing of the AFROGREN with actual Greek monetarial policies and convincing the creditors.

Besides, i only wrote the basic figures of my approach. Neither technical figures nor impact results were included yet. For example solution for immigrants in Europe is just a little part of this impact concept.

I wish; this frankly proposal can be accepted by patriotic authorites. Or at least Greek technotrats can issue the best structural planning. We have a mutual purpose: The recovery of Greece from current unnecessary crisis. Thanks.

Best Regards,

Serdar Manga