Commitments and financial incentives in service of global sustainability goals Adding short-to-medium term financial skin in the game

<u>abstract</u>

A system of contracts to get more skin in the game is described. Participants choose to enter by depositing an amount, which then is under contractual control. Participants could be heads of state, committees representing countries or companies or any other organization that can be represented by a public key.

outline of the contractual structure:

A challenge or competition in the form of a contract is launched. To enter is to deposit a sum (1). Once the representative has deposited, a timer is started, e.g. 60 days, during which a certain subset of goal-specifications from a set of them (2) must be chosen, or else when the timer runs out the funds are locked to be redistributed later to countries who did select goals and made progress beyond the set treshholds.

The redistribution happens a fixed time after the launching of the contract, e.g. 2 years and 60 days, and is determined by the failure or success of reaching the goals (3) as determined by evaluation of oracle values.

additional thoughts

We could have a step prior to the first one discussed here: an announcement step where the message is sent to the various organization or put on a globally accessible message board. The countries would have the opportunity to sign the message showing they are aware of the challenge. That way we would know they know, and they would know we know that they know of the challenge. These facts might activate social dynamics such as peer pressure and shame at the international level.

If a country fails to sign a message this may be perceived as closing their eyes to a set of problems, and if they do sign it they may be reluctant not to enter the contract without good reason (4), given the fact that if everyone reaches the goals nobody will have lost money. Entering the contract would signal to the rest of the world that they truly are committed, not just in words and feigned intention. There would be financial skin in the game, which seems to be a bigger factor than actual skin, lungs and oher organs, which all of us earthlings already have had in the game for a long time (e.g. the impact on every organ in the human body of breathing polluted air).

Let me mention at last that I have failed to mention many possibiliies, many of which surely are important, but I hope that the outline provided gets accross some of the meaning that I had in mind.

<u>Notes</u>

(1)

E.g. a percentage x of GDP or annual profits

(2)

E.g. 5 goal specifications out of a possible 17.

The goal specifications should allow unambiguous checking through oracles and possibly other means. Examples of goal specifications:

x/5 percent of gdp donation to reputable highly esteemed Research and development organization

y percent of energy consumption produced by wind, solar

y percent of annual energy consumption worth of storage capacity y published open source patents relating to stanable energy. For this one a comittee of recognized impartial experts may be called upon to judge originality and uniquesness,

y percent of gdp devoted toinstalling sustainable energy infrastucture such as batteries and solar installations

Most of these could be verified fairly straightforwardly, given a flourishing oracle ecosystem. It would be similar to getting stock price on-chain via oracles. Emurgo's oracle pool idea may turn out to be part of the solution.

Also: It could be allowed that a single problem specification be chosen multiple times, e.g. instead of reaching 30 percent sustainable energy production to choose the goal 3 times for 90 percent, or even 5 times for 150 percent (and become exporter of clean-sourced energy). We might disallow or limit this option in some cases, or subject it to additional constraints such as in the case of the patents in order to avoid bogus patents, and make sure there really are different patents. A committee of eminent scientists and engineers could be called upon to decide the matter of originality, uniqueness and potential relevance of the patents.

(3)

There are many possibilities for how this reallocation could happen. It could be binary where either all or none of the funds are lost, or it could be proportional to the progress made (where pogress can be quantified) or a combination.

(4)

The trick is to design the contract and its options so as to leave few valid reasons not to enter, e.g. the goals should be aggressive but realistic.