The proposed model in the submission is two levels of clubs, composed of cities and countries respectively. In order to tackle global catastrophic risks the model is inclusive, accountable, and additive. Clubs have requirements tied to addressing global challenges. The clubs do not require membership from every single actor in the system to be viable. Current city collaboration initiatives lack enforcement tools, therefore the submission institutes a city forum, and an index for comparing cities’ efforts, providing accountability and access to innovation exchange. The combination of tangible rewards to membership and the possibility of removal combined means decisions can be made despite the disagreement of a minority of individual members.
1. Abstract

A globalized, urban, rapidly changing world facing global challenges of a kind not previously faced requires a particular kind of global governance framework. Firstly, it must substantially include cities and harness their dynamism, direct accountability, and reduced ideological affiliations. Second, it must overcome the “tragedy of the commons” that many of the global challenges we face now and are likely to face in the future entail by aligning the solving of these challenges with selfish incentives. Third, it must bring on board the world’s most powerful players at both the city and the national level by distributing decision-making power according to actual political and economic power, without alienating the majority of other actors. Finally, it must be additive, not subtractive, so as not to infringe on sovereignty.

The proposed model achieves this through an optimal balancing of various forces and incentives. It relies on facilitating the creation of clubs of cities and countries. Clubs are optional to join and provide a tangible, excludable benefit to their members – benefits which actors not in the club can be prevented from having access to. Conversely, they have membership requirements which are tied to the addressing of global challenges. Decision-making power in these clubs is distributed according to GDP. Thus, powerful cities and countries are brought on board, but less powerful actors will also join to take advantage of the benefits and because once the clubs are sufficiently large, not joining will become a diplomatic inconvenience and result in the loss of significant benefits enjoyed by a majority of other actors. Crucially, clubs do not require buy-in from every single actor in the system to be viable, and the possibility of removal combined with the presence of tangible benefits from the club means decisions can be made despite the disagreement of individual members. By providing a tangible benefit in addition to the resolution of global challenges, the tragedy of the commons is overcome. Because joining a club is optional and meeting its requirement provides an additional benefit, the process is also entirely additive.

At the city level, the primary arena of operation of the model, there is no limit to how many clubs can exist, and the initiative for the creation of new clubs and the modification of existing clubs rests with member cities. This is balanced against enforcement through the Global Cities Forum (GCF), the central coordinating organization for city-level clubs, and the ability of a qualified majority of cities to reject the formation of a new club if it does not address a global challenge. The GCF receives funding from cities based on a fixed contribution determined by GDP, with a management appointed by member cities. Internal and external auditing, periodic review, and a charter ensure the GCF continues to fulfill its mandate. The GCF is responsible for measuring whether cities are fulfilling their membership requirements.

At the nation-state level, there is only one club due to the increased difficulty of providing tangible, excludable benefits, the smaller number of countries vis-à-vis cities, and the greater role of ideological and political considerations, which make a more complex and multifaceted structure unrealistic. A single club also increases the prestige and viability of that club, and thus enables much stronger requirements for membership and by extension contributions to solving global challenges. As at the city level, a central organization, the Global Collaboration Initiative Secretariat, coordinates the club and measures the completion of
requirements of membership. The Global Leadership School and the Innovation Access Initiative provide tangible, excludable benefits for members. The management of the GCI Secretariat is determined by countries.

For both the GCF and the GCI, mandatory periodic reviews and mechanisms for amendment ensure the clubs continue to address global challenges as they evolve.

Finally, building on the success of indices for companies and countries in increasing accountability and providing reward for improvement, the third component is the development of indices measuring cities on a variety of metrics. This also provides an objective method of measurement for clubs. The indices will be developed by the City Measurement Organization, a subsidiary of the GCF, and developed such that they maximize the extent to which they align incentives of cities and other actors towards the addressing of global challenges.

2. Description of the model

INTRODUCTION – SETTING THE CONTEXT


“Cities are increasingly the home of humanity. They are central to climate action, global prosperity, peace and human rights.” – Ban Ki-Moon, former UN Secretary-General [2]

The UN has since its inception been moderately successful at addressing global challenges, but we live in a changing world. Recent changes include increasing globalization and interconnectedness; a multipolar world in which the nations that have traditionally upheld the global order no longer have the power to enforce it; and a new raft of challenges such as climate change that are more global in nature, and more prone to the “tragedy of the commons” than past challenges. These make the current framework for addressing global challenges, which relies on unanimous agreement and lacks enforcement mechanisms, no longer suitable.

There are two main necessary components of a successful new framework of global governance. First, it must include and harness cities. Second, it must overcome the tragedy of the commons by providing tangible, excludable incentives that align the individual interests of governments with the tackling of global challenges.

1.1 Including and harnessing cities

Cities account for over 80% of global GDP and over 70% of greenhouse gas emissions [3], with the largest 750 cities accounting for 61% of global GDP [4]. Political power is now catching up with economic power; in recent years many large cities have been asserting their autonomy and developing more sophisticated
in-house governance and foreign policy [5], while national governments promote devolution [6]. This is coupled with a shift in loyalty and identification away from nations towards cities [7].

Furthermore, cities tend to be more pragmatic and less driven by ideology than nation-states in their policy-making, are less prone to capture by special-interest groups, and are more directly accountable to their populace [8][9]. For global challenges, this pragmatism is exacerbated by the disproportional impact of many global challenges on cities: 90% are coastal; due to an expected decline in rural populations from 3.4 billion today to 3.1 billion by 2030 [10] population growth will be driven by cities; and politically motivated violence often occurs in cities. Although 70% of the developing world’s poor are in rural areas, the urban proportion is increasing faster than urbanization, and poverty reduction in cities is below that in rural areas – extreme poverty is slowly shifting towards cities [11].

In an urbanized world, cities are increasingly both the origin of, and the solution to, global challenges as they produce most of the world’s GDP and assume greater political power. No framework for solving global challenges can be complete without the heavy involvement of cities.

1.2 Existing city initiatives
Cities have already taken initiative to cooperate on a global scale. On climate change, the C40 initiative brings together 91 cities to implement far more stringent standards on climate change than existing national and international standards. The C40 has created the Compact of Mayors, which has requirements for entry based on transparent measurement of cities’ efforts to fight climate change and is open to cities outside of the C40, and has grown to 428 members since being established in 2014. The Strong Cities Network (SCN) unites cities in fighting violent extremism. The recently established Global Parliament of Mayors (GPM) unites 61 cities into a coordinating platform and a lobbying organization for the rights of cities. The 100 Resilient Cities (100RC) organization seeks to strengthen cities’ resilience to a host of physical, social, and economic challenges emerging in the 21st century.

Although these are welcome developments and have grown quickly, they are not sufficient for the tackling of global challenges. All five lack enforcement mechanisms. The C40 and GPM include only a small minority of cities. The C40, Compact of Mayors, and SCN, although they have helped in their areas of specialization, are focused on only one issue. GPM does little more than lobby on behalf of cities for increased governance rights, and copies existing organizational frameworks; it has been criticized for being simply an additional layer of bureaucracy [12]. Most of its members are small cities and only a few of the world’s largest cities are represented. 100RC is one-directional, providing advice to cities. Most importantly, none of the five provide additional incentives for cities to implement desirable policies, nor an effective measurement and reward system for doing so, two fatal flaws as described below. These body are evidence that cities can coordinate in an international body separate from nation-states and established intergovernmental institutions; but they are only first steps and are not able to handle global challenges effectively in an integrated manner.
1.3 The tragedy of the commons and the problem of incentives
The problem with addressing global challenges is not will; most national and city-level governments are, in principle, supportive of coordinated action to address these new global challenges. However, three major barriers prevent the realization of such concerted action. First, global challenges play out in the global commons, which is a non-excludable public good – agents cannot be excluded from using it. This leads to the ‘tragedy of the commons,’ an application of the prisoner’s dilemma as elaborated by Hardin [13] – it is in everyone’s individual interest to maximize their extraction from the global commons, even though it is in everyone’s collective interest to maintain the commons in the long term. Even those who would like to maintain the commons have no way of enforcing this, and there will always be at least one defector who maximizes his or her extraction and thus leads to the degradation of the commons, while outcompeting those who choose to limit their extraction. This is particularly relevant for countries and cities, who must compete with each other for talent, resources, and economic power and who do not have access to good tools of enforcement aside from economic sanctions (which are costly and often of limited effectiveness) or war (which for obvious reasons is not a viable tool of statecraft in today’s world).

Second, the benefits of solving global challenges are either very broadly distributed, or are disproportionately concentrated in the regions least able to contribute to their resolution, leading to very low payoffs for most actors of solving the global challenge. It is thus especially hard to motivate concerted action, even if it were possible to overcome the tragedy of the commons. Additional incentives are needed.

Third, an inherent tension exists between the need for equal representation to ensure broad buy-in, and the need for a fair and unequal distribution of decision-making power to ensure buy-in from the most powerful and resource-rich players. Successful tackling of global challenges requires buy-in from both, but the two often seem mutually exclusive.

1.4 An all-inclusive solution
The model is optimized given these problems, opportunities, and constraints. Firstly, it harnesses the dynamism, direct accountability, and reduced ideological affiliations of cities. Second, it overcomes the tragedy of the commons and the low pay-offs for individual agents of contributing to the solving of global challenges by aligning the solving of these challenges with selfish incentives. Third, it brings on board the world’s most powerful players at both the city and the national level by distributing decision-making power according to actual political and economic power, without alienating the majority of other actors. Finally, it is additive, not subtractive, so as not to infringe on sovereignty.

PART 1: THE GLOBAL CITIES FORUM
The harnessing of the competitive and collaborative forces between cities is achieved through the formation of clubs. The structure of these clubs is simple: they are optional to join and have a membership requirement, which is tied to one or more global challenges. In return for meeting the requirements of membership, they provide tangible, excludable benefits to their members.

1.1 Global Cities Forum structure
The Global Cities Forum is the central organization for the creation, implementation, and amendment of city clubs. It acts as a facilitating platform,
with decision-making power resting entirely with the cities themselves. Its mandate is limited to the following functions: providing the mechanism for the establishing and maintenance of clubs; organizing conferences and other events on the major challenges facing cities, sharing of best practices, and other topics that are useful for all cities; the development of implementation templates and advice; and the provision of measurement mechanisms for ensuring compliance.

Although the tools for measurement are developed in-house and funded directly, the funding for the actual measurement of each club’s requirements falls outside of the GCF’s central budget and must be provided by each club. The clubs decide what the entry requirements are, but the GCF carries out the actual measurement without input from club members to ensure fairness and objectivity. Its central budget is entirely funded by participating cities, with contributions a fixed percentage of city GDP, calculated based on the budgetary needs of the GCF and the total GDP represented by its member cities. Data gathering organizations will be pushed to measure city GDPs, but for those cities where the data is unavailable, the GDP per capita for the host country will be multiplied by the population of the city. This will in most cases underestimate GDP, providing an incentive for cities to collaborate with data gathering organizations to ensure city-specific GDP data can be gathered. No outside sources of funding are permitted and no city may pay more or less than this contribution, to ensure stable funding and accountability to the cities that the GCF serves, while preventing special interests or individual cities from exercising undue influence. The budget is determined by the management of the GCF in a 2-year cycle, subject to 2/3rds approval from member cities with votes weighted by GDP. It may be decided at the discretion of the member cities to create a committee for budget approval if the proposed system becomes unwieldy as membership grows. The budget must also be externally audited. The management of the GCF is appointed by a 2/3rds majority of member cities, weighted by GDP, for a 4-year term, with a 2-term limit. The GCF also incorporates rigorous internal monitoring processes to ensure it continues fulfilling its original purpose and is doing so as effectively and efficiently as possible.

It is affiliated with, but not officially tied to, the UN and the World Bank, with the primary purpose of sharing best practices. If possible, the C40, the Compact of Mayors, and the Strong Cities Network should be included in modified form within the GCF framework as clubs, with the Compact of Mayors forming the basis for the development of measurement mechanisms. The Global Parliament of Mayors fulfills a different purpose and should thus remain independent.

1.2 Creation of new clubs

Any group of cities may choose to create a new club. Membership of the GCF is required for a city to be able to join or create a club. A club must provide a tangible, excludable benefit to its members as an incentive for joining. The GCF will develop in further detail templates of such benefits, but these can include trade preferences, the sharing of expertise, and pooled research and development. For larger clubs, existing benefits such as trade agreements can be tied to club membership, and punishment of non-members is also possible, for example through sanctions or the withholding of cooperation on other areas.

Conversely, a club must have a tangible requirement for membership, tied to the solving of one or more global challenges. There may be multiple tiers of requirements, based on an objective measurement such as GDP per capita, to
provide flexibility and fairness, but individual cities may not be given different requirements without a universally applied objective criteria. To ensure clubs are not formed which have requirements unrelated to the tackling of global challenges, 2/3rds of cities, weighted by GDP, can vote to block the formation of a club, with the initiation of such a vote requiring a petition including at least 1/3rd of members, weighted by GDP. This ensures flexibility as global challenges evolve, avoids bias, and maintains control in the hands of cities. Given that 1) many global challenges negatively affect cities; 2) many if not most cities, especially when weighted by GDP, are committed to making the world a better place, as evidenced by existing initiatives; and 3) the purpose of the GCF is explicitly to unite cities to tackle global challenges, this is a sufficient and robust mechanism for ensuring commitment to global challenges, and it avoids the inflexibility that other mechanisms are likely to have which are more centralized.

Any city that is willing and able to meet the membership requirement for a club must be allowed to join. The new club must provide its own funding to the GCF to pay for the implementation of its measurement mechanisms, although as previously described the GCF actually carries out the measurement. It is up to clubs how to provide this funding, although the suggested template is using a weighted combination of population and GDP. Although clubs set the requirements themselves, to ensure continued commitment there is an automatic process by which cities are expelled from clubs: if a city fails to meet the requirement as determined by the GCF, which must present empirical evidence of this failure, the city is expelled. Clubs may set a grace period up to a maximum of 3 years to allow for temporary lapses or situations beyond a city’s control. Amendments to the existing entry requirements or shared rewards of a club may be suggested by any member and require a 2/3rds GDP-weighted majority by existing members. A club member may leave at any time by default, subject to constraints imposed by the club.

### 1.3 Founding process of the GCF

Before officially announcing the Global Cities Forum, it is crucial to gain support from the world’s largest and best-run cities privately. It is important that these are geographically and economically dispersed. Once a sufficient critical mass of support is reached, it can be publicly unveiled and all cities will be invited to join. This will be accompanied by the announcement of a highly visible initial club tackling an existing issue, such as the conversion of the C40 into a club, being joined by most or all the founding cities. Care should also be put into selecting the first director; someone who holds credibility among city governments, such as a widely respected ex-mayor of a large city, is preferred.

### 1.4 The outcome

The end result is a series of clubs, each with a different set of entry requirements that are tied to the solving of global challenges, with overlapping membership. Most cities are a member of most clubs. Substantially all the global challenges are covered by at least one club. As the challenges faced by humanity evolve, clubs will modify their entry requirements and new clubs will be created. Each of these clubs either provides tangible, excludable benefits to its members, or punish non-members if it is sufficiently large. The Global Cities Forum conducts measurement of cities or uses the city indices described in Part 3 to determine whether they are meeting the entry requirements of each club.
PART 2: THE GLOBAL COLLABORATION INITIATIVE

The second component of the model is a single club, analogous in structure to those created under the Global Cities Forum, for nation-states. All nation-states are invited, provided they meet the club's requirements; a failure to meet these requirements leads to removal from the club and its corresponding benefits, with a three-year grace period. The club centers on two excludable benefits: the Global Leadership School (GLS) and the Innovation Access Initiative (IAI).

2.1 Global Collaboration Initiative Structure

The GCI will be initially set up by the G20 as a Specialized Agency within the UN. Ideally all 20 members will be involved, although this is not required for the GCI's successful initial implementation. The initial membership requirements are decided by this initial group. Like with the GCF, there is a central organization, the GCI Secretariat, responsible for measurement, organizing conferences and events, and taking care of administrative matters; unless otherwise specified, its functional organization is equivalent to that of the GCF. Since measurement systems already exist for countries, the GCF Secretariat will collaborate closely with existing international bodies such as the UN, the World Bank, the IMF, and the OECD in the development and implementation of its measurement mechanisms, and rely in part on existing measurement. There will be a 1-year period from the GCI’s announcement to its official founding during which the GLS and the GCI Secretariat will be set up, and during which countries can work to fulfill the necessary requirements or demonstrate that they will be able to do so the following year to qualify for founding membership. Funding works similarly to that for the GCF: each state must provide a fixed contribution proportional to GDP which covers the GLS, the GCI Secretariat, and the IAI costs. The details are the same as for the GCF. The GCI Secretariat and the GCF collaborate, since both are carrying out measurement, but remain independent organizations due to the different nature of their functions and the different political considerations.

Updating of the requirements of membership must be approved by a 2/3rds majority of member countries, weighted by GDP. A mandatory review will occur every three years, and additionally a petition submitted by states accounting for 1/4th of global GDP can call a vote at any time for an amendment.

2.2 The requirements for membership

As with the GCF, the requirements are to be determined collectively by the member states through a 2/3rd GDP-weighted majority. The initial requirements are set by the founding members, and further amendments occur through the process previously described. This assumes a majority of nations, weighted by GDP, are sufficiently committed to meeting global challenges and sufficiently driven by the benefits here described to continue to meet the updated requirements over time in response to changes in the major global challenges faced by humanity. By preserving sovereignty, this mechanism is realistic to implement while ensuring global challenges are still adequately addressed.

2.3 Global Leadership School

The Global Leadership School is one of the two primary benefits derived by members of the GCI. The GLS trains an international cohort in the nuances of leadership. Each nation-state in the Global Collaboration Initiative sends a number of students proportional to a weighted combination of its GDP and population. The quota per country is fixed but the selection process is determined individually by
each state. States may also choose the requirements to impose on their graduates as a condition for attending the GLS. Students must have at least a master’s degree to be eligible, although a separate one-year program prior to enrollment provides a master’s degree to individuals selected by their country who have not yet completed a master’s.

The curriculum is created and overseen by a committee of top academics and former leaders globally, with an over-representation of business school academics but with the broad inclusion of different disciplines to supply a holistic education. The membership of this committee is determined by the founding countries, with a four-year review in which the committee’s composition is re-evaluated and the curriculum is revisited. The curriculum has a heavy practical component, with projects in different member countries being carried out by the students. There are frequent guest talks by current and previous world leaders behind closed doors with personal advice and mentorship; it is important to get several leaders on board from the start to establish the prestige and usefulness of the GLS. The final curriculum is subject to approval by a 2/3rds majority of member countries, weighted by GDP, before implementation.

It is crucial for the world’s most important countries to go through a highly visible and elaborate selection procedure to establish the prestige of the GLS and infuse a symbolic value on a state’s ability to send students to the GLS. Although the high-quality training and education provided is valuable, the primary benefit derived by states from the GLS should be the symbolism of being a contributing member of the international community and deriving the benefits associated with this status; this requires a critical mass of states to take it seriously from the start. Making the process visible and prestigious also contributes to public pressure on governments in hesitating countries by their citizens to maintain the commitments enabling membership of the GCI.

2.4 Innovation Access Initiative
The Innovation Access Initiative provides access to a tangible, excludable resource which enhances innovation in a country. The exact nature of this is highly dependent on what states are willing and able to share. It could include best practices or patent sharing, or the tying of an existing benefit such as the removal of trade barriers to GCI membership. This is to be determined by the founding members of the GCI. Although not much detail is provided because it is so dependent on what countries are willing to provide, the IAI is an important piece of the model to ensure the benefits derived from membership are sufficient. Having the IAI will add private sector pressure in addition to the public pressure derived from the GLS on nation-states to fulfill their membership obligations of the GCI.

2.5 The outcome
Almost every country is a member of the Global Collaboration Initiative, and is actively addressing global challenges to maintain this membership. The Global Leadership School is globally renowned, and the yearly selection procedure is akin to a national ritual in most countries, gaining extensive media coverage. The sending of students to the GLS is a symbol of participation in the international community. Many trade benefits, patent sharing, and best practices sharing occurs through the Innovation Access Initiative, and governments actively collaborate with the private sector to meet their GCI requirements given the private sector’s
interest in maintaining access to these valuable benefits. Every three years, the requirements for membership are adjusted to account for changes in the global challenges faced by humanity. Links between the GCI and other international bodies like the UN and the World Bank are developing as countries increasingly seek to utilize the tools already available through these international bodies to maximize their ability to meet the membership requirements and thus contribute to solving global challenges. These bodies take on an increasingly important role not as global decision-making bodies, but as tools for individual countries to use for having a global impact.

PART 3: CITY INDICES
The third component is a series of indices for measuring and comparing cities’ performance on a variety of key indicators. Such indices already exist for countries; the World Bank’s World Development Indicators and in particular the recently implemented Atlas of Sustainable Development Goals provide comprehensive data and ranking on how countries are doing on meeting the 17 SDGs. The private sector, too, has recently seen the successful implementation of indices. The Access to Medicine Index rates the efforts of pharmaceutical companies to make medicine accessible to patients in low and middle-income countries. Since its implementation in 2008, it has led to “visible moderate progress” in almost all companies’ efforts, with Takeda and Merck in particular overhauling their practices to shoot up the ranking [14]. The World Benchmarking Alliance and the Index Initiative implement a range of corporate indexes measuring progress towards the SDGs, and several more specific indexes exist. However, aside from a few scattered attempts such as The Economist’s liveability index and the previously described Compact of Mayors which measures action by cities on climate change, there are no such indices for cities.

1.1 The rationale for city indices
Indices which explicitly rank companies such as those described above are effective for several reasons, which transfer to cities. First of all, they give credit where it’s due; according to Bill Gates, executives from pharmaceutical companies “want to do more for neglected diseases, but they at least need to get credit for it,” which the Access to Medicine Index has provided. For companies, good performance attracts customers and investors; for cities, this increases the current administration’s popularity with its constituents and increases the attractiveness of the city relative to other cities for highly skilled migrants and for investors. In the 21st century the best strategy for promoting economic growth at a city level is by attracting top talent, so cities will compete ferociously for a favorable ranking, particularly if these are tied to quality of living; in the words of Michael Bloomberg, “one of the biggest changes in urban governance in this century has been mayors’ recognition that promoting private investment requires protecting public health” [8]. Low scores for cities also puts pressure on the countries in which those cities are located. Thus, rankings for cities not only provides an incentive for cities to improve, but leads to a cascade effect which propagates upwards to nation-states. Another benefit is that, by ranking on certain metrics but not others, indices shape what cities and the wider public focus on as important issues. Within the model, indices provide an additional benefit – they provide useful data for determining and measuring club requirements in the GCF.
2.2 The City Measurement Organization

These city indices are implemented by a subsidiary of the GCF, the City Measurement Organization (CMO). To avoid excessive bureaucracy, it is not independent of the GCF and collaborates with the Index Initiative, the World Bank, and UN Habitat to share best practices. If possible, parts of the Compact of Mayors that aren’t integrated directly with the GCF’s measurement mechanisms are combined with the CMO, and its existing metrics and processes used as the base for further development. Funding is received through the GCF; conflicts of interest are avoided because cities contribute a fixed, automatic share to the GCF and the costs of leaving the GCF are sufficiently high that this cannot be used as a credible threat to influence the CMO.

The CMO determines which metrics to rank cities on, in consultation with the UN, the World Bank, the GCF, and other relevant bodies. Potential metrics include CO2 produced per capita, CO2 per dollar of economic output, access to healthy and/or sustainable food, levels of pollution, poverty reduction efforts, and healthcare access. Where possible, metrics should be tied to quality of life to increase the pressure by citizens on their city governments to score well in those metrics and promote competition between cities for attracting talent. It is important to also rank by rate of improvement, and by cities’ efforts to help outside of their jurisdiction such as by helping other cities, regions, or countries, to provide additional useful incentives and ensure cities which are not themselves home to, for example, poverty still have the possibility of rising in a ranking by helping others. The GCF sets the management of the CMO, but a charter established at founding ensures the CMO continues to fulfill its original purpose and places restrictions on the control of the GCF over the operations of the CMO.

PART 4: SECOND-ORDER EFFECTS

In addition to the direct effects of the model already described, there are two valuable second-order effects which further strengthen the ability of the model to address global challenges: aligning the incentives of multinational corporations with the addressing of global challenges, and making cities more politically autonomous.

4.1 Multi-national corporations

Multi-national corporations (MNCs) can play an important role in the mitigation of some global challenges such as climate change and poverty. The model aligns their incentives with doing so through second-order effects. First of all, the indices will pressure cities to pressure their suppliers and the businesses that are based in and operate within their jurisdiction to operate in a more sustainable manner. They will also lead cities to tighten regulations, affecting MNCs. Many measurements will have these effects indirectly, but to maximize the effect, indices should include measurements which are dependent on the extent to which the businesses based or operating in a city are helping or harming on global challenges, for example a measurement of the average carbon footprint per dollar of revenue, or company initiatives per capita towards the addressing of a global challenge.

4.2 Politically more autonomous cities

The increased role of cities in fighting global challenges and the development of the GCF as a coordinating platform will likely increase the political power of cities relative to nation-states. The Global Parliament of Mayors should be actively partnered with – however, the GCF itself should not engage in city advocacy or any
activities besides the implementation and maintenance of clubs. Collaboration with international and Intergovernmental organizations built around nation-states, such as the UN and the EU, is also important to ensure all efforts are synergistic and complementary. The model is an addition, not a replacement, to existing mechanisms for fighting global challenges. Furthermore, the increasing political autonomy of cities must be furthered in collaboration with national governments. When conducted in this manner, increasing political autonomy for cities is only a good thing; national governments will retain control over those areas which they are better at, but cities will take on roles that lend themselves to the pragmatism and flexibility of cities.

PART 5: A QUICK NOTE ON LOCATION
The physical locations of the various institutions proposed is to be determined in the founding process by the founding members. However, in general, they should be located in a politically neutral and uncontroversial location which already houses many international institutions, such as Geneva or Vienna. The Global Cities Forum should not be located in a very large city, even one with many international institutions such as New York, to avoid undue influence by the host city.

CONCLUSION
The 21st century is a brave new world. We face unprecedented globalization and interconnectedness; unprecedented global challenges; unprecedented urbanization; an unprecedentedly fast rate of change; and a multipolar world that lacks the enforcement mechanisms of a few large powers that have underpinned the UN’s success thus far. To continue meeting the global challenges we face, we need a revamped system, one that better aligns the incentives of governments and companies towards the addressing of global challenges despite the existing individual incentives against doing so. We also need to harness the shift in the center of gravity of humanity towards cities, and the many inherent advantages of cities as a political institution that make them in many ways better suited for the addressing of global challenges than national governments.

The proposed model achieves this by setting up clubs for cities, and a single club for countries, which are optional to join, provide excludable benefits, and have membership requirements tied to the addressing of global challenges. Mechanisms such as the possibility of updating the membership requirements and the ability of a majority of governments to reject the creation of a new club ensures the system remains aligned towards solving global challenges while allowing the flexibility that is necessary to stay relevant as global challenges change over time. A set of indices for cities provides concrete accountability and recognition, enhancing incentives and strengthening the club system while leading to second-order effects on the efforts of nation-states and multi-national corporations towards the addressing of global challenges. The division of power by GDP ensures big players buy in to the model. The concrete benefits such as the Global Leadership School and the Innovation Access Initiative on the national level, and the myriad of options available for city clubs to either provide benefit to their members or punish non-members, coupled with the symbolism of being a member of the international community, ensure broad involvement from the vast majority of countries and cities.

This is a model for a rapidly changing, globalized, urban world facing a host of difficult global challenges. This is a model for the 21st century.
3. Motivation

CORE VALUES
The model harnesses self-interest and the commitment of large, prosperous countries and cities to improving their global community towards the good of all humankind by aligning incentives. Although the use of GDP to distribute power may appear to be favoring those who are better off, this is 1) balanced by the weighting of contributions by GDP as well; 2) necessary to align self-interest with the solving of global challenges and bring on board those most able to contribute; 3) affects decision-making power but not benefit distribution. In fact, the proposed model is more aligned with the equal value of all humans and the good of humankind than a proposal not acknowledging GDP disparity would be because it effectively brings on board those with resources in a way that an alternative proposal may not. The tying of tangible, excludable benefits to the solving of global challenges concretely increases the incentives for every actor to take significant action that is beneficial for all of humankind, and the club mechanism ensures this coupling is implementable and robust once implemented.

The implementation of indices further strengthens the model’s ability to work towards the good of all humankind. It concretely ties a city’s ability to compete in the global fight for top talent, as well as a city government’s popularity among its constituents, to the extent to which it is operating towards the good of all humankind.

DECISION-MAKING CAPACITY
The decision-making processes of the proposed model are fast and efficient. Most decisions are decentralized to the clubs or relevant organizations and require only majority approval by the involved members. This allows many decisions to be made in parallel by different functional groupings, and prevents any single actor from being able to paralyzed the whole system. Furthermore, the optionality and reversibility of membership prevents single actors or small minorities within clubs and their parent organizations from being able to paralyze their functioning or freeze progress. Because many processes become automatic once initially decided (such as measurement and removal) and can only be changed with broad approval, the continued functioning of clubs is essentially guaranteed once established.

Furthermore, those decisions that are centralized are for the most part determined by a single organization and not by voting among the constituent countries or cities, streamlining the decision-making process. For example, the GCF decides on measurement mechanisms, not cities. Only decisions about those organizations’ structure and management, and the major decisions, require broad involvement and approval, and these require a qualified majority but not unanimity. They also occur only at set, widely spaced intervals, ensuring smooth functioning otherwise and allowing management to have sufficient time for implementing effective policies without having to constantly worry about incurring the temporary disapproval of cities or states.

EFFECTIVENESS
The model harnesses the desire of many city and national governments to tackle global challenges, while solving the key obstacle of the tragedy of the commons preventing cities and states from acting on this desire by providing mechanisms
for ensuring that other states also adhere to the agreed-upon framework through the possibility of removal from clubs and provision of tangible benefits, providing recognition through the indices, and eliminating the possibility of the system failing after its implementation because most processes become automatic.

The model is also extremely effective at ensuring implementation. The optionality and irreversibility of membership, as well as the tangible benefits associated with it and the high costs of non-membership, provide enforceability while preserving sovereignty in a unique way not achieved by any existing international frameworks.

Finally, the model is effective at multiple levels, directly and through concrete second-order effects – nation-states, cities, and MNCs. It thus harnesses all of the most important players necessary for the solving of global challenges.

RESOURCES AND FINANCING
Resources and financing are another strength of the model. By distributing decision-making power by GDP, it ensures buy-in from those most able to provide the necessary resources for the successful implementation of the model. However, because the benefits are provided equally to all members of a club, it ensures that benefits remain equitably distributed. Because membership of a club and the reaping of its benefits require the contribution of resources, there is a strong incentive in place for actors to contribute what is required, and because those requirements are fixed automatically it is not possible to contribute a bare minimum just to join. Additionally, a lot of the necessary resources are used directly by actors on themselves, for which there are obvious incentives. Many are also exchanged directly between actors rather than passing through a centralized organization, which reduces any potential issues with infringement of sovereignty and makes the transaction more streamlined. For all these reasons, the provision of the necessary resources and financing for the success of the model are easily ensured through concrete mechanisms.

Furthermore, resources are financed in a way to ensure accountability of organizations while avoiding conflicts of interest where applicable and eliminating the possibility of an actor exercising undue influence through the provision of resources by means of the automatic processes. The GCF and the GCI Secretariat rely on cities and nations respectively for their funding and are subject to periodic scrutiny, providing the accountability, but contributions are fixed by GDP, eliminating the possibility for exercising of undue influence and ensuring the organizations work for the global community, not a subset of actors.

TRUST AND INSIGHT
The decision-making mechanisms and power structures are simple and transparent. Power is distributed according to GDP. Because 1) membership is optional and excludable, 2) there are benefits associated with membership and these benefits are equitably distributed, and 3) decisions do not require unanimity, there does not need to be a pretense that decision-making power is distributed equally to ensure the cooperation of less powerful nations, a major roadblock for existing governance frameworks. The correlation between power and contribution, and the tangible benefits derived by less powerful actors from the model, ensures fairness and facilitates broad trust in the model. Furthermore, because of its ability to deliver concrete results both for cities and states individually and for the
solving of global challenges from day one as cities and states implement policies to meet the entry requirements for clubs, it will quickly gain trust as an effective governance mechanism.

Its mechanisms are streamlined and simple to understand and have a clear underlying logic to them which is accessible to everyone, ensuring insight into how the system works and why.

**FLEXIBILITY**
Flexibility is a key strength of the model that contributes to its effectiveness and sustainability. It does not specify the global challenges directly, and there is no central organization or unanimous decision-making mechanism for determining these, both of which would make implementation difficult if not impossible and whose continued willingness and ability to accurately diagnose global challenges is difficult to guarantee. Instead, global challenges are specified by those who best understand them – national and city governments. Furthermore, in true democratic fashion, which global challenges are most important is determined by actors starting and joining clubs devoted to them, a form of voting. If enough actors, and crucially due to the GDP weighting, enough powerful actors consider a global challenge important, not joining the club devoted to it becomes a diplomatic faux pas and those actors who were not particularly interested in addressing it become invested due to the diplomatic imperative and the tangible benefits provided by membership of a large club. This flexibility has limits, however; provisions such as the possibility of a qualified majority of actors preventing the formation of a new club if it does not address global challenges ensures the model remains committed to its original purpose. The model thus provides flexibility without compromising its continued ability to deliver results despite changes in the global challenges faced by humanity.

Furthermore, through the qualified majority voting processes, modifications to the structure of the model itself are possible, although the high threshold for approval prevents excessive flexibility that would enable straying from the original purpose.

**PROTECTION AGAINST ABUSE OF POWER**
There are various aspects that protect against the abuse of power. First of all are the automatic processes and the fixed funding contributions, which limit the influence any single actor can have on the model’s outcomes. Tied to this, the management of the GCI Secretariat and the GCF have long enough mandates that they can exercise some control and thus ensure the organizations remain committed to the global challenges, but are balanced by their responsibility to cities or nation-states through the elections every four years, and kept accountable for their responsibility to address global challenges in their charter.

Another balancing mechanism is the CMO and its mandate to decide and measure indices. It is still indirectly accountable to cities through its position as a subsidiary of the GCF, and the involvement of the UN and the World Bank combined with its charter and position within the GCF also provide accountability to addressing global challenges. Because cities are directly forming clubs while the CMO is determining indices, both of which lead to concrete changes in the incentives of all cities, there is a balancing ensuring that both of these actors have some influence over which global challenges are focused on and can correct each other.
Because a qualified majority can reject the creation of a new club, cities cannot abuse the system to create clubs that are not committed to addressing global challenges. This is not relevant for nations since only one club exists, and its inclusion of most members of the international community ensures commitment to global challenges because most nations are committed to solving them given they can ensure others are also devoting some of their resources.

Sovereignty is strongly protected, since all parts of the model are additive and none involve directly interfering with the internal affairs of a state or city in any way.

**ACCOUNTABILITY**

The ways the model ensures accountability have already been described in detail elsewhere. The GCF and the GCI Secretariat are held accountable through the four-year election cycle, the external auditing, the requirement for budget approval by city or national governments, and their charters. This ensures organizations and individual leaders are held accountable. Simultaneously, through the automatic funding processes and the ability for a majority to prevent the formation of a club, it prevents city or national governments from exercising undue influence in the first place. The CMO’s affiliation with the UN and the World Bank, and the barring of city funding contributions, ensure it remains accountable to its mission of objectively measuring cities on relevant metrics. The mandatory periodic review process of the GLS keeps it accountable. And of course, the reversibility of membership of clubs and the loss of the associated benefits and diplomatic prestige keeps city and national governments accountable to meeting global challenges in a very concrete way.
References

- “Urban Development Overview.” The World Bank