Optimizing a High-Impact, Clean-Innovation Program in the U.S. 8



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Optimizing a High-Impact, Clean Tech Innovation Program In the U.S. & U.K.

Prepared for:

THE CLIMATE GROUP

By:

2013 Summer Capstone Workshop Team:

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COLUMBIA UNIVERSITY School of Continuing Education

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TABLE OF CONTENTS

IN	IDEX OF FIGURES	4
IN	IDEX OF TABLES	5
EX	KECUTIVE SUMMARY	7
1.	INTRODUCTION 1.1 Purpose 1.2 Scope	8 9 9
2.	METHODOLOGY 2.1 Literature Review 2.2 Surveys 2.3 Interviews	9 9 10 10
3.	ANALYSIS FRAMEWORK 3.1 Step 1: Convince through creating original research and information 3.2 Step 2: Screening potential technologies 3.3 Step 3: Evaluating technologies to make the business case 3.4 Step 4: Implementation of a pilot project 3.5 Step 5: Rollout of the technology	10 10 11 12 12 13
4.	MARKET BACKGROUND	13
5.	RECOMMENDATIONS5.1 Create original research and information5.1.1 Create LCDT trend reports5.1.2 Create technology and business specific market intelligence reports5.2 Provide additional networking opportunities5.2.1 Launch a public policy task force with corporations5.2.2 Host additional regional events on an annual basis5.2.3 Provide peer-to-peer introduction services5.2.4 Create an internal online collaborative portal5.3 Improve The Climate Group's communication strategies5.3.1 External communication: improve The Climate Group's website5.3.2 Internal communication: increase and focus membership outreach5.4 Develop a strategic approach to funding5.4.1 Pursue increased levels of philanthropic funding from corporations and foundations5.4.2 Explore additional opportunities to raise in-kind contributions5.4.3 Create and implement a combined contribution structure that includes membership andstand-alone services.5.4.4 Utilize The Climate Group's board of directors and respected figures more effectively as a for secure funding	14 15 15 16 17 18 19 20 21 22 23 23 25 25 27 28 tool 29
6.	CONCLUSION	30

APPENDIX	31
Appendix 1. Best practice assessment methodology for competitive organizations	32
Appendix 1.1 Geographic locations of offices and activities of competitive organizations	33
Appendix 1.2 Funding top-performers	33
Appendix 1.3 Organizational effectiveness top-performers	36
Appendix 2. Interview Methodology	37
Appendix 3. Competitor focus areas within convince stage of the Team's framework	38
Appendix 4. Membership, interest, and satisfaction based on surveys and interviews	41
Appendix 5. LCDT integration with corporations and clean tech companies	45
Appendix 6. Comparison of web performance statistics for competitive organizations	51
Appendix 7. Funding opportunities	53
Appendix 8. Public policy task force – program	56
Appendix 9. Implementation timeline for program and organizational recommendations	58
BIBLIOGRAPHY	59

INDEX OF FIGURES

Figure 1: Analysis framework developed by the team for use in this report	10
Figure 2: Analysis of growth obstacles faced by clean tech organizations based on survey response	11
Figure 3: Analysis of hurdles faced by corporations in implementation of lcdt based on survey results	12
Figure 4: Global venture capital investments in clean tech per year	14
Figure 5: Summary of recommendation categories	15
Figure 6: Convincing corporations through original research and information	15
Figure 7: Networking opportunities provided through convincing, screening and evaluating	17
Figure 8: Analysis of interest in networking service based on interview responses	21
Figure 9: Improving communication strategies within all five steps of the framework	22
Figure 10: Frequency of communication desired by members from survey response	24
Figure 11: Fundraising efficiency vs. Total revenue for competitive organizations	35
Figure 12: Summary and analysis of surveys and interviews conducted	37
Figure 13: Analysis of the understanding of the climate group's role based on survey results	41
Figure 14: Analysis of the level of satisfaction with the climate group based on members surveyed	42
Figure 15: Analysis of 'type of relationship with the climate group' desired by clean tech companies	43
Figure 16: Analysis of the primary reasons members decided to join the climate group	44
Figure 17: Analysis of desired communication from the climate group by members	44
Figure 18: Analysis of the main objectives for integrating lcdt for corporations based on survey data	45
Figure 19: Analysis of services of interest to overcome growth hurdles in integrating lcdt	47
Figure 20: Analysis of services of interest to members to overcome growth hurdles in integrating lcdt	47
Figure 21: Analysis of services of interest based on interview responses	49
Figure 22: Analysis of the stage of product development of clean tech companies surveyed	49
Figure 23: Analysis of corporate advancement in the deployment of lcdt based on survey response	50
Figure 24: Analysis of willingness to pay for the climate group's services based on interview response	53
Figure 25: Analysis of ways corporations and clean tech companies are willing to pay for services	55

INDEX OF TABLES

Table 1: Needs and interests of corporations and clean tech companies in public policy advocacy	18
Table 2: Summary table of foundations and corporations supporting funding top-performers	26
Table 3: Examples of the specific initiatives supported by corporations and foundations	27
Table 4: Initial competitive organizations by type identified for best practice assessment	32
Table 5: Geographic presence of offices and activities of competitor organizations	33
Table 6: Fundraising efficiency of similar non-profits	34
Table 7: Organizational effectiveness indicators of best practices among competitive organizations	36
Table 8: Summary of surveys and interviews conducted	37
Table 9: Competitor activities within the convince stage of the team's framework	38
Table 10: Competitor activities within the screen stage of the team's framework	39
Table 11: Competitor activities within the evaluate, pilot, & deploy stages of the team's framework	40
Table 12: Understanding of the climate group's role by corporations and clean tech companies	41
Table 13: Level of satisfaction with the climate group based on members surveyed	42
Table 14: Type of relationship with the climate group desired by clean tech companies	42
Table 15: Primary reasons why members decided to join the climate group	43
Table 16: Desired frequency of communication from the climate group by members	44
Table 17: Main objectives for integrating lcdt for corporations based on survey data	45
Table 18: Biggest hurdle faced by corporations in the implementation of lcdt based on surveys	46
Table 19: Services of interest to overcome growth hurdles in integrating lcdt based on survey data	46
Table 20: Services of interest to based on interview responses	48
Table 21: Stage of product development of clean tech companies surveyed	49
Table 22: Corporate advancements in the deployment of lcdt based on survey response	50
Table 23: Rankings from three-month analysis of competitor web statistics (april - may - june)	51
Table 24: Three-month analysis of competitor web statistics (april - may - june)	52
Table 25: Top queries from search traffic landing on homepage	52
Table 26: Willingness to pay for the climate group's services based on interview response	53
Table 27: Ways corporations and clean tech companies are most willing to pay for services	54
Table 28: Most significant growth obstacles faced by clean tech companies based on surveys	55
Table 29: Implementation timeline for recommendations: services to stakeholders	58
Table 30: Implementation timeline for recommendations: organizational considerations	58

EXECUTIVE SUMMARY

The Climate Group is a non-profit organization that works internationally with businesses and governments to promote clean technologies and policies, with the aim of expanding clean technology markets and reducing global greenhouse gas emissions. Clean technology is now regarded as an integral option to curb the disastrous effects of climate change due to human sources of greenhouse gas emissions. To accomplish this, The Climate Group executes the Clean Revolution: an initiative aimed at facilitating a swift, massive scale-up of low-carbon, disruptive technologies.

In order to better understand the potential for The Climate Group to further advance this initiative, a team of graduate students at Columbia University has executed a project aimed at understanding the field of low-carbon, disruptive technology and the needs, barriers and wants of the various organizations involved in its development, including large corporations, technology start-up companies and venture capital firms. The paper details a five-step framework for the innovation process upon which low-carbon, disruptive technologies are moved to parity. The utilization of this framework organizes the services that can be provided to these organizations in a way that will allow The Climate Group to understand the potential for their strategic placement in the process.

The data collected through interviews and surveys in this project was used alongside a best practices analysis that researched non-profit organizations performing in the space to develop twelve key recommendations, grouped into four areas below, which will increase the effectiveness of the mission of the Clean Revolution.

The recommendations seek to focus The Climate Group's efforts in two key areas:

- 1. Create original research and information that informs organizations about trends and developments in the low-carbon, disruptive technology field.
- 2. Facilitate networking opportunities that build partnerships to expedite the innovation process of low-carbon, disruptive technologies.

Additionally, the project identified two main areas for improvement within the current operations of The Climate Group and provided recommendations that seek to increase the level of effectiveness:

- 1. Communicate more effectively with organizations about the mission and activities of The Climate Group.
- 2. Optimize a funding strategy that utilizes several sources of capital to provide The Climate Group financial sustainability.

Through the implementation of the recommendations found in full detail in this report, The Climate Group has the opportunity to increase its effectiveness in providing valuable assistance to the wide spectrum of organizations working toward a low-carbon future. The recommendations in this report are often suggestions to increase the levels of activity in many of the undertakings that The Climate Group already executes; a finding that suggests The Climate Group has to date been successful in its efforts and will continue to advance the field by strategically developing these initiatives further.

1. INTRODUCTION

Over the last century, the burning of fossil fuels and land use changes have increased the atmospheric concentration of carbon dioxide from 280 parts per million (ppm) to 400 ppm, with 450 ppm often cited as the tipping point for irreversible climate change-related damages.¹ There is scientific consensus that the current climate-warming trend is likely due to human activities.² Carbon dioxide is an important heat-trapping greenhouse gas (GHG), as increasing levels will exacerbate natural temperature variations.³ The consequences of global temperature increases are likely to include more extreme and more frequent weather events including: droughts, floods, storms, fires and rising sea level.⁴ To reduce the risks of global climate change to human populations and natural resources, GHG emissions must be reduced, while also balancing the need for increased human development.

GHG emissions are attributed to the increase of industrial activities, particularly in the energy sector. The most recent climate change mitigation strategies rely on the development of low-carbon sources of renewable energy including: solar, wind, tidal, geothermal and biomass. However, the development of these technologies has been difficult due to an ambiguous regulatory environment that stifles markets, and the lack of industry-wide standards that assist in adoption. While these barriers have slowed the growth of technology development, recent trends indicate that the private sector is emerging as a leader in providing access to markets to accelerate the deployment of clean technologies (clean tech).⁵ In June of 2013, the International Energy Agency (IEA) released its report, "Redrawing the Energy-Climate Map," and identified energy policies for reducing GHG emissions. The following two policies will drive the development of clean tech:⁶

- Target energy efficiency improvements in the industry, building and transport sectors.
- Limit the use and construction of inefficient coal-fired power plants.

Innovation in energy generation and energy efficiency will be pivotal in the effort to curb GHG emissions, and corporations have begun to recognize financial opportunities in integrating low-carbon innovation within their business model. In a resource-constrained world, business models that include low-carbon technologies can serve the dual purpose of curbing emissions and fostering economic growth.

The Climate Group, a 501c3 non-profit organization founded in 2004, has emerged as an industry leader in providing guidance on incorporating low-carbon, disruptive technologies (LCDT) into business models.⁷ LCDT are typically defined as products and services that can directly or indirectly lead to a reduction of carbon-based emissions. These technologies have emerged as one potential solution to mitigate and adapt to climate change.⁸

While LCDT are an important means of mitigating and adapting to climate change, nascent technologies face impediments due to regulatory and financial constraints. To address this, The Climate Group works with corporations to develop innovative business models that bring together public and private organizations, as well as identify the market under which LCDT are likely to be adopted. By facilitating collaboration and enhancing the discourse between stakeholders, The Climate Group is catalyzing clean tech innovation.

In 2012, The Climate Group launched the Clean Revolution, an initiative focused on broader leadership of a rapid transition to a prosperous low-carbon economy. This program encourages governments, business leaders and corporations to integrate LCDT into their organization, and it is transforming the way in which businesses address climate change by redefining business models.⁹ The Climate Group

promotes the use of LCDT as opportunities to generate revenue, reduce operational costs, retain customers and gain a competitive advantage in the market.

With climate change becoming a global priority, the number of non-profit organizations aimed at facilitating the adoption of LCDT has increased. As a result, The Climate Group must demonstrate a clear value proposition to existing, as well as potential, members in order to remain competitive. Although it has had great success in its initiatives to date, The Climate Group has commissioned a strategic review focused on one element of The Climate Group's work: the potential to take a more structured and targeted approach to connecting corporate members with clean tech start-ups. This review has also identified pertinent findings to The Climate Group's wider purpose, as well as provided insight into the nature of their relationship with its existing members and partners.

1.1 Purpose

The Climate Group engaged Columbia University's Sustainability Management Capstone Team (the Team) to assess The Climate Group's potential effectiveness in advancing the innovation ecosystem of LCDT in light of their wider efforts of networking and supporting climate leaders. The goal was to identify ways in which The Climate Group can expedite the implementation and scaling-up of LCDT through its membership program.

1.2 Scope

This analysis focuses on the markets for LCDT in the United States (U.S.) and United Kingdom (U.K.). While global, national and local policies play an important role in fostering the adoption of LCDT, this report does not explicitly evaluate policy agenda items.

2. METHODOLOGY

The Team employed three methods for data collection, which included: reviewing academic literature and completing web research, developing and administering preliminary surveys and conducting followup interviews. To assist in these efforts, The Climate Group provided a list of members and nonmembers from the following stakeholder groups: clean tech start-ups, corporations and venture capital firms. Individuals from these organizations held influential executive positions.

The Climate Group focused on these three stakeholder groups because they collectively drive the evolution of the clean tech industry, alongside policy makers. Corporations are requiring innovative technologies to gain a competitive advantage in the market place, and startups are seeking venture capital firms and corporations to incubate and fund their endeavors. Understanding and addressing the needs of these groups is pivotal to The Climate Group's success.

2.1 Literature Review

A comprehensive review of clean tech start-ups, corporations and venture capital firms provided overviews of each sector. This analysis included a review of current sector trends, market place dynamics, opportunities and challenges. Research was performed on competitive non-profit and for-profit organizations to determine best practices and top-performers in fundraising (Appendix 1). Best practices observed from top-performers were used to benchmark The Climate Group's service offerings, communication tools and funding models.

2.2 Surveys

Surveys were developed and sent to individuals prior to follow-up phone interviews to assess member's current satisfaction with The Climate Group. The surveys were tailored to the needs of corporations, clean tech start-ups and venture capital firms. Of the twenty-eight organizations contacted to participate in a survey, sixty-eight percent completed the preliminary survey including eleven corporations and eight clean tech start-ups (Table 8).

2.3 Interviews

Follow-up phone interviews were conducted. Interviews were twenty-minutes in duration and approximately fifteen questions. During the interviews, the Team expanded on questions from the surveys in order to uncover industry and sector-specific information. A total of nineteen interviews across the three stakeholder groups were conducted. There was an aggregate response rate of fifty-six percent of organizations contacted¹ (Table 8).

3. ANALYSIS FRAMEWORK

The Team developed a framework that identified the five steps corporations undertake in order to implement LCDT. The object of this framework was to help The Climate Group understand where they can have the most impact (Figure 1).





Although The Climate Group has participated in all five steps of the framework, it is currently most active in steps one through three. The Team recommends The Climate Group continue to concentrate its resources in these steps based on the data collected from the respondents and the best practices analysis. The following sections explain the rationale for why The Climate Group should continue to focus its services in these areas:

3.1 Step 1: Convince through creating original research and information

The first step of the framework is to *convince* corporate leaders and decision-makers to prioritize the adoption of LCDT. Even corporations that place a high priority on sustainability do not necessarily choose to invest in LCDT. Other options exist to reduce GHG emissions, such as reducing the carbon intensity of the supply chain.

The Climate Group is currently very active in this step of the framework through the production of original content, including the Smart2020 report. The Smart2020 report demonstrates the potential of

¹ Although nineteen organizations were surveyed and twenty-one completed interviews only seventeen organizations completed both surveys and interviews. Only the corporations and clean tech start-ups were contacted to participate in a survey. Six venture capital firms were also contacted for potential interviews. Of the six venture capital firms, two completed interviews.

the Information and Communications Technology (ICT) sector to reduce global GHG emission by 2020 through energy efficiency improvements in the transportation, industrial, buildings and energy sectors.¹⁰ Interviews indicated these original reports were highly appreciated by all stakeholders. Fifty-eight percent of survey respondents stated that "conduct[ing] original research and information" is one of the three services they would like The Climate Group to provide in order to help overcome hurdles faced in integrating LCDT (Table 19). This is important because forty-five percent of corporate survey respondents identified that "gaining internal management support" is one of the biggest hurdles towards integrating more LCDT.

When asked to describe how advanced their corporation is in investing and/or incorporating LCDT, seventy-three percent of corporate survey respondents consider themselves a "leader or very advanced having implemented ten or more projects" (Table 21, Figure 20). Despite identifying themselves as leaders, respondents still expressed a need for content in order to help them convince internal management of the benefits of adopting a low-carbon strategy.





3.2 Step 2: Screening potential technologies

The second step of the framework is to *screen* potential LCDT options. Because many LCDT exist, corporations need to identify the technologies best suited to meet specific business objectives. Twenty-two percent of corporations interviewed asked specifically for support in screening potential new technologies, and half of those asked for additional guidance in identifying LCDT with the shortest payback period and longest useful asset life (Figure 20). However, the remaining seventy-eight percent of corporations interviewed did not prioritize the need for screening services because the capacity to screen potential technologies already exists within their organization.

As a way to screen existing technologies, most respondents asked for additional opportunities to network, but expectations differed. Some respondents praised Climate Week NYC while others stated these networking events are becoming commonplace. As a consequence, the perceived value of attending these events has decreased. Evidently, the need for networking varies tremendously from corporation to corporation, and The Climate Group must understand its place among these needs.

3.3 Step 3: Evaluating technologies to make the business case

The third step of the framework is to *evaluate* the LCDT and determine if a business case can be developed around the incorporation of the technology. The Climate Group supports corporations during this step in two ways: 1) by identifying commonalities in similar business cases and 2) identifying ways of influencing policy and regulation in order to foster more favorable market conditions for the LCDT. More favorable market conditions can be achieved through public policy advocacy, which ultimately improves the profitability of the LCDT. The Climate Group's public policy advocacy efforts, including the State and Regions Alliance, seek to advance green policies to break down regulatory barriers currently unfavorable for the adoption of LCDT.

Evaluating technologies to make a strong business case is a critical step to integrating LCDT. Fifty-five percent of corporate responses to surveys indicated a major investment barrier is a long payback period (Figure 3, Table 18). Advocating for public policies that remove barriers to implementation can help businesses improve the profitability of their investments. Fifty-five percent of corporations and seventy-five percent of clean tech start-ups surveyed indicated government policy and regulations are one of the two biggest hurdles towards integrating more LCDT into corporate business models (Table 18). Sixty-three percent of clean tech start-ups and corporations surveyed indicated they would like The Climate Group to provide public policy advocacy as a service to help overcome these barriers (Table 19).





3.4 Step 4: Implementation of a pilot project

The fourth step of the framework is the *pilot* project, which occurs after the business case for the technology has been validated. Typically, the corporation starts with a small pilot project to test the LCDT financial and technical viability. The Climate Groups involvement in this step is less frequent, but still active. A recent example is the urban LED street lighting partnership where The Climate Group worked with cities, HSBC and Philips to scale-up urban LED street lighting and smart controls.¹¹

² See Table 18

3.5 Step 5: Rollout of the technology

The final step of the framework is the *rollout* of the technology, which includes the large-scale implementation of a project. In this step, the corporation has completely integrated the technology into their business model after learning from the pilot project and optimizing the technology for its business plan.

4. MARKET BACKGROUND

In order to understand The Climate Group's position in the market for LCDT, it is important to discuss the evolution of the clean tech market over the past several years.

The investment environment for low-carbon technologies has shifted away from the prior decades (2000's) trend of venture capital funding of capital-intensive, low-carbon generation technologies.¹² The technologies and sectors that accounted for the largest venture capital investments, including solar, wind and biomass energy, did not generate sufficient returns (greater than fifty percent) to satisfy the requirements of venture capital firms.¹³ Many of these technologies have struggled to reach commercial viability, and have subsequently not achieved the desired exits, which typically include Initial Public Offerings (IPO) and/or acquisitions.¹⁴

The 2008 credit crisis exacerbated venture capital firms' investment challenges and caused extensive apprehension from investors and acquirers of renewable energy technologies.¹⁵ As a result, venture capital firms held onto underperforming assets, which weighed heavily on their investment interests within the clean tech sector.¹⁶ Many venture capital firms and private equity investors have become hesitant to further fund unproven technologies without well-defined markets and supporting regulation.

With fewer venture capital investors providing funding to clean tech start-ups, many companies have become dependent upon government programs such as the Department of Energy's Advanced Research Project Administration-Energy (ARPA-E) to incubate nascent technologies. Strategic corporate venture investors have also emerged as financiers of clean tech start-ups, as corporations are able to withstand longer payback periods, increased technology risk and higher capital intensity.¹⁷

As of 2011, global clean tech investment totaled \$498 billion, with venture capital firms accounting for only two percent of the investment pool.¹⁸ From 2011 to 2012 there was a thirty-three percent (\$3.15 billion) decline in venture capital investment globally¹⁹ (Figure 4). Both the number of clean tech investments made by venture capital firms and the size of the average investment decreased.²⁰

In 2012, venture capital funding accounted for only \$6.46 billion of overall clean tech investment, of which corporate venture investors provided \$2.7 billion. Between 2006 and 2010 corporate investment in LCDT increased from \$1.7 billion to \$2.55 billion.²¹ This trend of corporate venture investors emerging in the clean tech sector is impacting the ways in which clean technologies are gaining commercial validation.

On a sector-specific basis, clean tech venture investors are currently focused on the technologies, which include energy efficiency, software, energy storage, electrical grid modernization initiatives (smart grid) and advanced transportation. In comparison to renewable energy technologies, these types of technologies typically have lower capital requirements, are more quickly scalable and have shorter sales cycles.²² In particular, unregulated sectors have seen the most active investments. For example, energy efficiency and energy storage have both led in venture funding over the past year, while investments in

the regulated utility sector have lagged. In addition, many investments have shifted away from hardware intensive products and services to focus on enabling software in order to address energy and climate change problems, forming a new investment class often referred to as "clean web." The convergence of operational technology (OT) and information technology (IT) often lends itself to more favorable returns because it requires lower capital investment.





This shift in technology has inspired corporations to add their own venture capital units to develop and integrate LCDT.²³ Corporate venture investors have been able to ramp up investment in clean tech because their investment profiles make them better suited to the capital intensity and product development time. In addition, corporate venture investors are able to provide nascent clean tech start-ups with cash, expertise, banking contacts and the support system needed to get their new technology off the ground and to market effectively.²⁴

Based on the market background analysis and respondent feedback, The Climate Group will not provide value to its members through increased efforts to connect its members with clean tech start-ups, as many corporations have developed their own internal capacity to do so. Instead, The Climate Group should focus on its strengths in convening and research as defined in the following set of recommendations. Additionally, The Climate Group should modify its current operational practices to ensure greater effectiveness overall as an organization.

5. RECOMMENDATIONS

By combining data collected from the surveys and interviews in conjunction with best practices analysis, the Team developed twelve key recommendations for The Climate Group (Table 29). These recommendations focus on improving services integral to The Climate Group's Clean Revolution initiative, as well as organizational considerations that will further support The Climate Group's objectives. As depicted in Figure 5, the Team's recommendations are further grouped into four categories. These recommendations are explained in further detail in their respective sections.

The implementation of these recommendations could lead to a more efficient and effective Clean Revolution initiative. In addition, it could provide The Climate Group with an advantage over organizations with similar purposes, as well as enhancing its role in accelerating the uptake of LCDT.

Figure 5: Summary of recommendation categories

Services to stakeholders

- Create original research and information.
- Provide additional networking opportunities.

Organizational considerations

- Improve The Climate Group's communication strategy.
- Develop a strategic approach to funding.

5.1 Create original research and information

Figure 6: Convincing corporations through original research and information



The Climate Group has an opportunity to increase its position as a thought leader in the innovation of LCDT by providing additional original research and information. Original research and information is critical in the innovation framework, as it convinces corporations of the opportunity for the incorporation of LCDT into their organization.

In discussions with stakeholders, forty-four percent of corporations identified a clear need for original research and collated information on the LCDT industry. The need for information varies across organizations due to size, sector and location, and for this reason the Team presents two types of research reports that aim to address these needs:

- Create LCDT trend reports.
- Create technology and business-specific intelligence reports.

5.1.1 Create LCDT trend reports

The Climate Group should utilize its internal expertise and networking capabilities to create LCDT trend reports that inform its stakeholder base on the most current developments in LCDT innovation.

In the Team's outreach, respondents reacted favorably to previous reports on industry trends produced by The Climate Group, such as Smart2020. These reports were utilized as powerful tools to present sustainability and climate change from a business and economic perspective to internal management. In fact, one organization specifically cited the Smart2020 report as the main reason they joined The Climate Group.

Members expect The Climate Group to frequently update them on the latest developments and trends in the industry and to present the information in an easily comprehensible manner. Sixty-four percent of members surveyed indicated original research and information as one of The Climate Group's services they are most interested in to overcome challenges in integrating LCDT (Table 19). Reports on broader industry trends can help stakeholders address knowledge gaps in technology development and utilization, and in return expedite the commercialization of LCDT.

Building on the success of previous reports, the Team recommends The Climate Group continue to produce and increase the number of industry-wide trend reports that it publishes. These reports should concisely inform The Climate Group's network of the current trends, news, policy developments and innovation within the LCDT sector. In addition, a more in-depth report should be produced and disseminated annually to summarize the entire year's events and developments, concluded with The Climate Group's forward-looking opinion for the next twelve months. Releasing this report in the months prior to Climate Week NYC could increase interest within The Climate Group's member and non-member network for the signature event.

By providing and disseminating information more frequently, these reports will continue to distinguish The Climate Group as a leader in accelerating the adoption of LCDT. Because resources may limit the number of additional reports The Climate Group could produce, partnerships with other organizations in the LCDT space should be explored as a potential means of limiting resource utilization.

The Climate Group could provide the report as a membership benefit, in addition to distributing the report on a fee-per-copy basis for non-members. The executive summary of each report should be publicly available on The Climate Group's website. This would serve as a great marketing tool to showcase the type of information, services and value derived from membership.

Priority: High. The feedback garnered from corporate members and non-members was very positive regarding these reports. Because The Climate Group has experience with these and potential partnerships in place to produce them, this should be an immediate action in order to sustain and grow memberships and funding.

5.1.2 Create technology and business-specific market intelligence reports

The Climate Group should produce market intelligence reports for members and non-members that provide strategic information to aid in business growth or the incorporation of LCDT into their business plan.

Clean tech respondents expressed a need for information that is directly related to the implementation of their technology. Examples of relevant and requested information included the identification of favorable market conditions for the deployment of LCDT, such as existing and emerging regulation on carbon, energy and water.

Resource and staff availability constraints on emerging clean tech start-ups make it particularly difficult to identify favorable conditions or potential customers for their product, and The Climate Group, with its global reach and network, could provide this as a very valuable service for these companies.

For example, an emerging materials start-up noted that a report on currently existing consumer goods companies that use unsustainable materials in their products, such as those including formaldehyde, would help their company identify future customers who could incorporate their new technology into the products as a more sustainable and eco-friendly alternative. The company also noted that any information on these types of products is highly disparate and aggregating data is time consuming. The

Climate Group could also help by consolidating this data into a more central repository, such as on The Climate Group website or portal, described below.

In another example, two clean tech start-ups expressed the need for intelligence reports on geographic locations where policies were favorable for the adoption of LCDT. Because their companies often rely on demand created by the implementation of government policies that regulate water usage and energy efficiency, information on cities, states and nations where these policies exist can be highly valuable in understanding easily attractive markets. The Climate Group's global knowledge and experience could be harnessed to produce market reports for these companies that may not have the capacity to perform the analysis internally.

Based on this feedback, The Climate Group should work with clean tech start-ups and other potential clients to identify target customers, market segments and additional information needs. The Climate Group could utilize current personnel and expertise, combined with experts in partner organizations, to produce market opportunity reports while minimizing any additional burden on current personnel. These publications should be marketed to members and stakeholders as a more tailored report and service than they would receive from competitor organizations, such as AGRION and Navigant Research.

Priority: Medium. These reports are valuable to organizations currently evaluating LCDT for both clean tech start-ups looking for market penetration analysis, and for corporations seeking to determine the best places to begin integrating LCDT. Clean tech start-ups demonstrated a greater demand for these reports than corporations. However, start-ups paying for these reports might be more difficult given their limited resources. The implementation of this recommendation could require additional personnel or the utilization of outside consultants, which could be costly for The Climate Group. For this reason, we recommend The Climate Group consider this as a less immediate and longer-term option.

5.2 Provide additional networking opportunities

Figure 7: Networking opportunities provided through convincing, screening and evaluating



Since its inception, The Climate Group has used its extensive network of corporations, venture capital firms, governments and clean tech start-ups to develop partnerships for its stakeholders. These partnerships have allowed The Climate Group to jointly pursue initiatives that increase the rate of LCDT adoption.

According to respondents, there is significant room for improvement to connect stakeholders. In the interviews with corporations and clean tech start-ups, seventy-six percent of respondents conveyed the need for additional networking opportunities through events, round table discussions and online platforms (Table 25, Figure 22).

In order to meet the demand for networking opportunities for its members and partners, and increase the value of the alliances that form in support of LCDT innovation, the Team recommends The Climate Group employ the following strategies in the Clean Revolution initiative:

- Launch a public policy task force with corporations.
- Host additional regional events on an annual basis.
- Provide peer-to-peer introduction services.
- Create an internal online collaborative portal.

5.2.1 Launch a public policy task force with corporations

The Climate Group should create a task force comprised of Chief Sustainability Officers at major corporations to share recent developments on public policy in the LCDT industry and coordinate efforts in influencing future policy directions.

The task force would educate participants on how to most effectively influence public policy in order to best facilitate the adoption of LCDT. This could be accomplished through the exchange of best practices and by supporting interactions with public policy experts and public officials. The task force could catalyze policy changes by taking on specific projects and working towards common objectives that would promote the commercialization of LCDT.

Respondents indicated that understanding and influencing public policy is one of the major benefits of joining The Climate Group. Many of the clean tech start-ups interviewed cited uncertain and unfavorable regulatory environments as one of the major barriers to commercializing LCDT (Table 1). One way to build a more sound business case for LCDT is to remove risk from market conditions, which can improve the likelihood of successful implementation, and in turn, the profitability of LCDT projects. As one respondent stated, the objective of this take force could build upon The Climate Group's existing strengths. In addition, it is a project that is realistic and feasible given The Climate Group's current resources.

Table 1: Needs and interests of corporations and clean tech companies in public policy advocacy³

Members surveyed that indicated public policy advocacy as a main reason for joining The Climate Group.	45%						
Clean tech companies surveyed that indicate government policy and regulation as their most significant							
growth obstacle.	13/0						
Corporations surveyed that indicate government policy and regulation as one of the biggest hurdles in	55%						
the implementation of LCDTs.	JJ70						
Corporations surveyed that indicate an interest in public policy advocacy as a service to overcome	720/						
hurdles in the implementation of LCDT.	15%						
Corporations interviewed that would be interested in The Climate Group leading a public policy task	E 6 9/						
force.	50%						

The Climate Group, as the organizer of the task force, could invite ten to fifteen Chief Sustainability Officers from corporations willing to take on a leadership role in the industry and brand these positions as prestigious roles in a key initiative under the Clean Revolution. Giving the task force a specific name and logo, with reference to LCDT, could make it easily identifiable, particularly when communicating the purpose of the task force. Another way to brand the task force would be to pursue the participation of an influential personality, such as a Michael Bloomberg, who could be at the intersection of the public policy and business sectors.

³ Data aggregated from survey and interview data

During the initial six-months, the task force could focus on providing the participants with a better understanding of LCDT and how they relate to public policy. The Climate Group could invite city officials in their network and public policy field experts including representatives from lobbying organizations and corporate public relations managers. The selectivity of this task force could attract new members who want to be on the cusp of an exciting initiative with other like-minded organizations. The Climate Group could support the task force's work by providing content, connections to its network and an intranet website where all of the information is centralized and easily accessible to its participants.

Priority: High. This service would give The Climate Group an advantage in the LCDT market by filling a void that has not been fully addressed by competing organizations. The service draws on The Climate Group's strengths in public policy, and the ability to convene stakeholders across multiple sectors.

5.2.2 Host additional regional events on an annual basis

The Climate Group should host an additional two to three events each year. Furthermore, the locations of these events should be determined based upon the alignment of technologies and key market developments.

A majority of respondents, including seventy-five percent of clean tech start-ups and over sixty percent of corporations, identified The Climate Group's main role in LCDT innovation as facilitating introductions among partners (Table 12). The Climate Group has done this primarily through organizing large networking events, such as Climate Week NYC, which aim to convince corporations that investing in these technologies can be lucrative.

Climate Week NYC presents an opportunity for members and other stakeholders to attend a number of briefings, panels, trainings and other events that educate and provide updates on recent innovations in LCDT. In addition, clean tech start-ups also utilize Climate Week NYC as an opportunity to showcase technologies, services and recent use cases to influential stakeholders whose audience might otherwise be difficult to access. Similarly, corporations use Climate Week NYC as an opportunity to efficiently share best practices among industry peers, and engage with and identify clean-tech products and services congruent with companies' business objective.

Overall, the desire for continued and increased events clearly indicates that members consider Climate Week NYC a success. Many respondents expressed interest in attending a number of events similar to Climate Week NYC. One corporate respondent stated: "Multiple events per year will help keep climate change and sustainability relevant and will overall be a good value-add to our company."

The Climate Group's competitors, including AGRION, Cleantech Innovation New England and Cleantech Open also host networking events. These gatherings foster thought provoking interactions between the private and public sector. For example, AGRION recently held an event on "Coupling Heat Financing Models with Energy Efficiency Retrofit Incentives," which assembled members from the New York State Energy Research and Development Authority (NYSERDA) and local businesses.²⁵

For greatest impact, The Climate Group should work with its membership base to strategically schedule two to three additional events per year on a more regional basis in order to allow for greater networking and information sharing opportunities as previously described. Regional events are especially important because they are often used to influence local and regional policy, which can drive demand and increase the rate of LCDT. Public policy is important to The Climate Group's stakeholders²⁶, as supported by the

surveys and interviews, and the events could be great opportunities to invite policy makers to engage with members.

However, hosting multiple regional events annually requires a significant dedication of time, financial resources and logistical management. For this reason, The Climate Group should partner with other similar organizations to co-host events, when possible. This will allow The Climate Group to provide their members with the additional services requested while efficiently allocating resources.

Priority: High. Respondents indicated the need for more localized events focused on specific topics. Since The Climate Group already has experience organizing events, available resources should be used immediately to begin planning and strategizing for additional future events in order to supplement Climate Week NYC.

5.2.3 Provide peer-to-peer introduction services

The Climate Group should provide peer-to-peer introduction services, which connect investors and clean tech start-ups.

Based on several interviews, many clean tech start-ups expressed interest in having The Climate Group provide peer-to-peer introductions. As one organization stated, "[there are] lots of frogs out there and you don't want to kiss them all...we want The Climate Group to only give us the Princes." Clearly, there is a need for The Climate Group to act as an intermediary.

In addition, several corporations also expressed interest in receiving similar services. Forty-five percent of corporations surveyed indicated they would like The Climate Group to provide advisory services to keep their companies informed of the latest clean technologies, as well as help their company identify potential investment and/or adoption opportunities for relevant LCDT (Appendix 1).

While the Team is not advocating The Climate Group provide strategy or management consulting services, there is an opportunity to become a facilitator of introductions. This is another way for The Climate Group to remain competitive with similar organizations and focus on providing value through curated networking opportunities.

Successfully providing this service requires The Climate Group become acquainted with the products and services clean tech start-ups provide, as well as the kind of connections stakeholders are looking to make. However, curating these connections requires a significant time and personnel investment. Therefore, this remains a less immediate priority.

If The Climate Group decides to provide peer-to-peer introductions, existing members and partners should be surveyed in order better understand what stakeholder are looking to gain. The Climate Group could then use this information to screen potential partners for interested stakeholders. If any stakeholder of The Climate Group expresses interest in connecting with a selected member organization, then The Climate Group could facilitate the introductory meeting between these organizations.

Priority: Medium. Strategic peer-to-peer introduction services are commonly requested among stakeholders. Since connecting the right investor with the right innovator is extremely important for increasing the adoption rate of low-carbon technologies, and this aligns with The Climate Group's mission, this recommendation should be implemented when excess resources are available.

5.2.4 Create an internal online collaborative portal

The Climate Group should implement an online collaborative portal for its members that provides and encourages additional networking opportunities. This could allow the Climate Group to remain competitive with peer organizations such as Agrion and Cleantech Open. In addition, the portal could provide access to information and reports provided by The Climate Group in one central location.

Seventy-six percent of surveyed respondents indicated a need for additional networking opportunities. Of those, eighty-nine percent of corporations expressed an interest in The Climate Group providing networking opportunities to share best practices with other organizations on the incorporation of LCDT, as well as interact with government agencies vested in the LCDT space (Figure 20, Table 20).

Clean tech start-ups expressed interest in more frequent networking opportunities with businesses and venture capital firms to pitch their products and identify partners. In fact, many clean tech respondents were interested in sector-specific networking opportunities. For example, one clean tech start-up noted a desire to connect with "utilities and retailers," as both are potential customers that could benefit from LCDT. Another respondent stated interest in connecting with "people who are taking energy efficiency seriously" to help identify short-term growth opportunities.





Networking activities are integral to the success of non-profit organizations working in the space. A best practices analysis performed by the Team shows that all of the organizations researched are extensively utilizing online and social collaborative platforms as a means of engaging member interaction (Appendix 1). For example, AGRION has created an online platform where its members can exchange ideas and discover opportunities in energy and corporate sustainability fields.²⁷

Each individual in Agrion's 200,000+ member community has a unique online profile displaying their information (name, company, location, etc.). AGRION's online tool presents an opportunity for virutal networking that fosters connections. Members can browse each others profiles and connect with individuals. AGRION also uses this online platform to provide members with additional services, such as webinars and online panel discussions. These webinars and panel discussions enable international participation and the exchange of best practices from global experts. Besides networking activities, the platform also offers members access to content and information, such as reports, blogs and previously recorded events.²⁸

To enhance its membership services, The Climate Group should investigate possible methods to create and implement an online portal exclusive to members and partners. The Climate Group could modify this online portal to include the option for members to add information about their business, such as sustainability plans, projects they are currently executing, progress toward implementation, projects they would like to execute and needs of members and partners. Stakeholders would have the opportunity to access each other's profiles and connect at any time without The Climate Group's direct involvement. This is a favorable service for members because it puts The Climate Group's expansive network at the fingertips of its members while expediting and streamlining networking opportunities.

The online portal should also be used as a central platform where The Climate Group aggregates and disseminates information such as publications, reports, blog posts and other updates. The Climate Group should also use the platform to increase the level of communication with its members, as discussed below.

While an online collaborative portal has the potential to be a powerful tool for networking and the dissemination of information, its effectiveness is ultimately dependent on the membership base. If members do not create profiles that are continuously updated and if they do not engage with one another, then this may not be an effective tool. In addition, The Climate Group has a much smaller member base than competitor organizations such as AGRION, which could hinder the success of a social collaboration portal.

If The Climate Group decides to deploy a social collaboration platform, The Climate Group should first investigate the benefits and pitfalls of developing these tools internally with existing staff versus contracting out the development. While these tools may offer several benefits and opportunities, the Team recommends The Climate Group develop a clear strategy for use before implementation.

Priority: Low. Although an online collaborative portal has become a commonly employed tool implemented by The Climate Group's competitors, The Climate Group will need to retain and expand its membership base to achieve the maximum benefit of the tool. For this reason, the Team recommends The Climate Group work on expanding its membership base first and consider this initiative at a later time.

5.3 Improve The Climate Group's communication strategies

Figure 9: Improving communication strategies within all five steps of the framework



In order to best serve the needs of current and future members of The Climate Group in a sustained and consistent manner, The Climate Group must alter its communication strategy to be more clear and effective in disseminating information about the organization. Feedback collected from interviews and surveys combined with best practices in non-profit communication suggest The Climate Group should implement two key recommendations to address current internal and external communication practices:

- External communication: improve The Climate Group's website.
- Internal communication: increase and focus membership outreach.

5.3.1 External communication: improve The Climate Group's website

The Climate Group should review key metrics related to its website to understand where improvements can be made. In order to do this, the Team recommends hiring an IT consultant to evaluate the website's logistics and make recommendations on how to improve technical aspects including effective navigation, interactivity and engagement.

A website is often the most publically referenced tool used to communicate the mission of an organization. It is vital that the website convey relevant and timely information while also providing an informative and engaging user experience. In addition, the website can serve as an important mechanism for tracking key performance indicators of the organization used to assess member participation, program impact and public engagement.

The Team benchmarked the performance of The Climate Group's website against competitor organizations websites using an Alexa Web Information Company Ranking.⁴ The Climate Group lags behind similar organizations on several key metrics including: overall traffic, number of page views per user and bounce rate. Bounce rate is the most important website metric, as it measures the percentage of individuals that arrive to a web page and immediately exit the site. The Climate Group's bounce rate of seventy-five percent indicates the average user browses very little content on the site and places the website in the bottom of the field in comparison to peer organizations (Appendix 6). These statistics provide justification for enlisting the services of a consultant.

Furthermore, these trends align with feedback gleaned from organizations that are not familiar with The Climate Group's mission and operations. Fifty percent of clean tech respondents were uncertain or confused by The Climate Group's mission and current initiatives (Appendix 4, Table 12). A website that more clearly defines and increases the visibility of The Climate Group's mission will improve the engagement of existing and prospective members.

Data analytic tools, such as Google Analytics, are available to non-profits for free and can be highly effective in providing insights into the way the current website is utilized. This should be used by The Climate Group's existing web team in the near-term to remove information from the website that is not currently utilized to provide a more streamlined or restructured experience. The Climate Group should use these tools to immediately monitor the performance metrics of its website (Table 7).

Priority: High. Overall, there seems to be a lack of understanding around The Climate Group's mission and operations, which may be stemming from some of the website's design characteristics. Because the website is such an important marketing and information dissemination tool, this recommendation should be implemented immediately.

5.3.2 Internal communication: increase and focus membership outreach

The Climate Group should increase the amount of two-way communication with its members and refocus the content to include more strategic and substantive conversations. The Climate Group should

⁴ Alexa Web Research is an Amazon company that collects web performance statistics.

also standardize information about membership to create a transparent mechanism for the recruitment of new members.

Current members of The Climate Group expressed an interest in increased two-way communication. Forty-five percent of members surveyed indicated a desire to communicate with The Climate Group on a monthly basis (Figure 10).





Currently, The Climate Group's relationship managers communicate verbally, on average, quarterly with its members. According to several respondents, the topics of conversations between members and relationship managers varies, but often focuses on "logistical information," such as the details of Climate Week NYC, its attendees and other information regarding events. Members indicated communication should move away from these "logistical conversations" to a more strategic discussion about how sustainability and LCDT directly relate to their organization and how The Climate Group can be of assistance.

Although an increased level of communication will require an additional time investment for The Climate Group's relationship managers, it is likely that improved member satisfaction will justify higher membership fees. As communication increases, The Climate Group will have a better understanding of members' needs with regards to LCDT, and may be able to add on additional projects, such as the production of original research or additional networking services, that can increase revenue and contribute to financial sustainability. The Climate Group could also utilize the membership portal recommended in the aforementioned networking section to more effectively communicate with members.

In discussions with non-member companies regarding their interest in a potential membership, it was apparent there was no clear understanding of how an organization becomes a member or what it is expected of each of the respective parties. As The Climate Group continues to expand its relationships with emerging clean tech start-ups, it should develop a transparent communication strategy that explains the initial membership engagement process. The development of a communication strategy surrounding the requirements of membership will increase the transparency of the process and attract members who may not initially understand the expectations, requirements and benefits of membership.

Priority: High. Communication and engagement with members are imperative to ensure member satisfaction. Because members are the key to the programmatic and financial sustainability of The Climate Group, this recommendation should be addressed immediately.

5.4 Develop a strategic approach to funding

To advance the Clean Revolution initiative, financial stability is pivotal to The Climate Group's ability to provide the previously recommended services. Developing an accompanying strategic approach to funding is paramount. Unlike for-profit businesses that create value and generate revenue from the sale of products and services, not-for-profit organizations must create value without clearly defined sources of revenue. This ambiguity leaves not-for-profit organizations without a standard funding model to guide financial health.²⁹

To address these challenges, the Team recommends four funding strategies to support the Clean Revolution.

- Pursue increased levels of philanthropic funding from corporations and foundations.
- Explore additional opportunities to raise in-kind contributions.
- Create and implement a combined corporate contribution structure that includes membership and stand-alone services.
- Utilize The Climate Group's board of directors and associated respected figures more effectively as a tool to secure funding.

The Climate Group should not prescribe to these recommendations as a full set of implementation actions to be used in total, but rather should employ a mix that best aligns with the current philanthropic and funding environment. This method can create a consistent financial sustainability model that will ensure the continued success of the Clean Revolution initiative.

Although the Team recommends raising funds through both philanthropy and fee-for-service models, these models can conflict. By pursuing philanthropic funding, the majority of The Climate Group's revenue can be used to develop impactful programs trying to make change happen. Alternatively, by obtaining funding through fee-for-service models, the majority of the revenue is spent on providing what The Climate Group is selling, rather than trying to identify where change will happen the fastest. Even though the Team recommends both types of funding models, The Climate Group should find a balance between being a campaigning non-profit and a business association.

5.4.1 Pursue increased levels of philanthropic funding from corporations and foundations

The Climate Group should continue to pursue philanthropic funding from foundations and corporations as an additional revenue source.

Support from foundations and corporations continue to be an important source of revenue for nonprofits. Though earned income has gained popularity as a way for non-profits to become financially stable, a study published by the Harvard Business Review shows that the percentage of earned income by non-profits has remained steady at around forty-seven percent in the past years.³⁰ The remaining financial support comes from other funding sources including foundations, corporations and individuals.

	Alcoa / Alcoa Foundation	Bank of America	Citi / Citi Foundation	DOW Chemical Company	Duke Energy	The Energy Foundation	MacArthur Foundation	Rockefeller Foundation	Rockefeller Brothers Fund	Skoll Foundation	Wells Fargo
Center for Climate and Energy Solutions	•	•			٠	٠			٠		
Cleantech Open				٠							•
Clinton Global Initiative	•		٠				٠	•			
GreenBlue	•										
SJF Institute		•	٠					•			
The Climate Reality Project							•			•	
The Clinton Climate Initiative (Clinton Foundation)		•	•	•	٠			•		•	
World Resource Institute	•		٠	٠		٠	٠	٠	٠	٠	٠

Table 2: Summary table of foundations and corporations supporting funding top-performers

Because The Climate Group receives approximately half of its total budget from philanthropy, this source of revenue should be further explored as a way to complement earned revenue from the services it provides. As shown in Table 2, the majority of top-performing non-profit organizations⁵ receive support from various foundations and corporations. Additionally, examples of the specific initiatives supported by corporations and foundations are presented in Table 3.

In order to increase the level of support from foundations and corporations, The Climate Group should expand on its previous success by allocating sufficient capacity to author strong grant proposals targeted at philanthropic organizations interested in advancing LCDT, including those listed in Figure 4. Best practices in the field show that additional capacity in regards to identifying, contacting and building strong relationships with potential donors is also a significant portion of the fundraising success.³¹ Leadership (including board members) can provide valuable support in these stages and should be actively involved in recruiting potential donors.³²

The Climate Group should also capitalize on the combination of its global network to show foundations they are a unique organization with expansive reach and expertise that can be harnessed to have impacts at multiple scales.

Priority: High. Since philanthropic funding is an increasingly important source of funding for The Climate Group, efforts to sustain and increase it should be prioritized. Charitable donations could allow The Climate Group to build a financial baseline to support the organization in finding ways to drive impactful change.

⁵ This refers to funding top performing non-profit organizations benchmarked based on fundraising efficiency. See Table 6 for more detail.

Foundation	Recipient	Award Amount	Project Supported						
	Climate Reality Project	200,000	Global event called "24 Hours of Reality" designed to educate the public about climate change						
ockefeller undatior	World Resources Institute	250,000	Global event called "The Future of Revaluing Ecosystems" designed to analyze the future trends of climate change and ecosystems						
Rc Fo	Clinton Foundation	3,000,000	Support for CCI's Carbon and Poverty Reduction Program						
ation	Climate Reality Project	500,000	General support for engaging the public and bringi facts about climate change into the mainstream media						
MacAi Found	World Resources Institute	250,000	For continued support of the International Financial Flows and Environment Project of its Institutions and Governance Program.						
ergy tion	World Resources Institute	30,000	Identify utility industrial energy efficiency program best practices						
The Ene Founda	Center for Climate 50,000 Energy Solution	To support the North America 2050 states' dialogue on carbon policy issues							
oa ation	Center for Climate Energy Solution	10,000	Grants for schools to pledge and take actions to save on carbon dioxide emissions						
Alc Found	Clinton Global Initiative	2,000,000	Commitment to increase U.S. recycling rates - "Action to Accelerate Recycling"						

rapic 3. Examples of the specific initiatives supported by corporations and roundations

5.4.2 Explore additional opportunities to raise in-kind contributions

The Climate Group should explore additional opportunities to secure in-kind contributions from member and partner organizations to reduce expenses associated with the Clean Revolution initiative.

While the execution of an initiative such as the Clean Revolution requires substantial financial resources, the utilization of cost sharing or in-kind contributions can reduce the fundraising requirements by an organization. Top-performers in the non-profit sector use in-kind contributions to support their efforts, including fifty percent of the organizations analyzed by the Team.⁶ For example, the Climate Reality Project received pro-bono support from Arnold Worldwide, an advertising agency, to develop its Reality Drop Site.³³ Furthermore, World Resources Institute (WRI) receives permanent in-kind contributions on a variety of items from its members, including:

- Access to stock video footage used to publicize WRI's work by Footage of the Worlds.
- Access to Bloomberg Profession Service by Bloomberg LP.
- IBM desktop and laptop computers on an annual basis.
- Beverages and catering products by Brown-Forman and Starbucks Coffee.

⁶ Fifty percent of funding top-performers are pursuing in-kind contributions as a source of revenue including The Center for Climate and Energy Solutions, Clinton Global Initiative, The Climate Reality Project and World Resources Institute.

While The Climate Group reported a \$32,421 non-cash contribution in its Form 990 to the Internal Revenue Service in 2010, the forms for 2009 and 2011 do not suggest in-kind contributions were secured.³⁴ Based on this data, the Team recommends The Climate Group review its expenditures for the previous five years to identify where in-kind donations could be pursued to help reduce expenses. In addition to the items listed above for WRI, common items often secured through in-kind contributions that could assist the Clean Revolution initiative include the donation of air travel, video-conferencing services and catering and meeting supplies, such as food and venues.

An excellent way to make in-kind donations attractive to partners is through the opportunity for branding. The Climate Group should utilize its capabilities as a brand and its outreach mechanisms, such as the website and publications, to recognize the generosity of partners who have donated.

Priority: High. This recommendation will assist in the overall fundraising strategy of the Clean Revolution initiative by reducing expenses associated with the program. Since The Climate Group has an extensive network of members and partner organizations, it should begin to utilize these resources in order to secure additional in-kind contributions.

5.4.3 Create and implement a combined contribution structure that includes membership and standalone services.

The Climate Group should consider augmenting its current membership structure to provide two options:

- 1. An all-inclusive service package for a flat membership fee.
- 2. The option to purchase individual services best suited to the specific needs of the organization.

A funding strategy that combines membership and fee-based services could be a way to attract, recruit and retain members. This approach provides corporations, clean tech start-ups and venture capital firms with the flexibility to draw on The Climate Group's services in a way that aligns well with their needs and budget. While memberships are currently the best option for many businesses, there may be opportunities for additional revenue generation through stand-alone services.

In discussions with current members, forty-four percent of respondents expressed a desire to continue to receive overall services in return for a membership fee because these fees are easier to pass through internal management funding hurdles (Table 27). Alternatively, forty-one percent of all interviewed respondents expressed a desire to choose on an individual basis from a selection of services provided by The Climate Group on a fee-for-service basis. Their preference for this structure was either to lower the cost burden for annual contributions or to select a limited number of services included within the membership package. In addition, a fee-for-service model was especially attractive for clean tech startups whose cash flows are often unpredictable, making annual contributions an unlikely way to pay for membership.

Currently, The Climate Group charges corporate members an annual fee of \$30,000 to \$45,000, depending on annual revenue. In discussions with current members who plan to remain members of The Climate Group, there was a consensus that higher membership fees would be tenable should there be increased value from the membership resulting from the additional services. In comparison, many of the top-performers in the non-profit sector, including WRI³⁵ and Cleantech Open³⁶, charge \$50,000 at the highest membership levels. This suggests The Climate Group could potentially raise its top membership tier to the same level. The Team recommends The Climate Group complete an analysis to

determine if their membership services are in line with top-performers to ensure competitiveness for the increased membership fee (See Table 4 for a comparative analysis).

	Clinton Global Initiative	CleanTech Open	World Resources Institute	GreenBlue
Event invitations	•	•	•	•
Advisory services	•		•	•
Access to a member website	•		•	•
Dedicated relationship manager	•		•	

Table 4: Serv	ices offered b	v funding tor	p-performers t	to members
	ices offered b	y runuing top	-periorniers	to members

While this model may be an effective means of increasing the level of involvement and funding potential of various stakeholders, there could be significant drawbacks. Providing the option to receive services on an individual basis may prove detrimental to the more expensive option of the full membership, if many current members decide to choose the individual services. This would significantly affect The Climate Group's cash flow. In order to ensure that this is minimized, the Team recommends conducting surveys, focus groups or interviews to provide the best guidance on this funding approach.

Additionally, in order to avoid a large level of new work for The Climate Group, the Team recommends services provided on an individual basis be limited to those included in the membership fee structure. For example, if one of the services provided to members is a report on market trends, it can also be offered to other stakeholders at a price, but there should be no new services available outside of the membership benefits.

Priority: Medium. The proposed combined contribution structure could increase The Climate Group's earned revenue for the services it provides to stakeholders as part of the Clean Revolution initiative. This recommendation should be addressed when resources are available to augment philanthropic and in-kind donations.

5.4.4 Utilize The Climate Group's board of directors and respected figures more effectively as a tool to secure funding

The Climate Group should better utilize its board of directors and respected global partner figures to identify additional funding opportunities. Highly regarded individuals associated with The Climate Group can drive fundraising activities by providing introductions to their corporate networks, foundations and wealthy individuals. Their credibility can also be a major asset.

Non-profit organizations have increasingly leveraged their associations with well-respected figures to drive fundraising activities, including forty percent of the top-performing organizations analyzed by the Team.^{37 7} For example, The Climate Reality Project receives funding from former vice-president Al Gore including the donation of five percent of all box office receipts for his documentary, *An Inconvenient Truth*, as well as all of Al Gore's personal profits from the film.³⁸ Additionally, Al Gore also donated ten percent of his Nobel Peace Prize proceeds to the Alliance.³⁹ Similarly, the Clinton Global Initiative and

⁷ The three organizations that receive support from well-respected public figures include The Climate Reality Project, Clinton Foundation and Clinton Climate Initiative. These constitute forty percent of the top-performing organizations.

the Clinton Foundation were founded on President Clinton's leadership, and undoubtedly use his identity to market these initiatives and similarly drive funding.

The Climate Group should capitalize on its close connections with global figures of the International Leadership Council⁸, including former Prime Minister Tony Blair, Prince Albert II of Monaco and prominent business leaders in corporations and venture capital firms, to drive fundraising. Examples of opportunities for support from these individuals can include similar activities to The Climate Realty project, such as the procurement of a portion of proceeds from the sale of publications, films and other items. These individuals are also often associated with wealthy networks that provide direct philanthropic donations to organizations, and they should be utilized to make introductions and provide recommendations of credibility for The Climate Group to these communities. The Climate Group should also increase the publicity of its involvement with these figures on its website and publications to drive the organization's overall credibility and attract additional funding.

In order to implement this recommendation, The Climate Group should articulate clearly to its Board of Directors its role in fundraising. The Climate Group should also seek opportunities to encourage the International Leadership Council to become involved in fundraising activities.

Priority: Low. Engaging board members and respected figures is a long-term strategy to obtain additional funding. This approach is not expected to attract funding in the short-term. However, as the Team's analysis of The Climate Group's competitors illustrated, aligning fundraising efforts with influential figures can be a successful strategy to supplement other contributions.

6. CONCLUSION

The Climate Group is widely acknowledged as a leader in addressing climate change. While the number of organizations with similar purposes has increased exponentially over the last several years, few of The Climate Group's peers have the same level of convening power and clout.

In addition, The Climate Group has already made considerable contributions in expediting the adoption of LCDT, as is reflected through overwhelmingly positive feedback from current and prospective members. The services provided to date are valued by many stakeholders, and in most circumstances, there is considerable demand for increased service offerings as well as more frequent communication with The Climate Group.

Through the implementation of many of the aforementioned recommendations, The Climate Group has the opportunity to continue to facilitate meaningful interactions within the industry by networking and educating the community through the production and dissemination of original research and information. In addition to continuing to distinguish itself as a thought leader, providing these valueadded services will allow The Climate Group to fund current initiatives, including the Clean Revolution, more aggressively, as well as explore longer-term opportunities. The Climate Group is clearly well on its way to expanding the Clean Revolution initiative, and the recommendations in this report will ensure the program continues to drive meaningful change.

⁸ The International Leadership Council is a group of 25+ executive level partners who assist The Climate Group in overall strategy. See the link below for a full list of members. http://www.theclimategroup.org/who-we-are/our-members/

APPENDIX

Appendix 1. Best practice assessment methodology for competitive organizations

Competitive organizations were analyzed based on their programs and funding to determine best practices. A total of 29 non-profit and for profit organizations were identified (Table 4: Initial List of Organizations). These organizations where chosen based on: 1) competitors identified by The Climate Group and 2) research by the Team on organizations working in a similar field. The Team used the criteria and process described below to identify organizational effectiveness and funding top-performers.

Table 4: Initial competitive organizations by type identified for best practice assessment

Agrion	Profit
C40	Non-Profit
Carbon Disclosure Project	Non-Profit
Carbon War Room	Non-Profit
CBSR (Canada)	Non-Profit
Center for Climate and Energy Solutions	Non-Profit
Ceres	Non-Profit
Clean Energy Solutions Center (CEM)	Quasi-Government UN
Clean Tech Group	Profit
Cleantech Innovation New England - NECEC Institute	Non-Profit
Cleantech Open	Non-Profit
CleanWeb	LLC
EcoConnect	Non-Profit
Environmental Defense	Non-Profit
GreenBlue	Non-Profit
ICLEI	Non-Profit
London Cleantech Cluster	Profit
National Trust for Historic Preservation	Non-Profit
NRDC / E2	Non-Profit
Pure EnergyPartners	Profit
SJF Institute	Non-Profit
Skipso GB	Private
The Carbon Trust	Profit
The Climate Group	Non-Profit
The Climate Reality Project	Non-Profit
The Clinton Global Initiative	Non-Profit
The Nature Conservancy	Non-Profit
World Resource Institute	Non-Profit

Appendix 1.1 Geographic locations of offices and activities of competitive organizations

Each competitive organization was analyzed to determine the geographic reach of the business. Through annual reports and other open source materials, the Team identified the geographic activities for these organizations including: administrative centers, regional satellite offices and extended program locations.

Office • Headquarters • Program initiative •	New York	San Francisco	Washington DC	Boston	Seattle	South West US	North West US	North East US	South East US	United Kingdom	France	Germany	European Union	Scandinavia	Russia	Middle East	China	India	South East Asia	North Africa	Sub-Saharan Africa	Southern Africa	Australia	South America	Caribbean	Mexico
Accelerate Long Island	•							٠																		
Agrion	•	•									•	•					•									
C40	•								•		٠	•				٠	•	٠		•				•		٠
Carbon Disclosure Project	•																									
Carbon War Room	•		•										٠													
CBSR (Canada)							٠	٠																		
Center for Climate and			•			٠	•	٠	٠				٠				٠	٠					•			
Energy Solutions																										
Ceres																										
Clean Energy Solutions	•									•			•	•	•	•	٠	•	•	•	•	•	•	•	٠	٠
Center																										
Clean Tech Group		•		•	•	•	•	•	•		•		•	•			•	•								
Cleantech Innovation								•																		
New England								-										-								
Cleantech Open		•		•	•	•	•	•	•				•	•			•	•								
CleanWeb	•	•		•	•	•	•				•		•	•		•	•									
Ecoconnect										•																
Environmental Defense Fund	2																									
GreenBlue																										
ICLEI Group													•													
London Cleantech													•													
Cluster																										
Historic Preservation			•																							
				•	•	•	•	•	•									•								
Pure Energy Partners				•	-	•	-	-	-									-								
Skipso GB																										
Start-up America		•																								
The Carbon Trust										•																
The Climate Group	•									•							•	•								
The Climate Reality			•																							
Project																										
The Clinton Global	•	•	٠			•	•	•	•				•	•		•	•		•	•	٠	•		•	•	•
Initiative																										
The Nature Conservancy	•	•	•	•	•	•	•	•	•																	
World Resource Institute	•		•			•	٠	٠	٠						•	٠	•	•	٠	•	٠	•		•	٠	٠

Table 5: Geographic presence of offices and activities of competitor organizations

Appendix 1.2 Funding top-performers

The funding top-performers across the set of 17 non-profit organizations from the US and UK were identified based on *fundraising efficiency* measured by total fundraising expenses over total revenue. Fundraising expenses include total expenses for running the organization's fundraising activities and total revenue refers to the total revenue amount. The ratio of fundraising expenses to total revenue represents the ability of an organization to raise funds.⁴⁰ A high ratio shows that the organization requires a higher cost to generate revenue while a low ratio indicates that the organization requires fewer funds to raise revenue.

Financials for the 2011 fiscal year, as reported in the organization's Form 990 to the Internal Revenue Service, were analyzed for each organization, including The Climate Group, to arrive at this metric. A total of 8 out of the 18 organizations showed lower fundraising efficiencies than The Climate Group, which indicated that these organizations were utilizing their funding mechanisms better than The Climate Group (Table 6). These 8 organizations were categorized as funding top-performers. The top-performers were further analyzed to better understand their individual funding models and to observe any best practice trends that appeared across multiple organizations.

	Total revenue	Fundraising expenses/total revenue
Cleantech Open	\$2,017,052	0%
Center for Climate and Energy Solutions	\$6,424,365	1%
GreenBlue	\$2,729,118	2%
Clinton Foundation	\$57,247,869	3%
SJF Institute	\$610,483	3%
World Resource Institute	\$50,079,176	4%
The Climate Reality Project	\$19,150,215	4%
The Clinton Climate Initiative	\$26,095,117	4%
The Climate Group	\$2,764,784	6%
ICLEI	\$4,144,058	6%
The Nature Conservancy	\$997,037,763	7%
National Trust for Historic Preservation	\$58,821,158	9%
Ceres	\$7,464,736	11%
Environmental Defense	\$96,358,261	11%
Cleantech Innovation New England	\$888,601	12%
Carbon Disclosure Project	\$3,831,676	12%
Carbon War Room	\$1,116,649	39%

Table 6: Fundraising efficiency of similar non-profits

In addition, *fundraising efficiency vs. total revenue* was plotted to visually place the organizations in terms of their fundraising efficiency and the size of their revenue. The organizations in the top-left quadrant are best positioned, as they have a high fundraising efficiency and high levels of revenue (Figure 11).





Appendix 1.3 Organizational effectiveness top-performers

Evaluating the effectiveness of non-profit organizations can be a challenging task. Non-profit organizations cannot simply be assessed through the most common measurement methods used to assess profit driven organization, such as stock market performance or profitability. Developing qualitative measures is challenging because non-profit organizations often have missions that are amorphous and offer services that are intangible.⁴¹ While financial indicators such as the fundraising ratios, proportion of total costs devoted to core services and donations per fundraising dollar allow a comprehensible assessment, qualitative analysis on nonprofit activities prove to be much more difficult to be assessed.⁴² This leads to an equally challenging discussion about which criteria of effectiveness should be employed.⁴³

Based on study findings on the performance of The Nature Conservancy "Mission Impossible: Measuring Success in Nonprofit Organizations" the Team developed a measurement tool consisting of nine indicators to measure inputs and outputs. These indicators are summarized in Table 7.

Indicator	Description	Evaluation (points)
Impact	Assessment of mission definition and measurability. Accurateness of mission statement.	Highly measurable (3) Measurable (2) Hardly measurable (1)
Activity	Achievement of goals and implementation strategies.	Achievable (3) Moderate achievability (2) Hardly achievable (1)
Capacity	Gauging the degree to which an organization mobilizes resources necessary to fulfill the mission.	Adequate mobilization (3) Moderate mobilization (2) Limited mobilization (1)
Transparency	Three concurrent years of annual financial and program reports.	Yes (1) No (0)
Social engagement platform	Peer-to-peer introduction between members and access to member content through a social platform with exclusive member content.	Yes (1) No (0)
Structure of network	Proven success of introductions	Yes (1) No (0)
Focus on clean tech industry	Activities focused on clean tech (not including other sustainability issues)	Yes (1) No (0)
Content generation		List of products

 Table 7: Organizational effectiveness indicators of best practices among competitive organizations

The above listed indicators were applied on this preliminary list in Table 4. Based on the assessment of these indicators, each organization was assigned a corresponding number of points. Of the eighteen possible points, the assessment resulted in a ranking with eight strong performing competitors with thirteen-fourteen achieved points: Agrion, Cleantech Open, Carbon War Room, National Trust for Historic Preservation, Clinton Climate Initiative, EcoConnect and Skipso.

Appendix 2. Interview Methodology

	Corporation	Clean tech	Venture capital ¹⁰	Member	Survey	Interview
Organization A	•			•	•	
Organization B	•			•	•	•
Organization C	•			•	•	•
Organization D	•			•	•	•
Organization E	•			•	•	•
Organization F	•			•	•	•
Organization G	•			•	•	•
Organization H	•			•	•	
Organization I	•			•	•	•
Organization J	•				•	•
Organization K	•				•	•
Organization L		•		•	•	•
Organization M		•		•	•	•
Organization N		•			•	•
Organization O		•			•	•
Organization P		•			•	•
Organization Q		•			•	•
Organization R		•			•	•
Organization S		•			•	•
Organization T			•			•
Organization U			•			•
Total	11	8	2	11	19	19
Attempted contact	19	9	6	16	28	34

Table of Sammary of Sameeys and meets conducted

Figure 12: Summary and analysis of surveys and interviews conducted



⁹ Although nineteen organizations were surveyed and twenty-one completed interviews only seventeen organizations completed both surveys and interviews. Only the corporations and clean tech start-ups were contacted to participate in a survey. Six venture capital firms were also contacted for potential interviews. Of the six venture capital firms, two completed interviews.

¹⁰ Data from the venture capital firms is not included in the interview analysis due to the small sample size and because the information gleaned was outside the scope of the project.

Appendix 3. Competitor focus areas within convince stage of the Team's framework

The Team identified the nine focus areas and activities of engagement for twenty-six competitive organizations. The Team accomplished this through the review of annual reports and other open source materials. This list is not conclusive, but rather gives an impression of the landscape in which The Climate Group is active.

	Climate change	Environmental issues	Green business	Community service	Health	Public policy	Events	Member social platform	Lectures
Agrion	•	•	•	•		•	•	•	•
C40	•	•				•	•		
Carbon Disclosure Project	•					•	•	•	•
Carbon War Room	•	•	•			•	•		•
CBSR (Canada)							•		•
Center for Climate and Energy Solutions	•	•				•	•		
Ceres	•								
Clean Energy Solutions Center (CEM)	•	•	•	•		•	•		•
Clean Tech Group			•					•	
Cleantech Innovation New England		•	•			•	•		•
Cleantech Open			•				•	•	•
CleanWeb			•					•	•
EcoConnect		•	•	•		•	•		
Environmental Defense Fund	•	•			•	•			
GreenBlue			•				•		
ICLEI Group	•	•		•	•	•	•	•	•
London Cleantech Cluster			•			•	•		•
National Trust for Historic Preservation		•	•	•		•	•		•
NRDC / E2		•	•			•	•		
Pure Energy Partners									
Skipso GB			•			•	•	•	•
Start-up America									
The Carbon Trust	•	•	•			•	•	•	
The Climate Group	•	•					•		
The Climate Reality Project							•		•
The Clinton Global Initiative	•	•		•	•	•	•	•	•
The Nature Conservancy		•				•	•		•
World Resource Institute	•	•	•	•	•	•	•		•

Table 9: Competitor activities within the convince stage of the Team's framework

	Business issues	Energy research	Supply chain	Energy: solar	Energy: wind	Energy: it	Renewable energy	Sustainable development	Urban management	Corporate networking	Executive education
Agrion	•	•	•	•	•	•	•		•	•	•
C40									•		
Carbon Disclosure Project			•								
Carbon War Room	•	•	•	•	•	•	•	•		•	•
CBSR (Canada)	•	•								•	
Center for Climate and Energy Solutions	•										
Ceres											
Clean Energy Solutions Center (CEM)	•	•	•	•	•	•	•	•	•	•	•
Clean Tech Group	•	•	•			•	•			•	•
Cleantech Innovation New England	•	•	•	•	•	•	•	•	•	•	
Cleantech Open	•	•	•			•	•			•	•
CleanWeb	•	•	•	•	•	•	•				
EcoConnect	•	•	•	•	•	•	•	•	•	•	•
Environmental Defense Fund		•		•	•		•	•			
GreenBlue	•		•								•
ICLEI Group		•					•	•	•	•	•
London Cleantech Cluster	•										
National Trust for Historic Preservation	•			•			•	•	•	•	•
NRDC / E2	•	•	•	•	•	•	•	•		•	
Pure EnergyPartners											
Skipso GB	•	•	•	•	•	•	•	•	•	•	•
Start-up America											
The Carbon Trust	•		•						•	•	•
The Climate Group	•								•	•	
The Climate Reality Project										•	•
The Clinton Global Initiative	•	•	•				•	•	•	•	•
The Nature Conservancy				•	•	•	•		•		
World Resource Institute	•	•		٠	٠	•	•	•	•	•	•

	E١	/aluat	te		Pilot		Deployment
	Economics	Finance policy	Original content	Finance arraigning	Mentorship	Advisory services	Deployment
Agrion	•	•	•		•		•
C40					•	•	
Carbon Disclosure Project							•
Carbon War Room	•	•	•				•
CBSR (Canada)							
Center for Climate and Energy Solutions	•	•	•			•	
Ceres		•				•	•
Clean Energy Solutions Center (CEM)	•	•	•				•
Clean Tech Group						•	•
Cleantech Innovation New England			•				•
Cleantech Open				•	•	•	•
CleanWeb							
EcoConnect	•	•	•				•
Environmental Defense Fund							•
GreenBlue					•	•	
ICLEI Group							
London Cleantech Cluster		•			•	•	•
National Trust for Historic Preservation		•	•				•
NRDC / E2	•	•	•				•
Pure EnergyPartners							
Skipso GB	•		•	•	•		•
Start-up America							
The Carbon Trust			•			•	•
The Climate Group							•
The Climate Reality Project						•	•
The Clinton Global Initiative	•	•	•	•			•
The Nature Conservancy			•				
World Resource Institute	•	•	•		•	•	•

Table 11: Competitor activities within the evaluate, pilot, & deploy stages of the Team's framework

Appendix 4. Membership, interest, and satisfaction based on surveys and interviews

	Corporations	Clean techs	Project implementation	Facilitating introductions	Information dissemination	Other
Organization A	•		•			
Organization B	•			•		
Organization C	•			•		
Organization D	•				•	
Organization E	•				•	
Organization F	•			٠		
Organization G	•			•		
Organization H	•				•	
Organization I	•			•		
Organization J	•			•		
Organization K	•			•		
Organization L		•		•		
Organization M		٠				•
Organization N		٠		٠		
Organization O		٠		٠		
Organization P		٠		٠		
Organization Q		•		٠		•
Organization R		•				
Organization S		•		٠		
Total	11	8	1	13	3	2
Percent surveyed			5%	68%	16%	11%

 Table 12: Understanding of The Climate Group's role by corporations and clean tech companies

Figure 13: Analysis of the understanding of The Climate Group's role based on survey results



	Corporations	Clean techs	1	2	3	4	5	Other
Organization A	•				•			
Organization B	•						•	
Organization C	•				•			
Organization D	•							•
Organization E	•				•			
Organization F	•					•		
Organization G	•				•			
Organization H	•					•		
Organization I	•				•			
Organization L		•				•		
Organization M		•		•				
Total	9	2	0	1	5	3	1	1
Percent of members surveyed	82%	18%	0%	9%	45%	27%	9%	9%

Table 13: Level of satisfaction with The Climate Group based on members surveyed

Figure 14: Analysis of the level of satisfaction with The Climate Group based on members surveyed



Table 14: Type of relationship with The Climate Group desired by clean tech companies

	Member	Specific project	Lasting relationship
Organization L	•		•
Organization M	•	•	
Organization N		•	•
Organization O		•	•
Organization P		•	•
Organization Q		•	•
Organization R		•	
Organization S		•	
Total	2	7	5
Percent of interviewed	25%	88%	63%

88%

Figure 15: Analysis of 'type of relationship with The Climate Group' desired by clean tech companies

Specific project

Lasting relationship

		and the second second	and shared a straight of the	and the second second	
Table 15: Primary	reasons wh	/ mempers	αεсιαεά το	ioin i ne	climate Group

	Corporations	Clean techs	Advisory services	Public policy advocacy	Name/brand recognition	Original research & info	Networking/events	Recognized as a leader	Other
Organization A	•		•	•					
Organization B	•				٠	٠			
Organization C	•						•	•	
Organization D	•			•			•		
Organization E	•			•				•	
Organization F	•				٠	٠			
Organization G	•				•		•		
Organization H	•						•		•
Organization I	•			•			•		
Organization L		٠				•	•		
Organization M		•		٠	٠			•	
Total			1	5	4	3	6	3	1
Percent of members surveyed			9%	45%	36%	27%	55%	27%	9%





Members surveyed

Table 16: Desired frequency of communication from The Climate Group by members

	Corporations	Clean techs	Weekly	Monthly	Quarterly	Other
Organization A	•		٠			
Organization B	•		٠			
Organization C	•			•		
Organization D	•				•	
Organization E	•				•	
Organization F	•			•		
Organization G	•			•		
Organization H	•			•		
Organization I	•		•			
Organization L		•		•		
Organization M		•				•
Total	9	2	3	5	2	1
Percent of surveyed	82%	18%	27 %	45%	18%	9%

Figure 17: Analysis of desired communication from The Climate Group by members



Appendix 5. LCDT integration with corporations and clean tech companies

	Member	Generate cost savings	Reach targeted CO ₂ reductions	Expand product offering	Generate additional revenue	Engage & retain customers	Other
Organization A	•	•	•				
Organization B	•	•				•	
Organization C	•	•			•		
Organization D	•			٠	٠		
Organization E	•	•		•			
Organization F	•					•	•
Organization G	•		•		•		
Organization H	•			•		•	
Organization I	•		•	•			
Organization J			•	•			
Organization K		•	•				
Total	0	5	5	5	3	3	1
Percent of surveyed	0%	45%	45%	45%	27%	27%	9%

Table 17: Main objectives for integrating LCDT for corporations based on survey data

Figure 18: Analysis of the main objectives for integrating LCDT for corporations based on survey data



Table 18: Biggest hurdle faced b	y cor	porations in t	the im	plementation o	f LCDT	based on s	surveys
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	Member	Obtaining funding / poor payback	Governmen t policy & regulation	ldentifying partners	Internal manageme nt support	Lack of internal knowledge
Organization A	•	•	•			
Organization B	•	•			•	
Organization C	•			•	•	
Organization D	•	•	•			
Organization E	•	•			•	
Organization F	•	•			•	
Organization G	•				•	•
Organization H	•		•	•		
Organization I	•		•	•		
Organization J		•	•			
Organization K			•	•		
Total	0	6	6	4	5	1
Percent of surveyed	0%	55%	55%	36%	45%	9%

Table 19: Services of interest to overcome growth hurdles in integrating LCDT based on survey data

	Corporations	Clean techs	Member	Networking	Facilitate events	Public policy advocacy	Original research & information	Advisory services	Connect to venture canitalicts	Marketing	Other
Organization A	•		•	•		•		•			
Organization B	•		•		•	•	•				
Organization C	•		•	•				•			
Organization D	•		•			•					
Organization E	•		•			•					
Organization F	•		•	•			•	٠			
Organization G	•		•				•	•			
Organization H	•		•			•	•	•			
Organization I	•		•			•	٠				
Organization J	•			•	•	•					•
Organization K	•					•	•				
Organization L		٠	•	•			٠	•			
Organization M		•	•			•	•				•
Organization N		•		•						•	•
Organization O		•		•		•			•	•	
Organization P		•				•	•				
Organization Q		٠		•			٠		٠	٠	
Organization R		•		•					•	•	
Organization S		•				•	•				
Total	11	8	11	9	2	12	11	6	3	4	3
Percent of surveyed	58%	42%	58%	47%	11%	63%	58%	32%	16%	21%	16%



Figure 19: Analysis of services of interest to overcome growth hurdles in integrating LCDT

Figure 20: Analysis of services of interest to members to overcome growth hurdles in integrating LCDT

	Corporations	Clean techs	Member	Screening	Vetworking / events	Peer-to-peer facilitation services	Advisory services	Research and information	Public policy	Task force	Vetworking platform
Organization A	•		•	<u>, , , , , , , , , , , , , , , , , , , </u>							
Organization B	•		•	•	•		•				٠
Organization C	•		•		•		•				•
Organization D	•		•		•			•			
Organization E	•		•		•						•
Organization F	•		•							•	
Organization G	•		•		•			•		•	
Organization H	•		•								
Organization I	•		•	•	•			•	•	•	
Organization J	•				•		•	•		•	
Organization K	•				•		•			•	
Organization L		•	•		•			•			
Organization M		•	•		•	•		•	•		
Organization N		•				•		•			
Organization O		•			•	•			•		
Organization P		•				•			•		
Organization Q		•			•	•		•			
Organization R		•				•			•		
Organization S		•			•	•		•			
Total	11	8	11	2	13	7	4	9	5	5	3
Percent of interviewed	58%	42%	58%	12%	76%	41%	24%	53%	29%	29%	18%

Table 20: Services of interest to based on interview responses¹¹

¹¹ Interview analysis identifies similar material as the surveys, but was synthesized through analysis of open-ended materials as opposed to surveys that provided multiple choices. Interview analysis also allows for more specific options (as opposed to the 'other' option in the surveys.) The task force is an example of a service that was suggested by a respondent and then included on subsequent interviews.

Interviewed organizations

Corporations interviewed

Cleantechs interviewed

Table 21: Stage of product development of clean tech companies surveyed

	Member	Pilot project	Commercialization	Other
Organization L	•			٠
Organization M	•		•	
Organization N			•	
Organization O			•	
Organization P		•		
Organization Q			•	
Organization R			•	
Organization S			•	
Total	2	1	6	1
Percent surveyed	25%	13%	75%	13%

Figure 22: Analysis of the stage of product development of clean tech companies surveyed

	Member	Experimenting	Intermediate	Advanced	Leaders
	member	(1-3)	(4-7)	(5-10)	(10+)
Organization A	•				•
Organization B	•		•		
Organization C	•				•
Organization D	•				•
Organization E	•				•
Organization F	•			•	
Organization G	•				•
Organization H	•				•
Organization I	•		•		
Organization J					•
Organization K					•
Total	9	0	2	1	8
Percent of surveyed	82%	0%	18%	9%	73%

	Table 22: Corporate	advancements	in the depl	oyment of LCD1	based on	survey res	ponse
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Figure 23: Analysis of corporate advancement in the deployment of LCDT based on survey response

Appendix 6. Comparison of web performance statistics for competitive organizations

An organization's website is the most important tool in the digital age to convey its mission and goals. The Team analyzed the performance of The Climate Group website with metrics developed by Alexa Web Research, an Amazon company that collects web performance statistics. This information was compared against peer competitor websites and ranked accordingly.

	Bounce rate ¹²		Time on sit	te ¹³	Page view/user ¹⁴	
	R	ank	R	lank		Rank
Clean Energy Solutions Center (CEM)	N/A	23	N/A		N/A	
The Climate Group	74.5%	22	1:34	20	1.60	0
Center for Climate & Energy Solutions	72.0%	21	2:07	15	1.60	0
C40	70.6%	20	2:18	14	2.00	0
GreenBlue	68.4%	19	1:09	22	1.70	0
The Climate Reality Project	67.3%	18	1:57	18	1.60	0
Ceres	64.2%	17	1:58	17	1.90	0
World Resource Institute	59.9%	16	2:06	16	2.00	1
The Nature Conservancy	59.0%	15	5:16	1	1.96	1
Cleantech Open	58.8%	14	2:20	12	2.20	1
Agrion	56.1%	13	2:40	9	2.00	1
The Carbon Trust	55.9%	12	2:42	8	2.90	1
Environmental Defense	55.3%	11	1:41	19	1.75	1
Clean Tech Group	54.7%	10	2:25	10	2.40	1
CBSR (Canada)	50.0%	9	1:25	21	1.50	1
ICLEI Group	48.6%	8	3:35	5	2.70	2
The Clinton Global Initiative	47.3%	7	2:24	11	2.40	2
Skipso GB	46.7%	6	3:35	4	4.00	2
Carbon War Room	46.7%	5	3:43	3	2.80	2
Carbon Disclosure Project	41.4%	4	6:32	2	4.10	2
CleanWeb	40.0%	3	2:50	7	2.20	2
National Trust for Historic						
Preservation	36.8%	2	2:18	13	2.14	2
NRDC / E2	36.4%	1		23	2.20	2
EcoConnect		24	2:57	6	3.00	

 ¹² Estimated percent of visits consisting of a unique page view
 ¹³ Estimated daily time on site

¹⁴ Estimated unique page views.

Table 24: Three-month ana	lysis of competitor web	statistics (April - May	y - June) ¹⁵

	General	United States	United Kingdom
EcoConnect	5,250,285		
CBSR (Canada)	3,862,530		
NRDC / E2	3,718,712		
GreenBlue	3,446,901	763,632	
C40	2,683,426		
CleanWeb	2,101,339		
Skipso GB	1,797,993		
Agrion	1,575,064	706,474	
Carbon War Room	1,450,163		
The Climate Group	1,169,826		
Cleantech Open	1,050,196	423,575	
ICLEI Group	921,737		
Ceres	570,471	172,264	
Center for Climate and Energy Solutions	553,877	209,780	
Clean Tech Group	466,356	121,821	
Carbon Disclosure Project	449,799		
The Clinton Global Initiative	437,958	182,345	
The Climate Reality Project	429,825	120,556	
The Carbon Trust	389,489		33,455
National Trust for Historic Preservation	171,856	39,828	
World Resource Institute	125,676	69,480	
Environmental Defense	92,046	26,996	
The Nature Conservancy	56,754	16,894	
Clean Energy Solutions Center (CEM)	N/A	N/A	N/A

 Table 25: Top queries from search traffic landing on homepage

	Percent of queries
1. The Climate Group	9.54%
2. Wu Changluma	8.32%
3. Next Change Will Be	7.29%
4. The Climate Group	5.76%
5. Climate Group	4.19%
6. Climate Change Groups	3.12%
7. Mahindra	3.06%
8. CBRE Success	2.70%
9. Coca - Cola Global Presence	2.67%
10. Tellus Mater Foundation	1.60%

¹⁵ Traffic rank – number of visits.

Appendix 7. Funding opportunities

	Corporations	Clean tech	Member	Are willing to pay
Organization A	•		•	
Organization B	•		•	•
Organization C	•		•	•
Organization D	•		•	•
Organization E	•		•	•
Organization F	•		•	
Organization G	•		•	•
Organization H	•		•	
Organization I	•		•	•
Organization J	•			•
Organization K	•			•
Organization L		•	•	•
Organization M		•	•	•
Organization N		•		•
Organization O		•		•
Organization P		•		•
Organization Q		•		•
Organization R		•		•
Organization S		•		•
Total	11	8	11	16
Percent of interviewed	58%	42%	58%	94%

Figure 24: Analysis of willingness to pay for The Climate Group's services based on interview response

	Corporations	Clean techs	Member	Membership	Increased membership	Project/service specific fees	Shared revenue	Event sponsorship	Event admissions	Corporate grant or charitable contribution
Organization A	•		•							
Organization B	•		•	•	•					
Organization C	•		•	•	٠	•		•		•
Organization D	•		•					•		
Organization E	•		•					•		•
Organization F	•		•							
Organization G	•		•	•		•				
Organization H	•		•							
Organization I	•		•	•						
Organization J	•			•						
Organization K	•			•		•			٠	
Organization L		٠	•			•	٠	•	٠	
Organization M		٠	•			•				
Organization N		٠					٠			
Organization O		•		•					٠	
Organization P		٠						•	•	
Organization Q		٠		•		•			•	
Organization R		٠					•			
Organization S		٠				•			•	
Total	11	8	11	8	2	7	3	5	6	2
Percent of members interviewed				44%	22%	44%	11%	44%	11%	22%
Percent of interviewed	58%	42%	58%	47%	12%	41%	18%	29%	35%	12%

Table 27: Ways corporations and clean tech companies are most willing to pay for services

	Member	Access to human capital	Access to funding	Customer adoption/ behavioral change	Government policies	Industry regulation	Other
Organization L	•	•		•			
Organization M	•			•	•	•	•
Organization N				•	•		•
Organization O		•	•	•	•		
Organization P					•		•
Organization Q		•	•				
Organization R		•		•	•		
Organization S				•	•	•	
Total	2	4	2	6	6	2	3
Percent of surveyed	25%	50%	25%	75%	75%	25%	38%

Table 28: Most significant growth obstacles faced by clean tech companies based on surveys

Appendix 8. Public policy task force – program

Creating a public policy task force is one way for The Climate Group to encourage and support communication between businesses and government. The goal of this task force would be to structure public policy in a way that favors the development and adoption of LCDT.

This task force would put participants, mainly corporations and clean tech start-ups from a wide variety of sectors, in a position to efficiently and effectively influence public policy makers in crafting out new regulations, which are in favor of LCDT. It would do so through the exchange of best practices as well as by offering participants the chance to interact with public policy experts and public officials. The task force would act as a catalyst for change in the field of public policy by taking on specific projects and working towards concrete deliverables to promote green policies supporting LCDT.

Should The Climate Group decide to implement this initiative, as the organizer of the task force it should invite ten to fifteen member and partner organizations to join the force and take on a proactive role. Each organization should designate one representative to be actively engaged in the task force.

For the first six months, The Climate Group should direct and manage the task force. This initial time period should be used to provide participants with a better understanding of LCDT and how they relate to public policy. This could be accomplished by inviting city officials and public policy experts to join the task force directly or just to participate in specific meetings or events. During this initial phase of learning, meeting content could be structured based on agency (Federal, State, or City) and the type of policy.

After the preliminary time period of establishment, The Climate Group should encourage one of the participating organizations to take on a leadership role and manage the task force. This would allow participating organizations to take charge and steer the task force in the direction that is most beneficial to them by determining which projects the task force should focus on and what deliverables should be achieved. The following are a few examples of deliverables, which could be considered:

- Creating and publishing a report aimed at convincing public policy makers.
- Organizing and hosting an event with public policy makers.
- Holding a press conference to educate and persuade the general public.

Having a participating organization lead the task force could greatly reduce the amount of resources The Climate Group needs to devote to this initiative. However, The Climate Group should continue to aid the task force by organizing meetings and events, as well as by providing content, connections, and an intranet website where all of the information is centralized and easily accessible to participants. In addition, The Climate Group should provide advice and expertise when needed.

The task force could meet as a whole group once every two months. However, if participants feel this is inadequate, more frequent meetings could be organized. Task force meetings could be held in The Climate Group's offices or any other convenient location in the US and UK. In addition, The Climate Group should offer the possibility for participants to attend these meetings via videoconference. This would reduce expenses associated with travel. Also, this would allow The Climate Group to record the meeting and make available the footage to participants for future reference.

In order to make The Clean Revolution task force credible and easily identifiable, a specific logo should be created. This logo could be used by The Climate Group to brand the task force and by participating organizations to communicate their involvement with the task force. Another way to strengthen, brand and enhance credibility of the task force would be to pursue the participation of an influential personality, such as a Michael Bloomberg for the US. Such an influential person who is at the intersection of the public policy and business sector can create a synergy between the two and accelerate the development of policies and regulations, which favor LCDT.

Appendix 9. Implementation timeline for program and organizational recommendations

	Priorit	y Immediate	Short-term	Mid-term	Long-term
Original resea	rch and ir	nformation			
LCDT trend reports	High	Survey members &	Establish partnorships	Collect analyze	Bromoto roports
Technology & business market intelligence reports	Medium	partners to identify specific content needs	with similar organizations	& process information.	using website & events
Provide additi	onal netv	vorking opportunities	;		
Launch public policy task force	High	Identify key individuals & launch task force	Brand task force		
Host more regional events	High	Strategically determine region & topic of events	Finalize event schedule	Promote event via website & other publications	Launch planned events
Provide peer-to-peer introductory services	Medium	Survey members & partners to identify needs	Screen potential partners and facilitate connections		
Create internal online collaborative portal	Low	Investigate benefits & pitfalls of portal	Develop a strategy for implementation		

Table 29: Implementation timeline for recommendations: Services to stakeholders

Table 30: Implementation timeline for recommendations: Organizational considerations						
	Priority	Immediate	Short-term	Mid-term	Long-term	
Improve organizational communication strategies						
Improve website	High	Utilize existing web team to make preliminary website improvements	Monitor performance metrics	Hire external consultant if performance does not improve	Promote reports using website & events	
Increase & focus membership outreach	High	Determine communication outreach method & timetable	Increase transparency			
Develop a strate	gic appro	bach to funding				
Increase philanthropic funding	High	Identify potential donors	Involve leadership in contacting & building relationships with donors	Develop grant proposals	Develop feedback mechanism for donors	
Explore opportunities to increase in-kind contributions	High	Identify major expenses incurred	Strategically identify potential donors	Begin donor solicitation		
Create and implement combined corporate contribution structure	Medium	Define services and offerings (membership tiers & stand-alone services)	Determine pricing scheme	Market membership & stand-alone service opportunities	2	
Utilize board of directors and associated respective figures as funding source	Low	Develop strategy that identifies expectations of spokesperson	Identify potential spokesperson & pursue them			

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⁴³Forbes, Daniel. "Measuring the Unmeasurable: Empirical Studies of Nonprofit Organizations Effectiveness 1977-1997". (Association on Research on Nonprofit Organizations and Voluntary Action), 184. The Clean Revolution is a partnership of international statesmen and governments, business leaders and corporations, thinkers and opinion formers. It is coordinated by The Climate Group. It calls for a swift, massive scale-up of clean energy and infrastructure, and of smart technologies and design. We believe this is the only feasible path to a smarter, better, more prosperous future. The initiative aims to create a tipping point for change by inspiring government and business leaders. It presents them with the evidence of the economic opportunities of the Clean Revolution, and profiles how innovative leadership is already transforming policies and markets around the world. Our shared vision is of a world of clean and accessible energy, sustainable mobility, smart buildings and closed loop systems: a low carbon world with a thriving economy, quality employment, energy security, and where the quality of life of communities everywhere is enhanced. THE CHALLENGE By 2050, there will be nine billion people sharing our planet. And in the next 20 years, the world's middle class will grow from less than 2 billion to over 4 billion. This growth will be coupled with enormous demand for resources. Even now, despite a weak International economy, world energy consumption is soaring. At the same time, by mid-century, we also need to reduce emissions by around 80% of today's levels to avoid the social, environmental and economic impacts of climate change. To achieve real emissions reductions we need a massive change in the way we produce and consume energy, so we can provide for more people - that are better off than ever before - in a way that makes financial sense. THE OPPORTUNITY A Clean Revolution will accelerate progress towards the change we need. A massive up-scale of clean technologies will improve the efficiency and use of our natural resources; it will create jobs and it will boost economic growth. To drive this change we need bold, transformational leadership. The world's decision makers have the power to create the tipping point towards a Clean Revolution. But to do this, they must understand the necessity and the opportunity of the low carbon economy. Our Clean Revolution Campaign aims to do just that. THE CAMPAIGN Over a period of three years we will show the world's most influential people that the Clean Revolution is vital to raising living standards, creating lasting employment and improving productivity. We will do this by showcasing successful examples of low carbon transformation from the city, state, region and business leaders around the world who are already working to scale up clean energy, increase energy efficiency and cut emissions. And we will highlight the opportunities for the Clean Revolution leaders of tomorrow by connecting them at events and introducing them to key projects. After introducing The Clean Revolution Campaign in September 2011 at Climate Week NYC, we officially launched The Campaign during the Rio+20 Earth Summit in Brazil, in June 2012. The Campaign received the immediate backing of leaders from the world of government and business. Tony Blalr, the former UK Prime Minister, delivered a passionate speech for Rio delegates in which he warned that those who failed to seize the moment would be left behind in the new global economy. The message that these leading supporters of The Campaign are sending, is that the Clean Revolution is happening. Around the world. Right now. CLIMATE CHANGE IS AN OPPORTUNITY .It's an opportunity for a Clean Revolution that will create a low carbon world, and a more prosperous life for all. Driving the Clean Revolution will generate returns now and in the future for those who lead and those they touch: jobs, wealth, security, and better quality of life. We can make this a reality with the technologies and ideas we have today, but it will only happen with inspired leadership now in business and in government. The Climate Group Partners play a key role in catalyzing this leadership and signing our Principles is a commitment to that. OUR BELIEFS The atmosphere is fundamentally important as a global commons for all and that the climate plays a critical role in shaping human society, the global economy, and thenatural world. Present and future generations have the right to a climate that does not diminish socioeconomic opportunities or negatively impact the functioning of natural systems as a result of human activity. Climate change is an urgent problem that requires collaborative international efforts to substantially reduce global greenhouse gas (GHG) emissions and transition to a low carbon economy. The transition to a low carbon economy within a timeframe that minimizes the risk of serious impacts is compatible with, and essential for, promoting economic growth and increasing human prosperity. A broad market transformation is needed in the way we produce and consume energy, with a rapid shift to low and no carbon energy sources and substantially increased efficiency and energy savings. Transforming the market and reducing GHG emissions must be pursued in a manner that suitably reconciles development goals and climate protection. Individuals, companies and all levels of governments share the responsibility to minimize GHG emissions by implementing or providing solutions and measures, many of which already exist. OUR AIMS demonstrate our low carbon leadership by focusing our activities in a way that contributes to reducing emissions in the short, medium and long term. Set clear aims to reduce GHG emissions and explore the full range of options available to us to achieve this. Make information about our efforts publicly available and share the lessons we learn with others to support their low carbon leadership. Work with our partners, clients and stakeholders to use our influence to help them reduce their GHG emissions. Provide support in the development and implementation of well-designed, cost-effective policies that promote the commercialization and deployment of low carbon energy sources and clean technologies over the short and long term. Engage with the work of The Climate Group and support the successful implementation of the organization's programs. POSITIVE. We believe that climate change Is an opportunity, and that the Clean Revolution is achievable. We are optimistic, solutions-oriented and dynamic. CATALYTIC. We seek to make well-designed strategic interventions that, by catalyzing leadership and unlocking specific barriers, drive transformational change. BOLD. Recognizing the urgency of addressing climate change and the need for bold and ambitious action, we are prepared to take risks to achieve our goals and accept that by not playing safe we may not always succeed. RESULTS-DRIVEN. We're judged by our results, not by our plans. We're committed to seeking impacts, but we're flexible enough to adapt our approach to changing circumstances in order to achieve our strategic priorities. HONEST, We approach our role with humility and transparency. We support the work of leaders and we give credit where credit is due, COLLABORATIVE. As a small organization we can't achieve our goals alone, so we value partnership and actively seek out collaboration that will maximize our impact. We see other organizations that share our goals as allies and, where possible, look to support their work. We work together, we're respectful of different cultures and we seek out different approaches, recognizing that there is strength in diversity. POLITICALLY NEUTRAL. We actively and equally support all individuals, organizations and governments that demonstrate leadership on climate change and show no preference on the basis of their nationality and political affiliation. COMMITTED TO EXCELLENCE. We recognize our responsibility to our supporters, partners and the wider world. From the rigor of our research, to the presentation of our reports, to the quality of our events, we aspire to excellence in everything we do. We expect these values to be reflected in the way we carry out our work and guide the decisions we make, as we inspire the Clean Revolution. CEOS EXPRESS URGENCY IN TACKLING AMERICA'S CLIMATE CHALLENGES AT CLIMATE WEEK NYC 2013 LAUNCH Climate Week NYC 2013 kicked off today with a NASDAQ Closing Bell Ceremony and panel discussion on the opportunities for America in clean energy investment and tackling expensive, runaway climate change. THE CLIMATE GROUP KICKS OFF 5TH ANNIVERSARY OF CLIMATE WEEK NYC Date16 July 2013 Climate Week NYC - the annual global Summit that convenes the world's top business, government and thought leaders to discuss how clean tech innovation can boost growth and create jobs - is taking placing in New York from September 23-29, 2013.THE CLIMATE GROUP BEIJING LAUNCHES CHINA YOUTH ENTREPRENEURSHIP PROGRAM FOR LOW CARBON LEADERS OF THE FUTURE Date16 July 2013 The Climate Group and a leading group of Chinese businesses and NGOs today launched a young entrepreneur program in China, to help low carbon leaders of the future realize their innovative green business plans. ALANA RYAN: THE CLEAN REVOLUTION AS AN OPPORTUNITY TO MITIGATE ENVIRONMENTALLY INDUCED MIGRATION Date 16 July 2013 The Climate Group's Alana Ryan writes about how governments, businesses and consumers can help mitigate environmentally induced migration as well as sustainable development, by investing in the clean revolution. EVAN JUSKA: THE THREE BIGGEST CHALLENGES TO OBAMA'S CLIMATE CHANGE PLAN Date 15 July 2013 Evan Juska writes about the significant hurdles President Obama's plan to address climate change must overcome before taking effect, specifically as the plan for new carbon emission standards for power plants is being billed as one that Obama can implement on his own. EUROPEAN WIND CAPACITY DOUBLES, LED BY THE UK Date 15 July 2013 Double the amount of new offshore wind turbines were fully grid-connected in Europe in the first half of the year, compared to last year, according to the European Wind Energy Association. CHINA TO ADD 35 GW OF SOLAR BY 2015 TO KICK-START INDUSTRY Date 15 July 2013 China has today announced plans to increase installed solar power capacity by 35 gigawatts over the next three years, to help reduce the country's reliance on exports. TEST-DRIVING THE WORLD'S MOST FUEL EFFICIENT CAR, THE VW XL1 Date 15 July 2013 David Mole, Fundraising Manager, The Climate Group, takes the world's most fuel-efficient car, the VW XLR, for a spin around central London. IN THE HEADLINES: CLEAN ENERGY INVESTMENT ROSE 22% AND GERMANY BEATS ITS SOLAR POWER OUTPUT RECORD Date 15 July 2013Here's a global snapshot of some of the biggest clean technology, economy and policy headlines, from the week commencing July 15, 2013. UK CAR INDUSTRY TO GET US\$1.5 BILLION TO POWER LOW CARBON TECHNOLOGY RESEARCH, CREATE JOBS Date 12 July 2013 Today the UK Government has announced a US\$1.5 billion boost to low carbon technology research in the automotive industry, which is expected to create 30,000 new jobs. NEW YORK SOLAR PROJECTS GET \$54 MILLION THROUGH GOVERNOR CUOMO INITIATIVE Date12 July 2013 Solar projects across the state of New York have scored US\$54 million in state funding towards their work through the NY-Sun initiative. MARYLAND PROVIDING AFFORDABLE, RELIABLE ENERGY FOR LOCAL ECONOMIES WITH SOLARCITY PARTNERSHIP Date11 July 2013A partnership between Solar City and Walmart is boosting solar energy generation in the US state of Maryland, giving the green light for local businesses to invest in cost-efficient solar power. 2013 The global solar market is set WORLDWIDE SOLAR MARKET ESTIMATED TO SURPASS US\$134 BILLION BY 2020 Date11 July to rise 51% to surpass US\$134 billion in annual revenue each year by 2020, according to a new report. GLOBAL CLEAN-ENERGY INVESTMENT ACCELERATES BY 22% IN SECOND QUARTER OF 2013 Date11 July 2013 Renewable energy investment rose 22% in the second guarter of 2013 when compared with the first three months, data form Bloomberg reveals. China, South Africa and the US have increased their spending, however Europe, and in particular Germany, has lost some momentum. AUSTRALIA ON TARGET TO REACH 30% RENEWABLE ENERGY Date11 July 2013 Around 29% of South Australian energy came from renewable in 2012, data from the Australian Energy Market Operator shows. CHINA AND US MAKE HEADWAY ON JOINT CLIMATE ACTION Date 11 July

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