

THE GLOBAL GREEN ECONOMY INDEX™

GGEI 2014

Measuring National Performance in the Green Economy

4th Edition – October 2014



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ABOUT DUAL CITIZEN LLC

Dual Citizen advises clients on how to leverage data analytics and strategic communications to further their growth and development agendas. We work with government ministries, international organizations and private firms on consulting assignments and by sub-contracting with strategic partners.

To support this work, we publish the Global Green Economy Index™ (GGEI), measuring the performance of 60 countries and 70 cities in the green economy and how experts assess that performance. Insights and data from the GGEI inform policymakers, international organizations and private clients with intelligence to advance their reputation and performance in the green economy.

For more information, please visit www.dualcitizeninc.com and follow us on Twitter @DualCitizenInc.

EXECUTIVE SUMMARY

This 4th edition of the GGEI is an in-depth look at how 60 countries perform in the global green economy, as well as how expert practitioners rank this performance. Like many indices, the GGEI is a communications tool, signaling to policy makers, international organizations, the private sector and citizens which countries are successfully orienting their economies toward greener growth pathways and which ones are not. Importantly, the GGEI also generates perception values, offering unique insights into how communications and information exchange can be leveraged to further advance green economic growth.

First published in 2010, this new edition of the GGEI presents a revised methodology resulting from a strategic review that revealed opportunities for broader sector coverage, more focus on environmental performance and enhanced data collection and processing methods. The highlights from the 2014 Global Green Economy Index results include:

THE WINNERS

- **Germany** (perception) and **Sweden** (performance) top the 2014 GGEI, confirming a trend observed in prior editions of strong results by Germany and the Nordic states. Besides performing well on both the economic and environmental areas of the GGEI, these nations display consistent green leadership and receive global recognition for it;
- Covered for the first time in this edition, **Costa Rica** performs extremely well, ranking third on the GGEI performance measure behind Sweden and Norway and receiving strong recognition on the perception survey, an impressive result for such a small country;
- Like in 2012, **Copenhagen** is the top green city as ranked by our survey of global experts, reinforcing the continued strength of the Danish green brand. Tracked for the first time this year, **Vancouver** and **Singapore** also rank in the top 10 of green cities.

EMERGING TRENDS

- Many of the fastest growing economies in the world rank poorly on the GGEI performance measure, highlighting an urgent need to reorient their economies to greener growth pathways. Regionally, these countries are mostly in Africa (**Ghana**), the Gulf (**Qatar, United Arab Emirates**), and Asia (**Cambodia, China, Thailand, Vietnam**);
- There are concerning results related to more developed countries as well – notably **Australia, Japan, the Netherlands** and the **United States** – where perceptions of their green economic performance dramatically exceed their actual performance on the GGEI. These countries appear to receive more credit than they deserve, an information gap that requires further exploration;
- Despite its leadership founding the Global Green Growth Institute (GGGI), **South Korea** continues not to register as a green country brand on our survey and performs poorly, ranked 39th out of 60 on this year's GGEI. Despite better perception results, **Japan** also performs poorly on the 2014 GGEI, ranked 44th out of 60;
- While the **United Kingdom** performs adequately in most areas of the GGEI, it doesn't excel on any one topic, possibly due to inconsistent political rhetoric and policy related to green economy there. While gradually improving in each successive GGEI edition, the UK still lags behind its northern European and Nordic competitors;
- Five European nations - **Austria, Iceland, Ireland, Portugal** and **Spain** – reveal performance scores that exceed their perception ones significantly – signaling an urgent need for better strategic communications and information exchange of their green merits and associated investment opportunities;
- The GGEI results reveal a similar observation for a variety of non-European states - including **Ethiopia, Mauritius, Rwanda** in Africa and **Colombia, Chile** and **Peru** in Latin America – again suggesting a need for these states to better position their green economies on the international stage.

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INTRODUCTION

We first published the Global Green Economy Index in 2010 guided by a belief that the environment, climate change and green, low carbon growth would rapidly become defining issues for national policy makers **and** the global reputation of countries. As we went to press on this 4th edition of the GGEI, 2,646 events in nearly 162 countries mobilized pressure on over 100 world leaders gathered in New York at the United Nations to take substantive and binding action on climate change. The link between these issues and the reputation of leaders and nation states is more vivid today than ever before.

While the urgent need to address climate change is becoming increasingly mainstream, an appreciation of the underlying changes to economies that will be required to address this threat are not well understood. Green economy and green growth – powerful approaches to reorienting global growth on more sustainable pathways – are still understudies to the starring role played by climate change in international discourse.

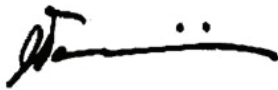
In this context, we publish the Global Green Economy Index™ (GGEI) as a communications tool, to empower policy makers, international organizations and the private sector with a reference point for both national performance in the green economy and how experts rank that performance over time. In releasing the 4th edition of the GGEI, we are proud to share the following updates, illustrating further progress towards a goal of becoming a leading benchmark in the global green economy:

- The GGEI now covers 60 countries and 70 cities, a substantial increase from 27 nations covered in the last 2012 edition;
- It continues to track how investors rank the appeal of different markets as targets for green investment;
- It now provides a global measure of national performance in key efficiency sectors, including buildings, transport, tourism and energy;
- This new edition integrates environment & natural capital to the GGEI calculation for the first time, measuring both perceptions and performance of environmental areas like air quality, water, forests and agriculture.

Unlike similar indices published by international organizations or NGOs, the GGEI is produced by a private U.S.-based consultancy, Dual Citizen LLC, and sustained by subscription revenues and customized consulting offerings. We publish this report to illustrate high-level findings from this new edition. But the in-depth delivery of the full data we collect and customized reports for different countries and stakeholders is reserved for our client subscribers.

In tandem to publishing this new edition of the GGEI, we have launched a new website presenting full transparency on the methodology behind constructing the GGEI performance index, conducting the perception survey, as well as answers to frequently asked questions and an image library for academics, policy makers, practitioners, businesses and the media to integrate charts and info-graphics from this report to their research, presentations and reporting. The following pages present a discussion of the results from this year's GGEI and an appendix of country profiles for each of the 60 nations covered so that leaders there can better interpret how the GGEI can be a tool for advancing green economic growth in their nations and cities.

As always, it is your feedback and engagement with the GGEI that propels it forward with each successive edition. We look forward to hearing from you.



Jeremy Tamanini
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COUNTRIES AND CITIES COVERED

The 4th edition of the GGEI covers 60 countries, more than double the 27 countries tracked on the 3rd edition in 2012. We make our best efforts to cover all countries with active work underway related to exploring more green growth pathways for their economies. The 70 cities covered in the GGEI represent the largest metropolitan areas in each country, and the GGEI collects perception survey values for these cities.



AFRICA

	BURKINA FASO (OUAGADOUGOU)
	ETHIOPIA (ADDIS ABADA)
	GHANA (ACCRA)
	KENYA (NAIROBI)
	MAURITIUS (PORT LOUIS)
	MOROCCO (CASABLANCA)
	MOZAMBIQUE (MAPUTO)
	RWANDA (KIGALI)
	SENEGAL (DAKAR)
	SOUTH AFRICA (JOHANNESBURG)
	TANZANIA (DAR ES SALAAM)
	ZAMBIA (LUSAKA)

ASIA

	CAMBODIA (PHNOM PENH)
	CHINA (BEIJING, SHANGHAI)
	INDIA (DELHI)
	INDONESIA (JAKARTA)
	ISRAEL (TEL AVIV)
	JAPAN (TOKYO)
	MALAYSIA (KUALA LUMPUR)
	MONGOLIA (ULAN BATOR)
	PHILIPPINES (MANILA)
	QATAR (DOHA)
	REPUBLIC OF KOREA (SEOUL)
	SINGAPORE
	TAIWAN (TAIPEI)
	THAILAND (BANGKOK)
	TURKEY (ISTANBUL)
	UNITED ARAB EMIRATES (ABU DHABI, DUBAI)
	VIETNAM (HANOI)








OCEANIA

	AUSTRALIA (MELBOURNE, SYDNEY)
	NEW ZEALAND (AUCKLAND)



EUROPE

	AUSTRIA (VIENNA)
	BELGIUM (BRUSSELS)
	CZECH REPUBLIC (PRAGUE)
	DENMARK (COPENHAGEN)
	FINLAND (HELSINKI)
	FRANCE (PARIS)
	GERMANY (BERLIN)
	ICELAND (REYKJAVIK)
	IRELAND (DUBLIN)
	ITALY (ROME)
	NETHERLANDS (AMSTERDAM)
	NORWAY (OSLO)
	POLAND (WARSAW)
	PORTUGAL (LISBON)
	SLOVAKIA (BRATISLAVA)
	SPAIN (MADRID)
	SWEDEN (STOCKHOLM)
	SWITZERLAND (GENEVA, ZURICH)
	UNITED KINGDOM (LONDON)

LATIN AMERICA & THE CARIBBEAN

	ARGENTINA (BUENOS AIRES)
	BRAZIL (SAO PAULO)
	CHILE (SANTIAGO)
	COLOMBIA (BOGOTA)
	COSTA RICA (SAN JOSE)
	MEXICO (MEXICO CITY)
	PANAMA (PANAMA CITY)
	PERU (LIMA)
	URUGUAY (MONTEVIDEO)

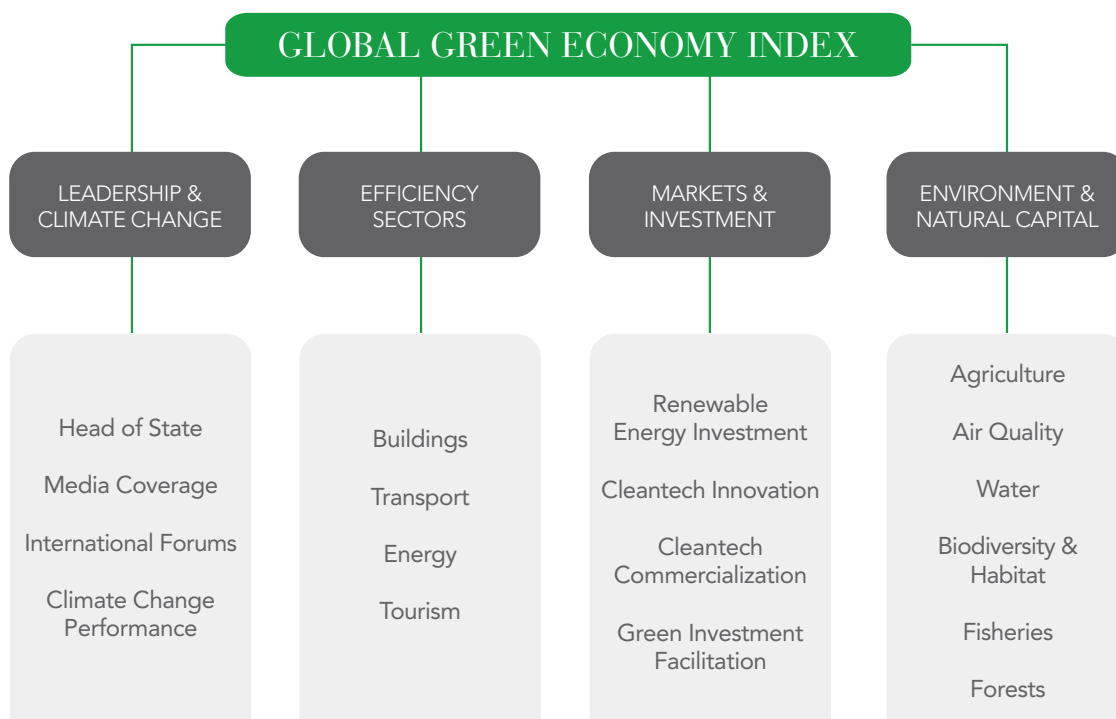
NORTH AMERICA

	CANADA (OTTAWA, TORONTO, VANCOUVER)
	UNITED STATES OF AMERICA (LOS ANGELES, NEW YORK, WASHINGTON DC)

PERFORMANCE INDEX

The performance index of the 2014 GGEI is defined by 32 underlying indicators and datasets, each contained within one of the four main dimensions of leadership & climate change, efficiency sectors, markets & investment and environment & natural capital.

The chart below presents a general structure of these four main dimensions and their associated sub-categories. Appendix A of this report provides more detail on each type of data reference, its weighting, a brief description and the source. Our new website provides a more in-depth discussion of the data selection process, our approach to weighting, data aggregation and links to the original sources where possible. To access this online, please visit www.dualcitizeninc.com and click on the **GGEI > Performance Index** tab.



PERCEPTION SURVEY

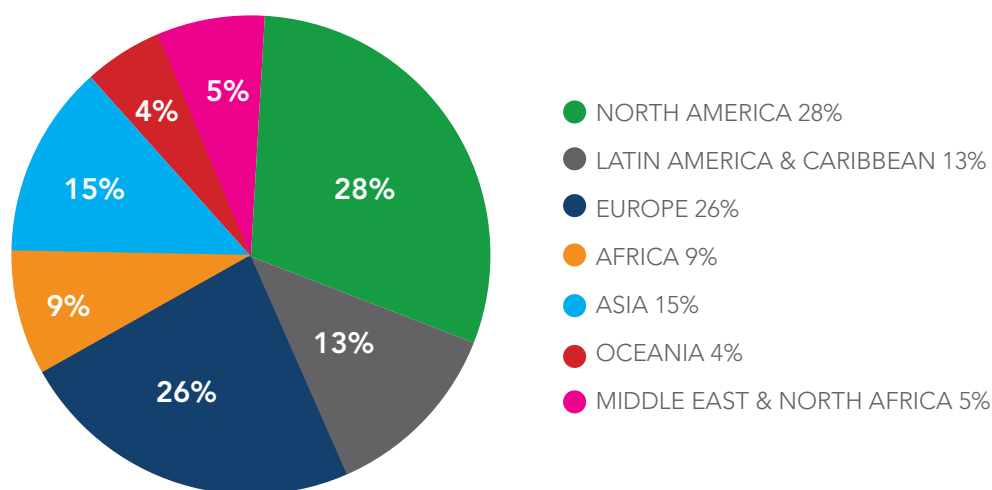
The perception survey for the 2014 GGEI was conducted from June through August 2014, and polled targeted respondents on how they assessed national green performance on the four main dimensions of Leadership & Climate Change, Efficiency Sectors, Markets & Investment, and Environment & Natural Capital. Since its first publication in 2010, Dual Citizen LLC has developed targeted lists for each of these four dimensions with qualified practitioners working globally on issues relevant to green economy and green growth.

Independent of the actual survey results, this work has revealed valuable insights into the topic. One such insight is the high level of uncertainty surrounding the definition of 'green economy' across geographies, sectors and particularly between different types of organizations and institutions (i.e. international organizations, civil society, the private sector). This finding reinforces the need for a framework like the GGEI to better understand information flows and how perceptions vary about different aspects of the green economy.

Another related insight suggests that while numerous individuals and institutions work on sector-based or thematic components of the green economy, there are only a few with a dedicated focus on knowledge generation and country-level capacity building in the green economy per se (the UNEP [Green Economy Initiative](#), the [Green Growth Knowledge Platform](#), the [Green Economy Coalition](#) and the [Global Green Growth Institute](#) are four exceptions).

This reality mandated a segmentation of the 2014 GGEI perception survey into four distinct groups of respondents, defined by the proximity of their professional work to the four main dimensions of the GGEI. This approach ensured more informed responses such that an individual with knowledge about sector performance in the green economy (i.e. buildings, transport, tourism and energy) wasn't also asked to rank environmental performance in areas like agriculture or forestry where they lack a similar level of expertise.

2014 GGEI PERCEPTION SURVEY RESPONDENTS



COUNTRY RESULTS

The results from the 2014 Global Green Economy Index reveal a wide range of insights relevant to policy makers in the governments being measured, as well as international organizations, civil society and private actors interacting with them. This new edition of the GGEI confirms what had already been established in previous editions: **Germany** and a block of Nordic countries continue to dominate this Global Green Economy Index, both in terms of performance and perceptions of that performance by expert practitioners.

Beyond these impressive results, some compelling findings emerge through this latest edition, in part due to the greater diversity of countries covered and an updated methodology and data structure providing greater sector focus and integration of environment & natural capital. Covered for the first time, **Costa Rica** records an impressive result, ranking 3rd behind **Sweden** and **Norway** on performance and in the top 15 for perceptions overall, a notable accomplishment for such a small country. Other Latin American countries – including **Colombia**, **Peru** and **Chile** – also perform well in their first time being covered on the GGEI, although this performance is not yet recognized in a meaningful way through the perception survey.

These new results also reveal some vivid examples of countries where performance clearly exceeds perceptions of it, signaling significant opportunities for improved green country branding and strategic communications. Five European countries – **Austria**, **Iceland**, **Ireland**, **Portugal** and **Spain** – clearly fall in this category. A similar observation emerges for a variety of other countries - most notably the African states of **Ethiopia**, **Mauritius**, **Rwanda** and **Zambia** – all covered for the first time on this year's GGEI. In these cases, global audiences simply aren't registering the green merits of these states or country competitors are overshadowing them with a more strategic approach to communications and information exchange.

A red flag from this year's GGEI results is that few of the fastest growing economies in the world rank very well in the GGEI performance measure or on the perception survey, reinforcing the importance of mainstreaming the green economy concept further so it can be better integrated to policy formulation in these markets. While doing quite well in terms of perception, China ranks near the bottom of the performance measure, driven by its poor performance on Efficiency Sectors and Environment & Natural Capital. But this problem extends beyond **China**: rapidly growing countries in Africa (**Ghana**), the Gulf (**Qatar**, **United Arab Emirates**), and Asia (**Cam-bodia**, **Thailand**, **Vietnam**) rank poorly on the GGEI performance measure.

There are concerning results related to more developed countries as well, yet they are expressed in a different manner. In some cases – notably for **Australia, Japan, the Netherlands**, and the **United States** - perceptions of their green economic performance dramatically exceed their GGEI performance. This result suggests a lack of understanding about the underlying challenges these countries still face moving towards more low carbon growth pathways. By looking more closely at the reasons why this performance is lagging, these nations have significant opportunities to improve, particularly through leveraging areas like Markets & Investment where their domestic economies are already perceived as attractive for green investment and product development. Translating this appeal into actual performance improvements will be critical.

These overall findings only tell part of the story, and the following pages present a brief snapshot of the results for the 60 nations covered on the GGEI as they play out on the four main dimensions: Leadership & Climate Change, Efficiency Sectors, Markets & Investment and Environment & Natural Capital. Our goal is to become the leading benchmark for countries to track their performance in the green economy over time and how experts assess it. The following pages serve as an entry point for deeper engagement with the GGEI data and associated consulting services to address more country or firm-specific challenges.

“The gap between what we are doing and what we need to do has again grown, for the sixth year running. The average annual rate of de-carbonization required for the rest of this century for us to stay within the two-degree budget now stands at 6.2%.” – PwC Low Carbon Economy Index 2014

PERCEPTION RANK	COUNTRY	SCORE	PERFORMANCE RANK	COUNTRY	SCORE
01	Germany	93.6	01	Sweden	68.1
02	Denmark	92.8	02	Norway	65.9
03	Sweden	90.2	03	Costa Rica	64.2
04	Norway	84.8	04	Germany	63.6
05	Netherlands	84.0	05	Denmark	63.2
06	United States	76.2	06	Switzerland	63.1
07	Japan	72.4	07	Austria	63.0
08	United Kingdom	71.6	08	Finland	62.9
09	Finland	70.2	09	Iceland	62.6
10	Switzerland	67.8	10	Spain	59.2
11	Australia	66.3	11	Ireland	59.0
12	Canada	63.0	12	New Zealand	58.8
13	China	61.6	13	France	56.4
14	Costa Rica	60.4	14	Colombia	56.1
15	Brazil	59.7	15	Portugal	55.8
16	India	56.1	16	Peru	55.8
17	Austria	55.1	17	Kenya	55.4
18	New Zealand	52.0	18	Brazil	55.3
19	Iceland	49.1	19	Chile	55.1
20	France	48.5	20	United Kingdom	54.6
21	Spain	46.7	21	Netherlands	54.2
22	South Africa	45.8	22	Uruguay	54.1
23	South Korea	44.1	23	Mauritius	51.5
24	Israel	41.1	24	Zambia	51.3
25	United Arab Emirates	40.3	25	Italy	51.2
26	Kenya	40.0	26	Ethiopia	50.6
27	Malaysia	39.3	27	Rwanda	50.4
28	Mexico	37.1	28	United States	50.1
29	Italy	36.1	29	Canada	49.6
30	Belgium	36.0	30	Taiwan	47.5
31	Indonesia	35.3	31	Mexico	47.4
32	Peru	35.0	32	Philippines	47.2
33	Ireland	34.3	33	Israel	47.0
34	Mauritius	34.0	34	South Africa	46.8
35	Chile	33.5	35	Malaysia	46.4
36	Tanzania	33.3	36	Tanzania	46.2
37	Ethiopia	33.1	37	Australia	46.1
38	Philippines	33.0	38	Czech Republic	46.0
39	Morocco	32.6	39	South Korea	45.6
40	Portugal	32.5	40	United Arab Emirates	45.6
41	Colombia	31.6	41	Burkina Faso	45.2
42	Poland	31.5	42	Cambodia	44.9
43	Qatar	31.2	43	Turkey	44.8
44	Turkey	31.2	44	Japan	44.6
45	Vietnam	31.1	45	Thailand	44.5
46	Taiwan	30.7	46	Ghana	44.5
47	Argentina	30.2	47	Belgium	44.1
48	Rwanda	30.1	48	Argentina	43.8
49	Zambia	30.0	49	India	43.4
50	Mozambique	29.8	50	Slovakia	43.0
51	Thailand	29.3	51	Panama	41.5
52	Czech Republic	29.2	52	Morocco	41.5
53	Cambodia	28.9	53	Mozambique	41.0
54	Ghana	28.7	54	Indonesia	40.3
55	Burkina Faso	28.5	55	China	40.1
56	Slovakia	28.2	56	Poland	37.1
57	Mongolia	27.7	57	Senegal	33.4
58	Uruguay	27.6	58	Qatar	33.3
59	Panama	27.4	59	Vietnam	32.2
60	Senegal	27.3	60	Mongolia	29.5

LEADERSHIP & CLIMATE CHANGE

Political leadership has a critical role to play in mainstreaming the concept of green economy and green growth. A variety of leaders, particularly heads of state and members of parliament, have powerful communications platforms to utilize, as well as the influence to advocate for the fiscal and policy tools that promote green investments and low carbon development.

The Leadership & Climate Change dimension of the GGEI calculates both a perception and a performance measure for the 60 nations we track, defined by four sub-categories: head of state, media coverage, international forums and climate change. Our experience publishing the GGEI reveals that perceptions of values like heads of state and media coverage can be quite unstable. As leadership changes through elections or big events splash onto global media related to a country's green economy, these values often rise and fall dramatically. As a result, we weight these two sub-categories of the GGEI less than the more stable ones of national behavior through international forums and climate change performance.

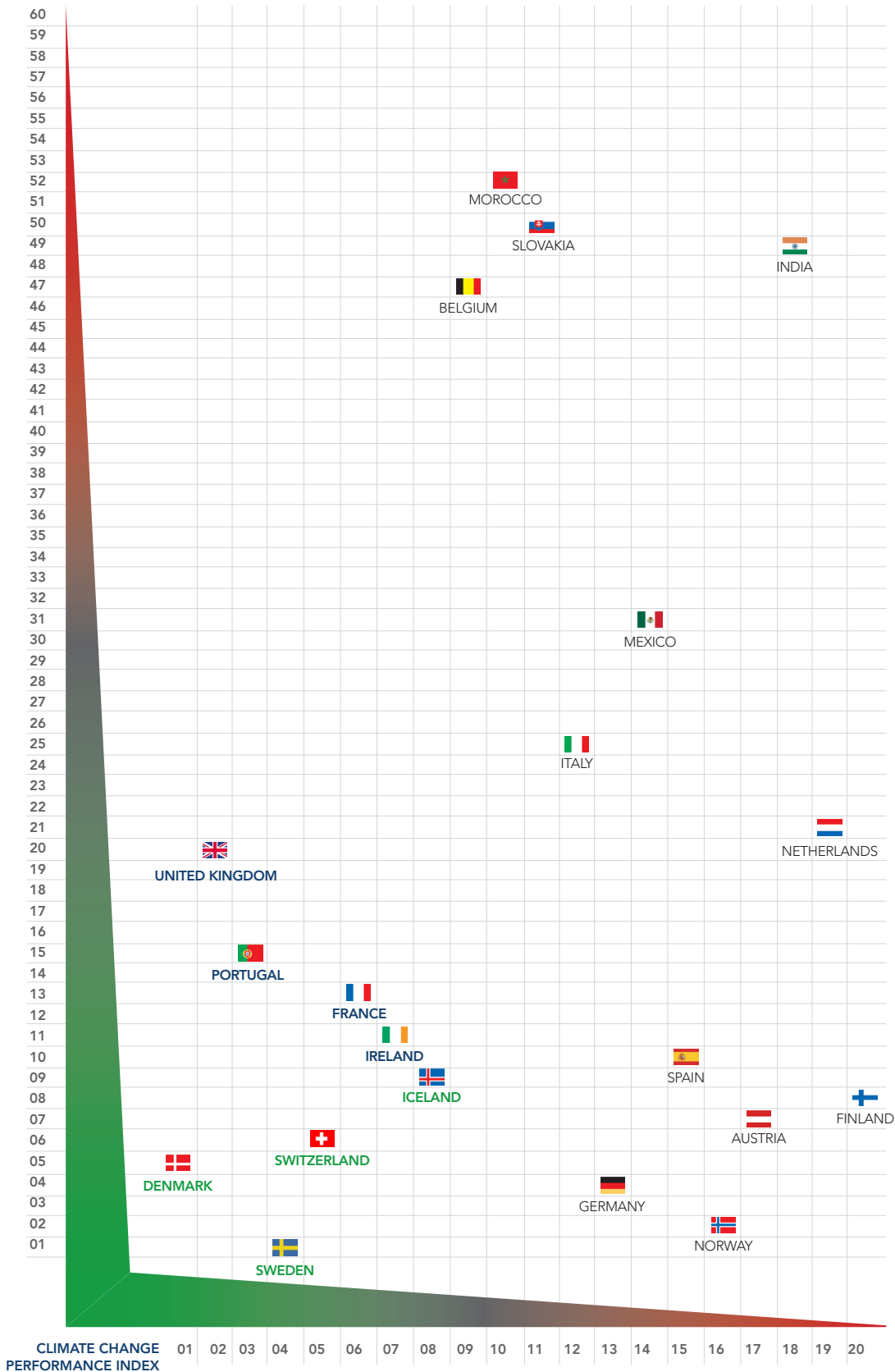
As we go to press on this 4th edition of the GGEI, the United Nations Climate Summit 2014 has just concluded, providing yet another global forum for leaders to forward collective action on climate change. Actions and rhetoric in these forums matter greatly to how a green country brand is perceived, and this is why we include a qualitative performance measure of country behavior at the recent COP19 in Warsaw, Poland and the Bonn Climate Change Conference as reported by the Climate Action Network's ECO newsletter daily coverage.

The most significant (and most heavily weighted) sub-category of this dimension is climate change performance, for three main reasons in the context of the GGEI and its purpose. The first is that there are frequently gaps between rhetoric and action in this area, and a solid measure of climate change performance allows the global community to track how nations are delivering on their commitments, and where they are falling short. Second, climate change is a politicized topic, meaning that perceptions of how nations are addressing it are critical for political leaders to understand and address. And third, related to these first two points, the GGEI perception survey reveals a vague understanding of the high-level numbers related to national climate change performance, highlighting the importance of better information exchange on the topic.

To illustrate this point, consider the following: Germany and Brazil ranked towards the top of the GGEI perception survey results in terms of which countries survey respondents believe are making the most constructive efforts towards improving their climate change performance. Yet according to the recently released PwC Low Carbon Economy Index, Germany and Brazil both registered a positive increase in the carbon intensity of their economies in 2013, and in the case of Brazil, an average positive increase over the past five years as well.

CLIMATE CHANGE PERFORMANCE VS. GREEN ECONOMIC PERFORMANCE*

GLOBAL GREEN ECONOMY INDEX



* Only some of the top 20 performers from the 2014 Climate Change Performance Index (CCPI) published by Germanwatch rank in the top 20 of the overall GGEI results, suggesting that gaps exist between how some countries are faring at reducing their carbon emissions versus how successfully they are orienting their economies towards greener growth pathways. More in-depth studies should explore these links between climate change and green economic performance because reducing carbon emissions will rely upon greener economic growth.

EFFICIENCY SECTORS

Unlike earlier editions of the GGEI that only measured the tourism sector, this year we present a much broader view of efficiency sectors, including coverage of Buildings, Energy, Transport and Tourism as the four sub-categories underlying this dimension of the GGEI. While the importance of this broader view of efficiency sectors is critical to better understanding green economic performance, arriving at a reasonable method for measuring them in a comparable way is methodologically complicated.

In terms of perception, OECD countries dominate this dimension of the GGEI as the Nordics, northern European states like Germany and the Netherlands and other technology-driven economies like Japan and the United States are perceived as having made the most progress at embedding greater efficiencies in these sectors. While many of these nations also rank well on the performance measure, so do emerging markets including Costa Rica, Colombia, Zambia and Chile that lack corresponding recognition in the perception survey.

There are various factors driving these strong performance results in emerging markets: a commitment to sustainable building practices (Chile, Colombia); high levels of renewable energy as a source of electricity production (Zambia); and improving carbon efficiencies in the transport sector (Colombia, Zambia). Costa Rica performs well in all four sub-categories of this dimension, most notably tourism where it is the top ranked country in terms of performance on the five areas assessed by the GGEI, edging out New Zealand and a lengthy list of other nations with strong merits around sustainable tourism.

TOP 10 GGEI RESULTS – EFFICIENCY SECTORS

PERCEPTION RANK	COUNTRY	SCORE	PERFORMANCE RANK	COUNTRY	SCORE
01	Sweden	96.3	01	Sweden	76.7
02	Denmark	96.2	02	Costa Rica	73.9
03	Norway	92.3	03	Norway	73.6
04	Germany	91.7	04	Colombia	72.8
05	Netherlands	91.5	05	Austria	69.6
06	Japan	84.8	06	Switzerland	65.1
07	United States	73.6	07	Zambia	64.4
08	United Kingdom	70.2	08	Portugal	63.2
09	Finland	68.1	09	Germany	62.3
10	Australia	67.9	10	Chile	60.8

Buildings offer a useful window into the methodological considerations behind the GGEI performance measure for Efficiency Sectors. Green economic growth is closely tied to buildings, due to their high contribution to emissions, energy consumption and usage of natural capital like water and land. Because buildings interact in various ways with climate, energy and the environment, it is challenging to identify datasets or indicators that well represent the extent of sustainable building in a given economy, particularly for 60 diverse country profiles.

Our solution to this challenge was to use sustainable building certification, namely the Leadership in Energy & Environmental Design (LEED) green building certification program, as a proxy for sustainable building in the 60 countries covered by the GGEI. Aiming to be the global certification scheme of the built environment, the U.S. Green Building Council recently revealed a real-time data platform with updated LEED certification data for most countries around the world.

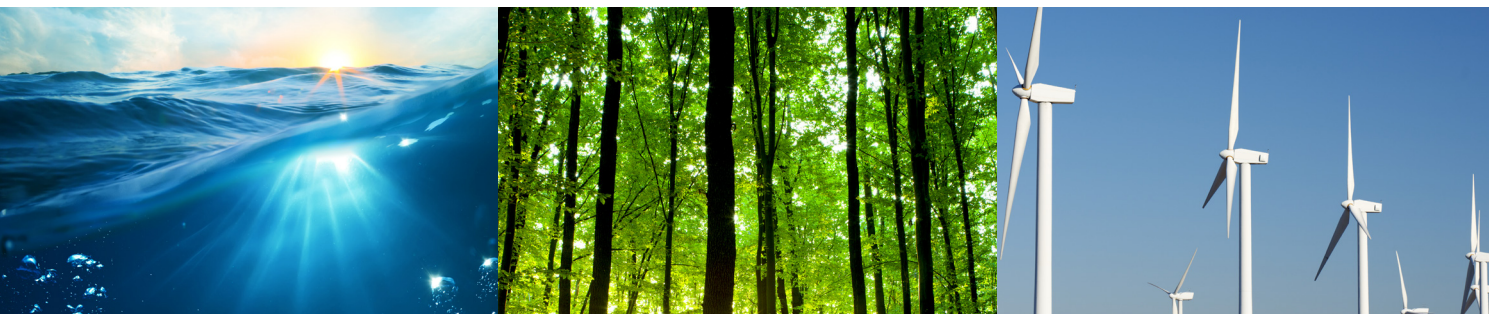
These data, adjusted for the size of each economy, enabled the GGEI performance measure to reveal an approximation of sustainable building that took into account emissions, energy and natural resource consumption in a way that would have been more difficult, if not impossible, using globally reported data around sustainable building that didn't conform to one, widely embraced certification scheme.

TOP 10 GGEI RESULTS – SUSTAINABLE BUILDINGS*

COUNTRY	TOTAL LEED CERTIFICATION (GROSS SQUARE METERS, WEIGHTED BY GDP/PPP)
United States	15,787,215
Finland	8,382,777
United Arab Emirates	8,341,119
Canada	6,120,837
Taiwan	3,383,766
Sweden	3,015,825
Costa Rica	2,994,026
India	2,455,359
South Korea	2,337,632
Chile	1,924,255

* Data collected in August 2014 from the USGBC real-time database accessible at: <http://www.usgbc.org/articles/international-market-briefs-get-your-green-building-data-around-world> and includes only certified projects receiving LEED Gold, Silver, Certified or Platinum.

Subscribe TO THE GGEI



Subscriptions are a critical component of the GGEI business model. They fund the research, production and promotion globally of the GGEI, helping to mainstream the green economy concept in the process. They also provide our subscribing clients with in-depth, customized interpretations of the GGEI data, as compared to what is presented in the public reporting. GGEI subscribers receive the following:

- Delivery of full perception (survey) and performance (index) data from the most recent edition of the GGEI. The four main dimensions of the GGEI - Leadership & Climate Change, Efficiency Sectors, Markets & Investment and Environment & Natural Capital - are each defined by a variety of thematic sub-categories. We collect both perception and performance data for these different topics and themes. Only subscribing clients receive this full, proprietary data delivery; the information in the public domain is aggregated.
- A written report interpreting and synthesizing these results, translating them into more accessible issues and opportunities for clients to evaluate. An overall structure of this report could include an executive summary, key gaps revealed between perception and performance, implications for the client given its unique approach to green economy, and concrete suggestions for how to improve rankings in the future, with a particular focus on strategic communications and data analytics.
- A one-day virtual or live workshop linking findings from the GGEI to the client's specific strategic needs. One workshop model is convening individuals tasked with managing green data so they can better understand the GGEI data and what it is useful for. In other cases, this workshop could engage representatives from a wide-range of ministries or businesses with the goal of increasing their understanding of the green economy concept overall. Other customized models and approaches can be explored upon understanding more about the client's priorities in this space.

Our goal is always to tailor each subscription to the needs of the client, so that what we deliver adds concrete value to their work. To inquire about subscribing to the full GGEI or engaging us for customized consulting assignments, please contact **Jeremy Tamanini** Jeremy@dualcitizeninc.com.

MARKETS & INVESTMENT

Transitioning to a green economy will require significant public and private investment, as well as a commitment from national leaders to promote the right mix of fiscal incentives to accelerate green growth. The Markets & Investment dimension of the GGEI calculates national performance in the areas of renewable energy attractiveness, cleantech innovation and commercialization, and green investment facilitation by government affiliated bodies. It also calculates perceptions of these four main sub-categories, because investment decisions are often driven by the quality of market information available. By providing both perceptions and performance measures in this way, the GGEI offers governments and the business community a baseline to understand the 60 green markets we cover and how to formulate strategy to improve their appeal and performance in the future.

As in previous editions, GGEI survey respondents continue to rank the United States and China, along with Denmark and Germany, as the top markets for green investments and the development of cleantech companies and products. While these perceptions are generally confirmed by the performance measure for the U.S., Germany and Denmark, China fails to score in the top 20 of this dimension for performance, due to its continued lack of appeal to businesses as a market climate for the innovation of cleantech products & services and their lack of best practice communications in facilitating green investments.

This dimension of the GGEI also reveals opportunities for nations to improve how global investors perceive their markets, demonstrated by GGEI results where performance exceeds perceptions of it. Looking at the top 10 snapshot of results below, Spain, Austria, Iceland, Brazil and Ireland all fall in the top 10 of the performance measure, but do not register the same on the perception side. This indicates that some of the strengths of these five markets as targets for investment are not fully appreciated by the respondents in our survey, selected due to their knowledge of and participation in green markets globally. Thus, better strategic communications and information exchange should be a priority for these nations – as well as many others not in the top 10 rankings presented here – to improve these perceptions in order to facilitate greater capital investments, including human capital.

TOP 10 GGEI RESULTS – MARKETS & INVESTMENT

PERCEPTION RANK	COUNTRY	SCORE	PERFORMANCE RANK	COUNTRY	SCORE
01	Germany	99.9	01	Denmark	86.6
02	United States	99.5	02	Germany	86.1
03	China	96.2	03	Finland	75.5
04	Denmark	94.9	04	Sweden	74.0
05	India	81.5	05	Spain	71.0
06	United Kingdom	79.9	06	United States	70.3
07	Japan	79.5	07	Austria	70.1
08	Sweden	74.4	08	Iceland	70.1
09	Netherlands	67.5	09	Brazil	70.0
10	Finland	61.7	10	Ireland	68.7

There is no one solution to addressing these information gaps through strategic communications. Each market is different with distinct investment opportunities, requiring a tailored approach to develop the right communications strategy. While the majority of the sub-categories in the GGEI are based on quantitative datasets – including renewable energy investment country attractiveness and cleantech innovation and commercialization – there is also a qualitative score for each country around its efforts to facilitate green investments. Understanding the areas evaluated in this sub-category can be a starting point to addressing some of the aforementioned information gaps.

The GGEI qualitative score assessing national performance at facilitating green investments is based on the five factors below. The top two performing nations in this sub-category – Austria and Rwanda – exhibit dramatically different country profiles and economies. Yet they both demonstrate interesting cases to consider when employing government bodies to bridge these information gaps with the broader global investor community.

ASSESSING GREEN INVESTMENT FACILITATION

FACTOR	DESCRIPTION	IMPORTANCE
Green focus	To what extent is the green economy and market opportunities within it prominently displayed on the website for the country's lead investment promotion agency?	The hierarchy of sectors and investment opportunities signals to the marketplace national priorities. By prominently displaying green business opportunities, countries signal that they are dedicated to developing them.
Presentation of related national initiatives	What information is provided about national initiatives in place or planned to foster greater green investments and support international investors and entrepreneurs?	This background further signals that nations are serious about pursuing green economic growth and supporting the businesses that enable it. It can also provide tangible resources for entrepreneurs who may be considering joint ventures in the market.
Market data provided	Is there easily accessible and clearly formatted country-level data available so that investors and businesses can better understand the characteristics of the market?	Investors need data to evaluate investments and having these relevant data clearly displayed show transparency and a willingness to support investors with tangible tools as they evaluate their options.
Interactive & social media outreach	Does the investment promotion agency have a sophisticated grasp of digital and social communications tools in a manner than successfully leverages them to share useful information?	When approached strategically, digital and social platforms enable cross border communications and information exchange in new and useful ways. Agencies that use these tools properly can advance their attractiveness as a green investment target.
People	Are there people highlighted as contacts related to certain market segments so that serious investors and entrepreneurs can contact them for more in-depth information exchange and knowledge sharing?	Despite the power of digital these days, people still matter a lot. Linking individuals to different green market segments offers investors comfort that they can follow up with a person to discuss more nuanced questions.

ENVIRONMENT & NATURAL CAPITAL

For the first time, the environment and natural capital are integrated to this 4th edition of the GGEI. The relationship between a country's environmental performance and its overall reputation is vitally important. Air quality is perhaps the most vivid example of this linkage as social media transmit daily images of smog-filled skies in global cities like Beijing, harming its international reputation, not to mention the standard of living and health of its inhabitants.

But the environment and natural capital function on a deeper, more complex way in the context of the green economy concept, and it is important to define this clearly as a way to illustrate the gap between the current performance measure of this dimension in the GGEI and an ideal one for the longer term. In all economies, natural capital like forests and water are inputs to economic activity, and exist in varying levels of supply. While economies or communities within them often depend on natural capital for their economic well being, many of these same places are in a state of "ecological overshoot," a concept championed by the Global Footprint Network (GFN) to illustrate the annual demand on natural resources compared to what the Earth can regenerate each year. These country-level data tell an ominous story, and the GFN notes that according to their approach, the Earth has been in ecological overshoot since the 1970s.

The importance of integrating the use of natural resources or "capital" into measures of economic activity and growth like gross domestic product (GDP) is critical, and some of the initiatives currently underway to formulate and measure these values will contribute invaluable insight to indices like the GGEI in the future. For this year's edition, the GGEI calculates environmental performance based upon the results from the recently calculated Environmental Performance Index (EPI), published by Yale University. The EPI data are both high quality from a measurement perspective and exhibit widespread coverage of the 60 countries tracked on the 2014 GGEI. These two characteristics are critical for using data as inputs to global indices like the GGEI. The lack of public datasets exhibiting these qualities is one of the issues limiting greater analysis and understanding around the complex relationship between the environmental and economic pillars of the green economy.

In terms of the 2014 GGEI, the results on both the performance and perception sides reveal interesting insights. Many of the same countries that are perceived positively overall also do well on this dimension, led by Germany, the Nordic states, Australia and Canada. But much like the comparison of climate change performance with green economic performance, the performance measure here reveals disconnects between these themes and environmental performance. For example, Australia performs near the top of the EPI and the GGEI performance measure of Environment & Natural Capital, but its performance is poor overall on the GGEI and the Climate Change Performance Index (CCPI). From a reputational point of view, national leaders will tend to emphasize the positive areas in their public presentation of the country's approach to the environment, climate change or green economy. So, advancing public understanding of these different perspectives and how they differ from one another – as well as reinforce each other – remains a critical communications challenge, particularly related to the concept of green economy.

The following table explains the environmental issues from the EPI where scores were used to define the environmental performance rank in this year's GGEI. The descriptive language below is mostly borrowed from the EPI web platform, which can be accessed online at epi.yale.edu.

ISSUE	DESCRIPTION FROM YALE EPI	IMPORTANCE OF PERCEPTIONS
Agriculture	Agriculture assesses policies related to the effects of intensive agriculture, specifically farm subsidies and pesticide regulation.	Consumers increasingly value organic food products and perceptions of the extent to which nations enable forms of sustainable agriculture can impact levels of satisfaction among the population.
Air Quality	Air Quality measures population-weighted exposure to fine particulate matter and percentage of the population burning solid fuel for cooking.	Smog and poor air quality, particularly in cities, galvanizes protest and impacts the calculation of human capital considering moving there.
Water	Water and Sanitation tracks percentage of population with access to improved drinking water sources and improved sanitation, including pit latrines and toilets. Water Resources tracks how well countries treat wastewater from households and industrial sources before releasing it back into the environment.	Access to water – and how nations enable or obstruct it – is an extremely politicized topic. Countries that make progress towards improvement in these areas will receive credit from their populations and the global community.
Biodiversity & Habitat	Biodiversity and Habitat tracks the protection of terrestrial and marine areas as well as threatened or endangered species.	Global tourism is increasingly oriented around so-called “eco travel” and the extent to which nations preserve their natural biodiversity impacts the appeal to this growing segment of travelers.
Fisheries	Fisheries assess countries’ fishing practices - both the use of heavy equipment and the size of the catch.	Oceans and fisheries receive increasing attention from the global media and countries that demonstrate strong performance in these areas will improve their global green reputations over time.
Forests	The Change in Forest Cover indicator measures the percent change in forest cover between 2000 and 2012 in areas with greater than 50 percent tree cover. It factors in areas of deforestation (forest loss), reforestation (forest restoration or replanting) and afforestation (conversion of bare or cultivated land into forest).	Also a highly politicized issue, forests and rates of deforestation impact a country’s green reputation in a variety of ways, not to mention impacting local communities who may depend on forests for their livelihood.

CITY RESULTS

While primarily focused on measuring national perceptions and performance in the green economy, the GGEI expert survey also collected perceptions of cities for each of the four dimensions. For each of the 60 countries covered by the GGEI, we identified their largest metropolitan area(s) and then asked survey respondents to select the best performing city.

These results revealed both similarities and differences as compared to the national ones. For the second time, **Copenhagen** tops the green city perception measure, with decisive results on all four GGEI dimensions of Leadership & Climate Change, Efficiency Sectors, Markets & Investment and Environment & Natural Capital. Other Nordic capital cities also rank in the top 10, as do cities like **Vancouver** that outperform the perception score for their country (Canada). **Singapore** also receives positive recognition, and is categorized as a city in this year's GGEI.

The relationship between cities and countries in the green economy is a rich one, deserving of a more in-depth exploration than what the GGEI can currently provide. With such a central role to play in greening national economies – particularly as hosts to a growing percentage of the world's population – city green performance should be studied more closely as data and reporting evolves, perhaps through important initiatives like C40 Cities Climate Leadership Group and the already published Siemens Green City Index.

At present, one insight from the GGEI that can be instructive to leaders is the relationship between city and national green reputations. In many countries – particularly smaller markets – the capital city is the main target for green investment, innovation and information exchange around the green economy. Countries in this category face a strategic messaging decision about whether to emphasize more the country or the city as the central actor in narratives around the green economy. As the table below indicates, a few places have managed to do both, with Denmark - Copenhagen and Sweden - Stockholm being vivid examples. But the broader results from this category show many cases where cities dramatically outperform the countries in terms of perception or vice versa, insights we believe should inform strategic communications in these places for the future.

TOP 10 GGEI RESULTS – PERCEPTIONS OF GREEN CITIES

CITY PERCEPTION RANK 2014	CITY	SCORE	COUNTRY PERCEPTION RANK 2014	GAP SCORE*
01	Copenhagen	100	4 (Denmark)	+3
02	Amsterdam	98.3	5 (Netherlands)	+3
03	Stockholm	96.4	3 (Sweden)	Even
04	Vancouver	96.0	12 (Canada)	+8
05	London	90.7	8 (United Kingdom)	+3
06	Berlin	90.0	1 (Germany)	-5
07	New York	89.2	6 (United States)	-1
08	Singapore	84.9	n/a	n/a
09	Helsinki	82.8	9 (Finland)	Even
10	Oslo	81.2	4 (Norway)	-6

*A gap score indicates how a green city reputation interacts with a country one, with a positive score suggesting that the city green reputation exceeds the country one, while a negative score indicating the opposite. Understanding these relationships is important to the branding and communications aspects of green economy, particularly in smaller countries where the capital city may be the target for most activity in terms of investment or technological innovation.

CONCLUSION

Like previous editions, this 2014 GGEI is an entry point for leaders from different parts of the green economy to better understand the relative performance of countries over time and how actions being taken domestically are impacting both their green economic performance and international reputation.

The overall findings presented in this report only tell part of the story, and the following appendices are designed to offer more transparency and country-level information so that readers can better understand how to leverage the GGEI to support their green economy work. Appendix A presents the indicators and data sources defining the GGEI performance index through its four main dimensions. Appendix B shares some general information about the GGEI methodology, directing readers to our new website where more in-depth information can be found under the GGEI > Methodology tab. Appendix C shares brief country profiles for each of the 60 nations covered on this year's GGEI, with associated spider graphs mapping each country's perception and performance score on the four main dimensions of Leadership & Climate Change, Efficiency Sectors, Markets & Investment and Environment & Natural Capital.

Partners and stakeholders looking to explore these data more closely in the context of their specific activities in the green economy should contact us to formalize a GGEI subscription. These subscriptions are structured to share the full data from the GGEI in a manner that relates more specifically to different markets or policy contexts. While each subscription can be tailored to client needs, a general model for how these subscriptions work is defined on our new website under the **GGEI > Subscribe** tab.

In many cases, these subscriptions are best supplemented by additional consulting offerings, where findings from the GGEI are combined with other data or analytic work to enrich our client's understanding of how to improve their green economic performance and perceptions of it. Again, some examples of these customized consulting offerings – including GGEI customizations by country, region or city, market prospectuses, sector or thematic strategic communications, localized perception surveys, and training packages for index creation – can be found on our new website under the **GGEI > Consulting** tab.

The core purpose of the Dual Citizen LLC practice is to improve the value of data and communications as tools for promoting international development and green growth. We view this 4th edition of the GGEI as a big step forward in our ability to realize this purpose in partnership with the wide array of other individuals, organizations and country and city leaders working to address this critical issue. Each new edition of the GGEI reveals progress, greater momentum and new opportunities for using data analytics and strategic communications to embed green economy and green growth more deeply in our shared global economy. We hope that this expanded 4th edition of the GGEI continues to enrich our clients, partners and the international community at large.

APPENDIX A: INDICATORS AND DATA SOURCES

DIMENSION	INDICATOR	TYPE	WEIGHTING	DESCRIPTION	SOURCE(S)
Leadership & Climate Change	Head of State	Qualitative	20%	Head of State's advocacy for green economy	Google Analysis scored by Dual Citizen LLC on scale of 0-10
	Media Coverage	Qualitative	10%	Positive media coverage of national green economy	Google Analysis scored by Dual Citizen LLC on scale of 0-10
	International Forums	Qualitative	20%	National positions & statements in international forums	Climate Action Network (ECO) reporting scored by Dual Citizen LLC on scale of 0-10
	Climate Change Performance	Quantitative	50%	CO2 emissions per capita CO2 emissions per unit of gross domestic product (GDP) CO2 emissions per unit of primary energy use	International Energy Agency (IEA), Climate Change Performance Index (CCPI)
Efficiency Sectors	Buildings	Quantitative	25%	LEED certification of building construction	LEED certification as reported by the U.S. Green Building Council (USGBC)
	Energy	Quantitative	25%	Renewable electricity as a percentage of national total	International Energy Agency (IEA)
	Tourism	Qualitative	25%	Ranking of national tourism ministry efforts	Scored by Dual Citizen LLC on scale of 0-10
	Transport	Quantitative	25%	Emissions from transport and 10-year trend	International Energy Agency (IEA)

DIMENSION	INDICATOR	TYPE	WEIGHTING	DESCRIPTION	SOURCE(S)
Markets & Investment	Renewable Energy Investment Attractiveness	Quantitative	25%	Country attractiveness for RE investment	Renewable Energy Country Attractiveness Index (RECAI, Ernst & Young)
	Cleantech Innovation	Quantitative	30%	Business climate for cleantech innovation	Global Innovation Index (INSEAD), Cleantech Group, Heslin, Rothenberg, Farley & Mesiti p.c.
	Cleantech Commercialization	Quantitative	20%	Business climate for cleantech commercialization	WWF Cleantech Group Global Cleantech Innovation Index 2014
	Green Investment Facilitation	Qualitative	25%	National efforts to facilitate green investment	Scored by Dual Citizen LLC on scale of 0-10
Environment & Natural Capital	Agriculture	Quantitative	17%	Assesses policies related to the effects of intensive agriculture, specifically farm subsidies and pesticide regulations	Environmental Performance Index 2014 (Yale University)
	Air Quality	Quantitative	17%	Measures population-weighted exposure to fine particulate matter and percentage of the population burning solid fuel for cooking	Environmental Performance Index 2014 (Yale University)
	Water	Quantitative	17%	Tracks how well countries treat wastewater from households and industrial sources before releasing it back into the environment	Environmental Performance Index 2014 (Yale University)
	Biodiversity & Habitat	Quantitative	17%	Tracks the protection of terrestrial and marine areas as well as threatened or endangered species	Environmental Performance Index 2014 (Yale University)
	Fisheries	Quantitative	17%	Assesses countries' fishing practices - both the use of heavy equipment and the size of the catch	Environmental Performance Index 2014 (Yale University)
	Forests	Quantitative	17%	Measures the loss in forest area from 2000 to 2012 using satellite-derived data	Environmental Performance Index 2014 (Yale University)

APPENDIX B: METHODOLOGY

The GGEI methodology draws from guidelines published through the OECD Handbook on Constructing Composite Indicators. We have also consulted extensively with the publishers of other leading indices in this field to learn from their methodological approaches to similar measurement challenges.

Publishing an index like the GGEI is ultimately a series of decisions, often balancing the depth and breadth of issues covered against the available data. Furthermore, the concept of “green economy” is still a nascent one, gradually becoming more defined as the theoretical and practical parts of it are tested and developed.

We applied a consistent normalization approach using GDP (PPP) to expressed values with inherent imbalances based on the size of the country economy. Based on the “top down” approach to data selection, we generally applied equal weightings to both the four dimensions of the GGEI and their sub-categories. One exception to this is on the Leadership & Climate Change dimension, where we lessened the weighting for the head of state and media coverage sub-categories, which in turn more heavily weighted international forums and climate change performance.

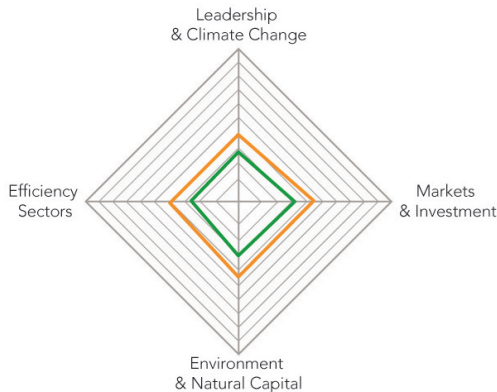
Obviously, the GGEI draws from a wide range of underlying datasets, and it is important to assume a consistent method for aggregating them. Our approach was to calculate the mean and standard deviation for each indicator or dataset, which in turn enables calculating a z-score and associated percentile. Then, these percentile values can be aggregated in a uniform manner, generating a country score that is expressed on the spectrum of 0-100.

For a more detailed explanation of the methodology behind the 2014 GGEI, please visit our website www.dualcitizeninc.com and click on the **GGEI > Methodology** tab.

APPENDIX C: COUNTRY PROFILES

ARGENTINA

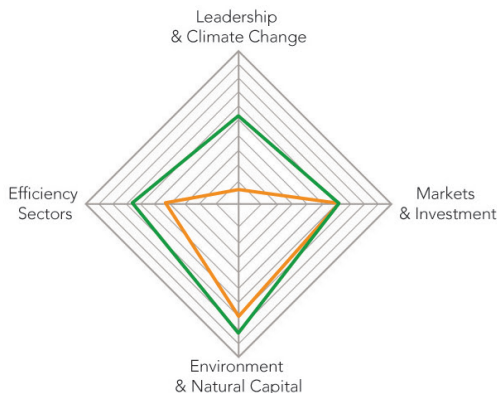
● PERCEPTION RANK
● PERFORMANCE RANK



Argentina's mid-range performance ranking slightly exceeds its perception score, meaning that there is significant room for improvement in both Argentina's GGEI performance and in the communication of its green endeavors. Compared to other countries in South America, Argentina scores poorly on the Leadership & Climate Change dimension - driven by a lack of media association between the nation and the green economy concept - and on Efficiency Sectors, most notably sustainable building. Areas to focus on might include Markets & Investment and Environment & Natural Capital, where Argentina ranks respectably on the performance side, results that could be translated into a stronger green reputation over time.

AUSTRALIA

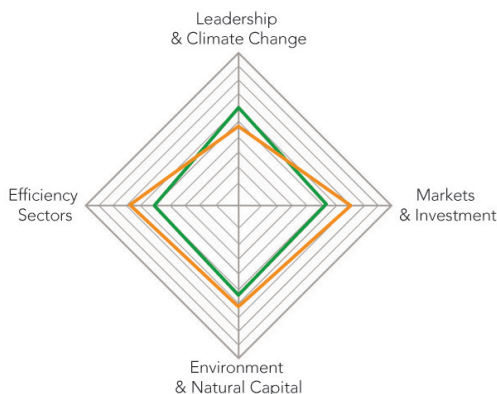
● PERCEPTION RANK
● PERFORMANCE RANK



Australia's debate over a carbon tax has thrust the country into the international spotlight this year, perhaps leading to a greater understanding of the country's overall green economic merits. Australia is a rare case where its perception score significantly exceeds its performance one. The main driver is the Leadership & Climate Change dimension where despite relatively strong recognition in the survey, Australia ranks last on the performance measure. This poor result is due to negative media coverage, unconstructive behavior in international forums and poor climate change performance, despite its reduction in the carbon intensity of its economy over the last year. Besides focusing much needed attention in these areas, Australia should build upon its strong result in both perception and performance on the Markets & Investment dimension.

AUSTRIA

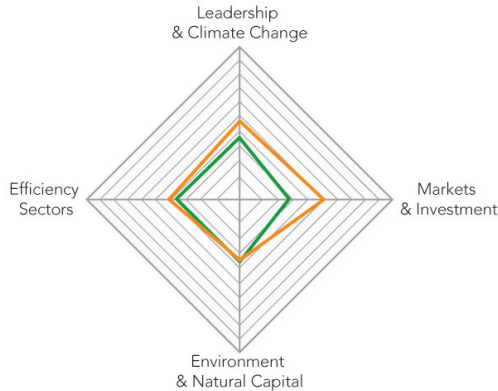
● PERCEPTION RANK
● PERFORMANCE RANK



Austria outperforms expert perception rankings on the GGEI, revealing an opportunity for better green country branding and strategic communications. The highlights of Austria's performance result include Efficiency Sectors and Environment & Natural Capital, driven by its energy sector and commitment to sustainable tourism. One area of focus for Austrian leadership is to build international recognition of their positive performance in these areas. But Austria has most to gain on the Markets & Investment dimension, where they score in the top 10 for performance but much lower for perception, a clear call to action for better information exchange around the vitality of Austria's domestic market for green investment and business development.

BELGIUM

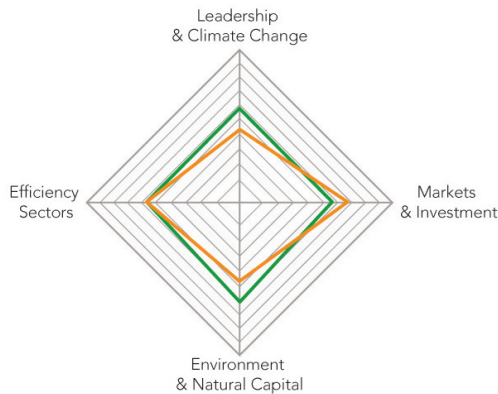
● PERCEPTION RANK
● PERFORMANCE RANK



Covered for the first time on this year's GGEI, Belgium exhibits mediocre results for both perceptions and performance. Belgium performs near the bottom of EU states in each dimension of the GGEI, with the exception of Leadership & Climate Change, where its result is around the middle. Belgium's head of state, favorable media coverage and constructive contributions to international forums on climate change contribute to this more positive result. On the other three dimensions, Belgium is not breaking through on the perception survey and has work to do to improve its performance relative to other EU nations.

BRAZIL

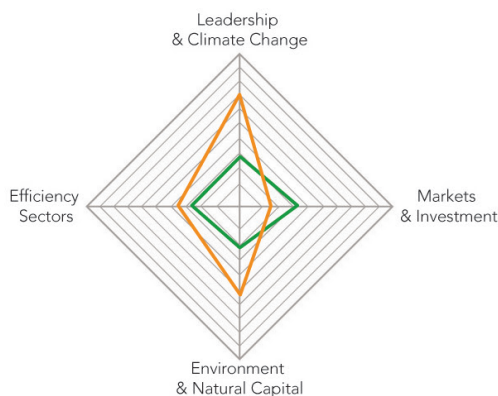
● PERCEPTION RANK
● PERFORMANCE RANK



Brazil's overall perception and performance scores are nearly even, but they both fall short of the top 10 position it held in the 3rd edition of the GGEI, likely due to the inclusion of more nations with stronger green merits in this year's index. Brazil performs well on the Markets and Investment dimension with its vital market for cleantech commercialization and an attractive domestic climate for investment in renewables. Given its significant natural resources and rising economic power, Brazil can do more in providing leadership around the centrality of green economic growth to its future development. This leadership will be critical for Brazil to improve its future performance on the Environment & Natural Capital dimension, particularly forests and water.

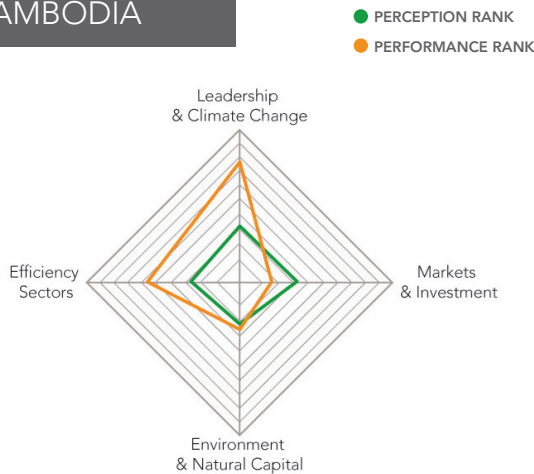
BURKINA FASO

● PERCEPTION RANK
● PERFORMANCE RANK



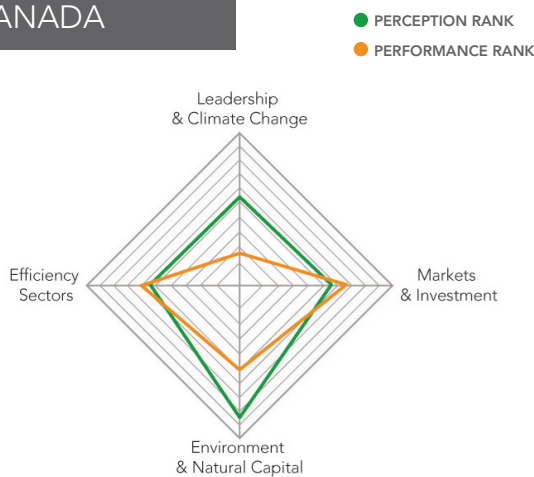
Burkina Faso's GGEI performance score exceeds its green reputation, suggesting several areas for improvement in communicating the nation's green merits. Burkina Faso's performance score is driven mostly by its overall environmental result, defined by a high rank in the agriculture and fisheries sub-categories of the Environment & Natural Capital dimension of the GGEI. Burkina Faso also does well in green leadership through international forums and media recognition of its commitment to pursuing a green development model. For the future, Burkina Faso should focus greater resources on articulating this commitment and positive performance with the goal of further engaging international stakeholders with knowledge and understanding of its domestic green economy.

CAMBODIA



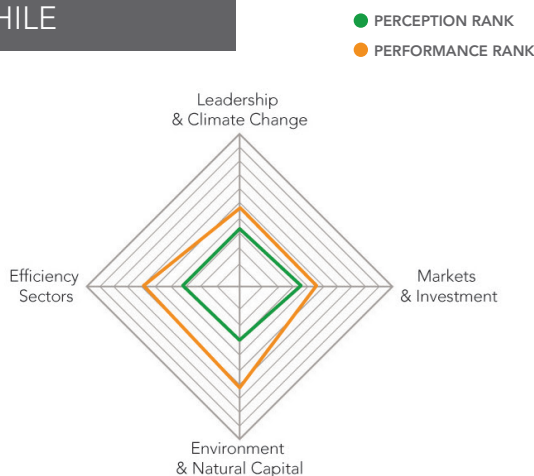
Covered for the first time on this year's GGEI, Cambodia's results shows some areas of good green economic performance, but very limited recognition through the perception survey. Cambodia fails to register really on any aspect of the GGEI perception survey, meaning there is work to be done to better position its efforts to global audiences. But Cambodia performs quite well on the Leadership & Climate Change and Efficiency Sectors dimensions, and stronger focus communicating its efforts in these realms should help to improve its perception score over time. Cambodia's performance is not as impressive on the Markets & Investment and Environment & Natural Capital dimensions, where focused efforts are needed.

CANADA



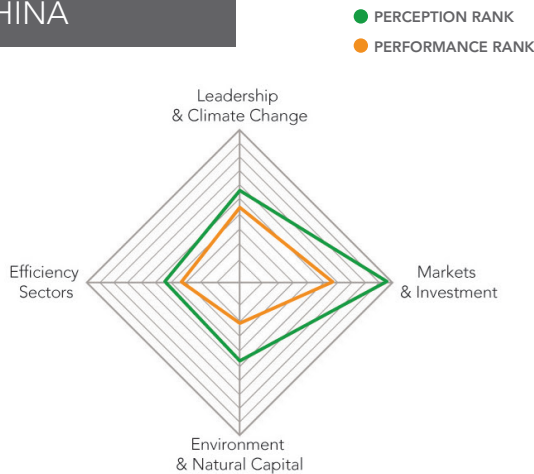
Canada's results remain difficult to decipher, something also found in earlier editions of the GGEI. On the one hand, Canada's green economy is quite strong, both in terms of perception where it ranks near the top 10 overall and performance, where Canada does very well on the Efficiency Sectors and Markets & Investment dimensions. But Canada's performance score near the bottom of the Leadership & Climate Change dimension drags down its overall result significantly. The country's head of state, media coverage, behavior in international forums and climate change performance are all extremely low as measured by the GGEI. While these areas obviously need improvement from a performance point of view, our survey respondents don't appear to take much notice, as Canada still ranks near the top 20 of the GGEI perception survey on Leadership & Climate Change.

CHILE



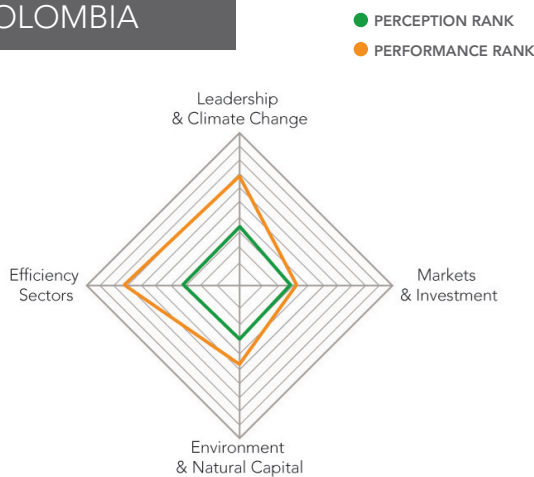
Chile greatly outperforms its overall perception score on the GGEI, and there are a variety of rich opportunities for better green branding and communications there. Although our survey respondents gave Chile poor marks on Environment and Natural Capital measures, Chile's performance ranked in the top 10, surpassing other South American nations, due mainly to its prevention of deforestation. Chile's excellent performance on Efficiency Sectors, such as buildings and tourism, also went mostly unnoticed by our experts, suggesting that there is a strong need for better communications efforts by national leadership of Chile's commitment to sustainability. Building this sustainability-conscious image will go a long way toward improving perceptions of Chile's green economy and attracting greater visibility to investment opportunities there.

CHINA



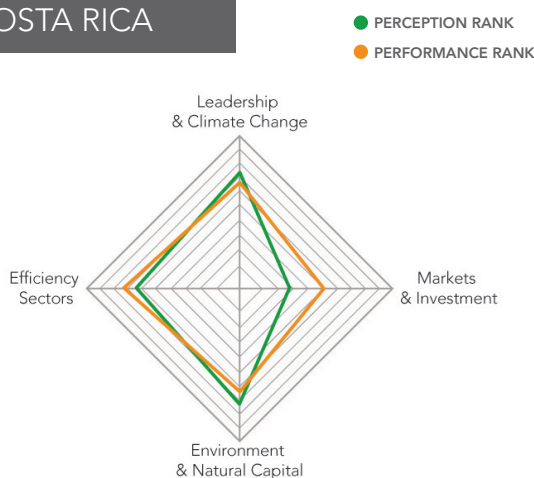
As a fast-growing economy with significant market opportunities related to efficiency sectors, China continues to rank quite well on the GGEI perception survey. Not surprisingly, China's best results in terms of the perception survey can be found on the Markets & Investment dimension where the country is perceived as a leading target for investment and green product development along with the United States and Germany. China's GGEI results can improve with greater focus on performance on the other three dimensions, where it ranks quite poorly. The Environment & Natural Capital dimension is an urgent area for Chinese leadership to tackle, as China ranks last in performance among the 60 nations tracked by the 2014 GGEI.

COLOMBIA



Colombia greatly outperforms expert perception rankings on the GGEI, suggesting the need for better outreach and communications about the country's green merits and opportunities. Colombia's high performance is driven by a strong result on the Efficiency Sectors dimension due to its utilization of renewable energy and commitment to advancing sustainable tourism. Colombia is also a high performer in terms of international leadership on green economy, and global media appear to cover these efforts favorably. In addition to greater focus on messaging these strengths to international audiences, Colombian leadership should look carefully at ways to improve its performance in the Markets & Investment dimension, as this is Colombia's weakest result on the GGEI.

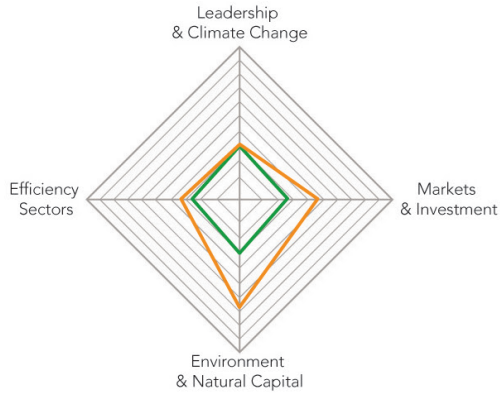
COSTA RICA



Covered for the first time, Costa Rica shines in all aspects of the GGEI, providing a useful case study for how a small, upper middle income nation can both perform well in the green economy and build a vibrant green country brand around it. Costa Rica's overall top result on the performance measure is driven by impressive results on both the Efficiency Sectors and Environment & Natural Capital dimensions, making it one of only a few countries to achieve such strong results in both areas. Unlike similar nations that excel on the performance rank, Costa Rica is also recognized for it, a lesson in how smart communications and green country branding can pay off, regardless of country profile. Future efforts in Costa Rica should focus on Markets & Investment, where there is room for improvement both in terms of perception and performance.

CZECH REPUBLIC

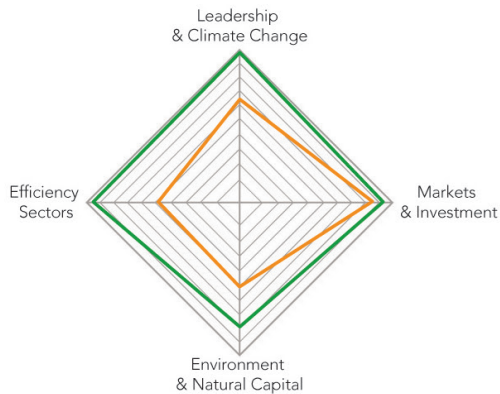
- PERCEPTION RANK
- PERFORMANCE RANK



The Czech Republic's GGEI performance reveals a mixed picture. On the one hand, the country exhibits very strong environmental performance. On the other hand, the Czech Republic (along with Poland) is near the bottom of EU countries on the Efficiency Sectors dimension, driven in part by its relatively carbon inefficient economy. To improve this performance for the future, and hopefully perceptions as well, Czech leadership should focus on how to transform its economy to be less carbon intensive, an effort that should be aided by the strong business climate there for the innovation of cleantech products and services.

DENMARK

- PERCEPTION RANK
- PERFORMANCE RANK



Denmark continues to maintain its leading position on the GGEI, both in terms of perception and performance. A true green country brand, Denmark relentlessly communicates its commitment to green growth through a variety of strategies and tactics, and global practitioners continue to signal the positive impact of these efforts. Denmark generally ranks higher in perception compared to other Nordic nations, particularly as a vital market for cleantech investment and innovation. Greater environmental focus on fisheries and forests coupled with translating Denmark's strong green policies into greater efficiency improvements in sectors like buildings and transport can improve Denmark's score further in the future.

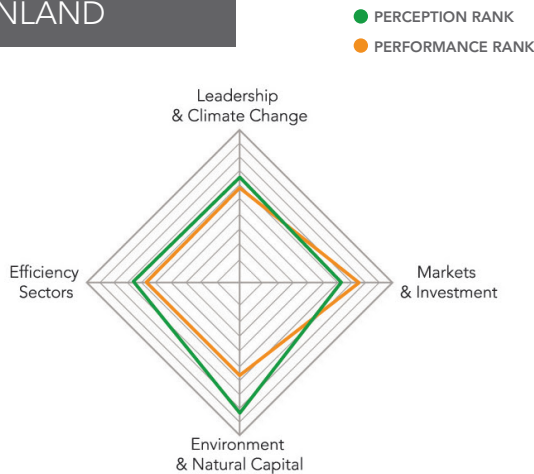
ETHIOPIA

- PERCEPTION RANK
- PERFORMANCE RANK



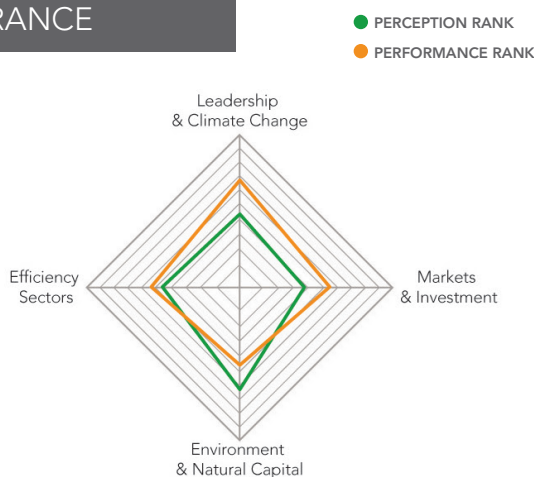
Ethiopia's overall performance on the GGEI exceeds how experts perceive it, suggesting an opportunity for more targeted communications from leadership there. Ethiopia tops the performance rankings on the Leadership & Climate Change dimension, driven by the relatively low carbon intensity of its economy and national efforts to promote green measures through its Climate-Resilient Green Economy Strategy. Given its high GDP growth rate at the moment, Ethiopia should work on its performance in the Markets & Investment dimension and better articulate to investors the green investment opportunities there. It will also be critical to ensure that its carbon intensity remains low as development proceeds in efficiency sectors like buildings.

FINLAND



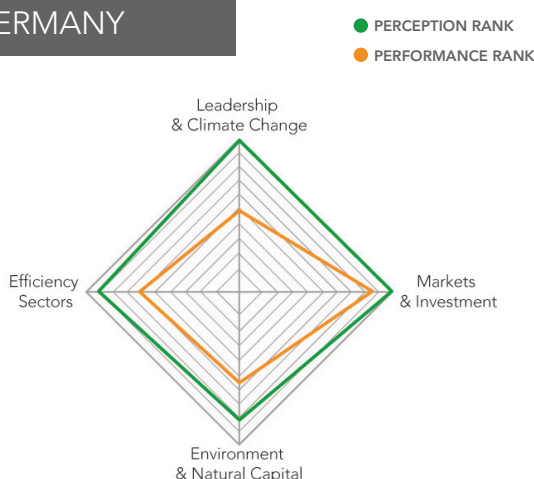
Finland continues its steady improvement in results on the GGEI, ranking in the top 10 for both perception and performance. There are a lot of bright spots to Finland's green economy story ranging from its efficiency sectors, its vital market for green investments and its successful stewardship of the environment and natural capital. The challenge continues to be breaking through in comparison to its Nordic neighbors, who also focus strategically in these areas and generally outshine Finland on the perception survey. Efforts underway like Solved – an online cleantech advisory service - are smart examples of how to approach closing this gap in practice. Continued focus on strategic communications and networking to convey the strength of Finland's position in the green economy should help to improve perceptions for the future.

FRANCE



France is a country where perceptions of its green performance lag slightly behind performance as measured through the GGEI. This result appears on the Leadership & Climate Change and Efficiency Sectors dimensions, while on the Environment & Natural Capital dimension France's perception result is actually stronger than its performance one. One area of opportunity for France is Markets & Investment, where it is behind most of the other large, EU economies both in terms of perception and performance. Yet France does quite well in terms of its attractiveness for renewable energy investment and the innovation of cleantech products and services, something that French leadership can capitalize on to better position its green economy as an engine for future growth.

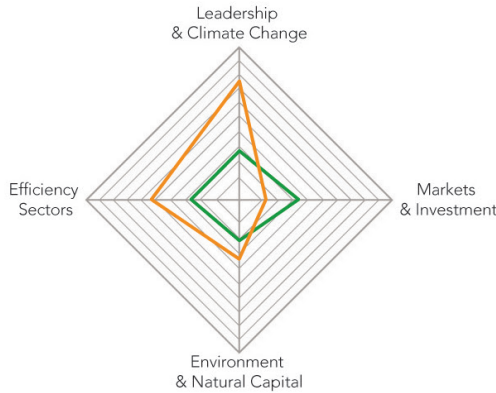
GERMANY



It is difficult to find a weak spot in the Germany results on the GGEI. Highly regarded by survey respondents on all four GGEI dimensions, Germany is a case study in how a sensible, no-nonsense policy approach to green economy can translate into a glowing global green reputation. In the top 10 of most perception and performance scores, Germany is particularly dominant in the Markets & Investment dimension where it is the leading country in both perception and performance. Similar to other developed economies, Germany's performance score is negatively impacted by the carbon intensity of its economy. Ensuring that Germany continues to reduce the carbon intensity of its economy as it phases out nuclear power will be critical for Germany to maintain its strong standing on the GGEI's future editions.

GHANA

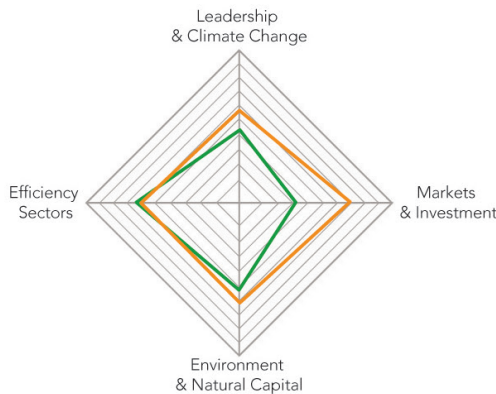
● PERCEPTION RANK
● PERFORMANCE RANK



Ghana’s performance on the GGEI exceeds expert perceptions of it, indicating the need for greater recognition of the country’s green leadership and low carbon-intensive economy. Though Ghana has one of the fastest growing economies in the world in terms of GDP, the country ranks last on the Markets & Investments dimension, a clear indication that Ghana should focus on policies that enable a more vital climate for green investment, innovation and knowledge transfer. Ghana also exhibits worrisome environmental performance, and greater focus on its forests and air quality score are keys to improving this result for the future.

ICELAND

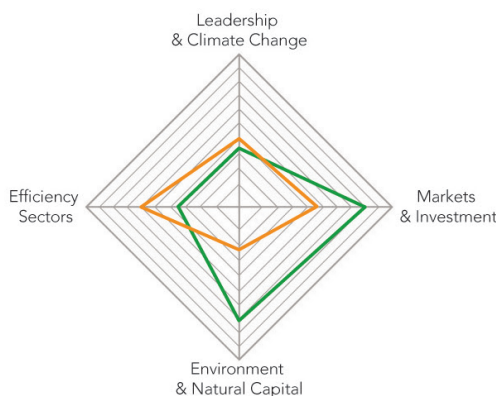
● PERCEPTION RANK
● PERFORMANCE RANK



Iceland is a case where better communications are needed to advance global understanding of its green economy and associated market opportunities. The country’s high performance ranking overall in the GGEI corresponds to an average rank in most areas of the perception survey. Iceland’s strong GGEI performance relates to its energy efficient economy with a high reliance on renewables for electricity generation and a strong commitment to the environment. If Iceland smartly communicates its leadership in this space – through political, business, and public diplomacy channels – it should see a corresponding rise in its standing in future editions of the GGEI perception survey.

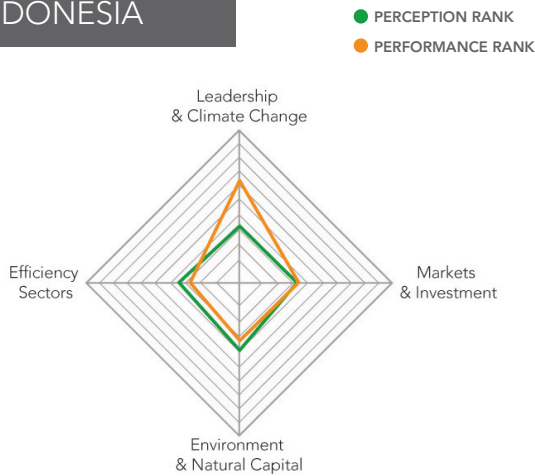
INDIA

● PERCEPTION RANK
● PERFORMANCE RANK



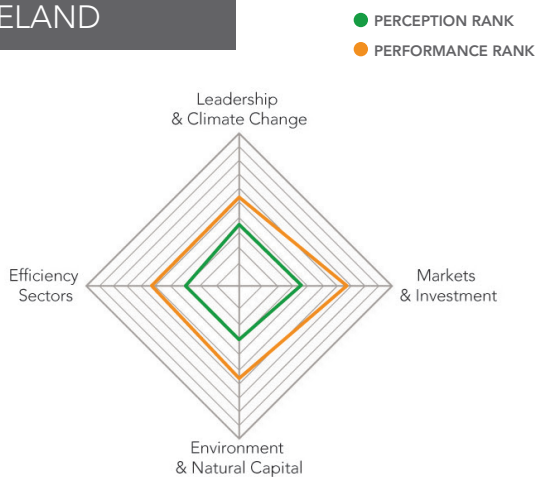
India scores fairly well on the latest GGEI perception survey, based mostly on its high result on the Markets & Investment dimension. Global investors continue to see the Indian market as appealing for renewable energy investment and the innovation and commercialization of cleantech products and services. While India’s performance on the Markets & Investment dimension lags behind perceptions of it, India’s greatest challenge relates to its low performance result in other areas of the GGEI. India ranks near the bottom on Leadership & Climate Change and Environment & Natural capital performance. Serious efforts are required to address the country’s carbon inefficient economy and environmental sub-categories like agriculture, air quality and water.

INDONESIA



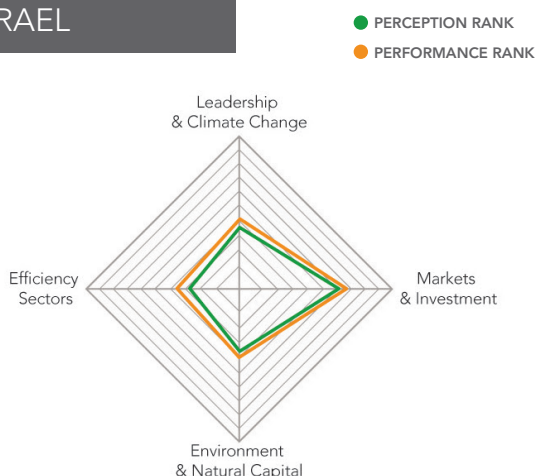
Indonesia's performance on the GGEI is quite poor, ranking near the bottom of most dimensions except for Leadership & Climate Change. Efficiency sectors like buildings and transport are poor performers from a green perspective in Indonesia, while its energy and tourism sectors are only slightly better. The other dimensions reveal a similar result, making it difficult to identify an area Indonesia can build upon to enhance its global green reputation. That said, Indonesia actually performs notably better on perception compared to performance, suggesting that global practitioners have taken notice of the country's efforts to begin to pursue more green growth pathways. As Indonesian leadership remains committed to these improvements, the country should start to see these efforts reflected in their GGEI ranking.

IRELAND



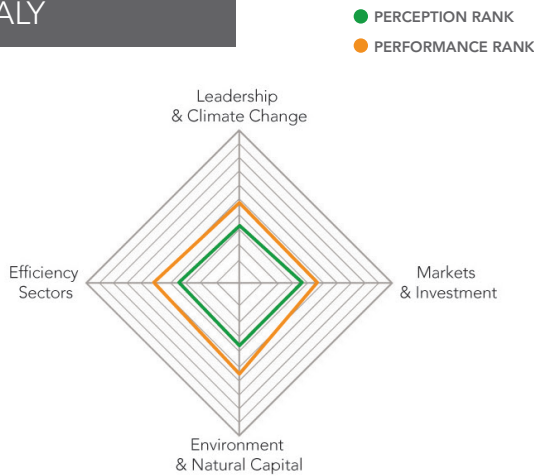
Ireland is a case where better communications are clearly needed to advance global understanding of its green economy and associated market opportunities. While there is room for improvement, Ireland performs respectably on each of the four dimensions of the GGEI performance measure. The challenge for Irish leadership is to communicate this performance and the associated opportunities to global audiences more effectively. One vivid example: Ireland ranks near the top in terms of being a vital market for cleantech innovation but our survey places Ireland near the bottom of EU nations on this topic in terms of how the country is perceived.

ISRAEL



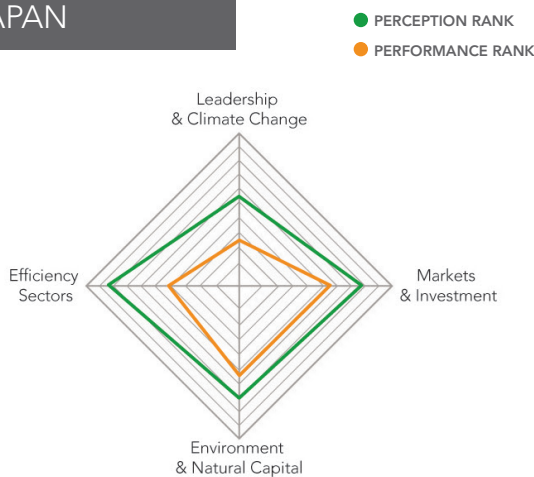
Israel performs quite well on the GGEI perception survey for a country of its size. Its overall top 20 ranking is driven primarily by the Markets & Investment dimension, where survey respondents give Israel high marks for its attractiveness as a target for green investments and the innovation and commercialization of cleantech products and services. While continuing to cement its reputation as a leader in these new markets and the innovations driving them, Israel's future GGEI performance rank could be improved significantly with greater focus on greening efficiency sectors, most notably buildings, energy and transport.

ITALY



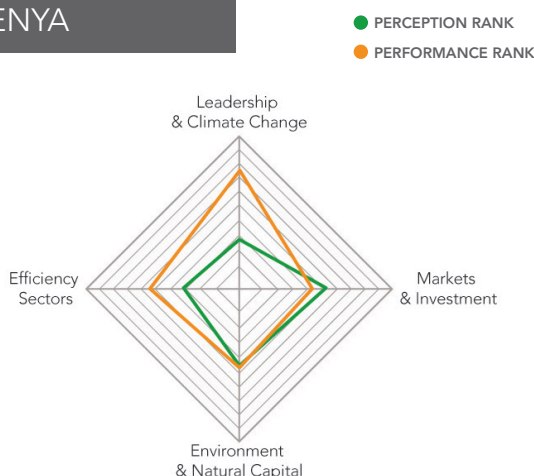
Italy's GGEI results are generally unremarkable, ranking around average on most dimensions and below the majority of EU states. Two bright spots in terms of Italy's performance is better climate change and environmental performance than many comparable EU states. The challenge, however, appears to be around Markets & Investment where Italy is not regarded as a vital target for renewable energy investment despite fairly good results on the performance measure. As Italy continues to struggle with broader fiscal challenges, leaders there should work towards a better climate for green investment, innovation and commercialization as a strategy for green growth and better GGEI results.

JAPAN



Japan experienced significant improvement in its perception survey results in 2014 as compared to 2012. In the top 10 overall, Japan is perceived as particularly strong on Efficiency Sectors and Markets & Investment anchored by a perceived commitment to clean transport and cleantech innovation. Yet these perceptions aren't confirmed by Japan's performance results. In that regard, Japan ranks overall towards the bottom of OECD nations. A relatively carbon intensive economy negatively impacts Japan's performance on the Efficiency Sectors Markets & Investment and Environment & Natural Capital. Japan should continue to promote renewable energy development to offset its phasing out of nuclear power as a strategy for improving its future GGEI performance score.

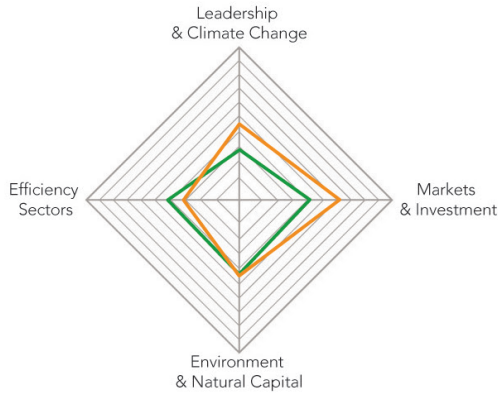
KENYA



Kenya's overall performance and perception rankings on the GGEI are matched, though there is a significant amount of disparity between the two rankings on each dimension of the GGEI. Contrary to expert perceptions, Kenya excels in performance rankings on the Leadership & Climate Change dimension due to the low-carbon intensity of its economy and relatively strong green leadership. Much like neighboring country Ethiopia, however, Kenya performs poorly on the Markets & Investment dimension, driven by a lack of perceived opportunities for renewable energy investment and growth. For the future, Kenya should focus on facilitating investment opportunities to maintain low-carbon intensity development in its efficiency and environmental sectors.

MALAYSIA

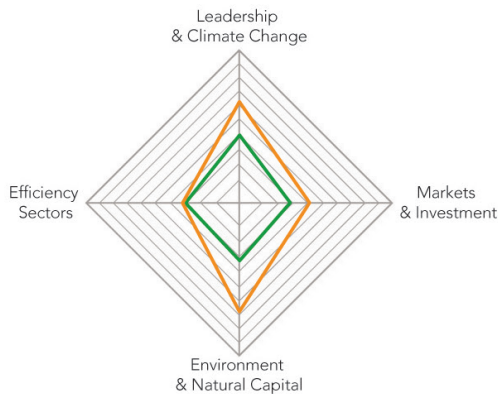
● PERCEPTION RANK
● PERFORMANCE RANK



Covered for the first time on the GGEI, Malaysia exhibits average results both in terms of green performance and expert perceptions of it. While Malaysia’s results don’t reveal any areas where its perception rank is unusually strong, it generally isn’t unusually weak, suggesting a platform upon which to build its green reputation for the future. On the performance side, Malaysia ranks in the top 10 of the Markets & Investments dimension, revealing an opportunity to focus more resources on educating global investors about these opportunities. The country’s performance result on the Efficiency Sectors and Environment & Natural Capital dimensions are less encouraging, and Malaysian leadership should focus policies around improving these results for the future.

MAURITIUS

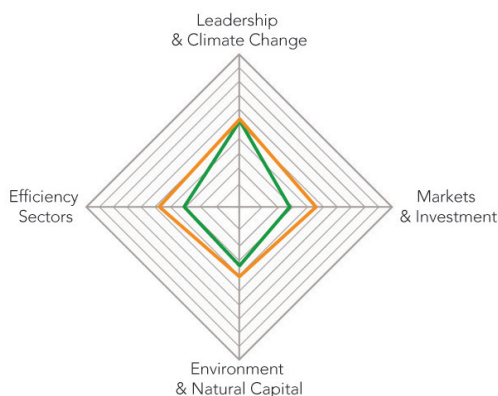
● PERCEPTION RANK
● PERFORMANCE RANK



Mauritius performs well in its first year on the GGEI, with its performance surpassing expert perceptions due mostly to impressive results on the Environment & Natural Capital dimension. Mauritius is near the top in performance here, driven by its results in the air quality and agriculture sub-categories. Interestingly, Mauritius performs quite poorly on the Efficiency Sectors dimension – despite stronger perception results - due to insufficient communication around sustainable tourism and limited renewable energy integration with its overall economy. Given its reputation as a tourist destination and the existence of some efforts to more formally integrate sustainable tourism, Mauritius should advertise better how to visit the island in a sustainable way.

MEXICO

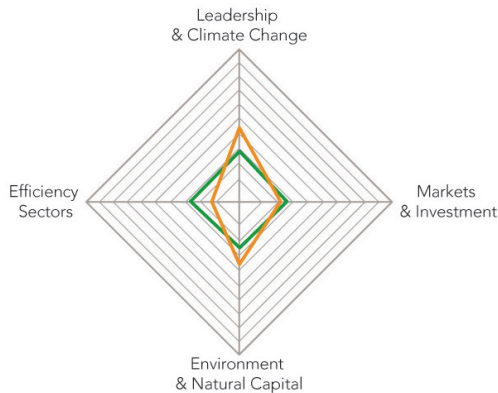
● PERCEPTION RANK
● PERFORMANCE RANK



Mexico’s overall perception and performance rank are basically equal, and the GGEI reveals various opportunities for improvement in both areas. While Mexico ranked in the top 10 of the last edition of the GGEI in terms of perceptions of its Leadership performance, its position has fallen significantly in this year’s edition. On the other dimensions, it is hard to find an area for Mexico to build upon as it exhibits mediocre performance and perception results on the Efficiency Sectors, Markets & Investment and Environmental & Natural Capital dimensions. One bright spot is sustainable tourism, where Mexico is ranked third in performance. Given that Mexico is a tourist destination, better green country branding through sustainable tourism may be a smart communications strategy for Mexican leadership to pursue.

MONGOLIA

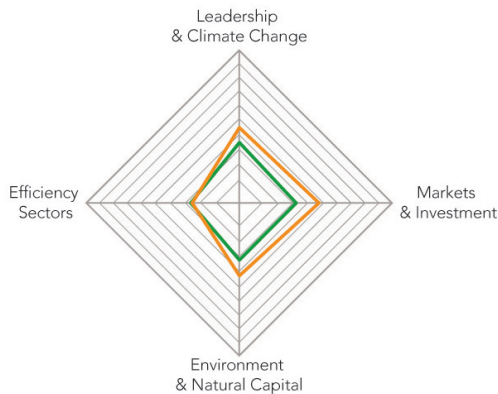
● PERCEPTION RANK
● PERFORMANCE RANK



Covered for the first time, Mongolia ranks towards the bottom of both the perception and performance rankings of the GGEI. Unlike some cases where a poor overall ranking is associated with stronger results in one of the four GGEI dimensions, it is hard to identify this with regards to Mongolia. It is critical for Mongolian leadership to continue to vocalize their commitments to green economic growth and to build partnerships with initiatives like the United Nations Environment Program’s Partnership for Action on the Green Economy (PAGE), in order to slowly build the capacity to pursue green economic growth. Once this direction is established, Mongolia should have new opportunities to communicate and brand the country around green economy to global audiences.

MOROCCO

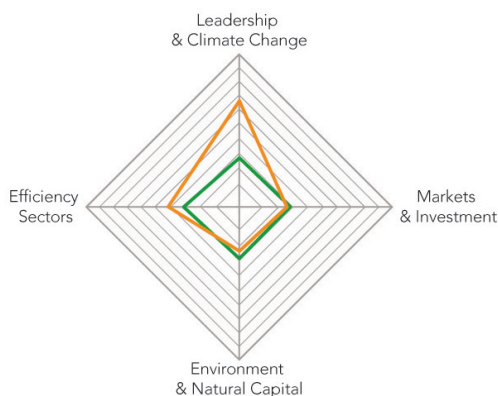
● PERCEPTION RANK
● PERFORMANCE RANK



Covered for the first time on this year’s GGEI, Morocco exhibits mediocre results for both perceptions and performance. Morocco receives an extremely low score on the Efficiency Sectors dimension, both in terms of perception and performance, due to a lack of sustainable building and relatively high emissions from the transport sector. Morocco has articulated its commitment to the green economy model through recent initiatives, including renewable energy and sustainable tourism, and continued policy commitment and communications in these areas will be critical to improved GGEI results in the future.

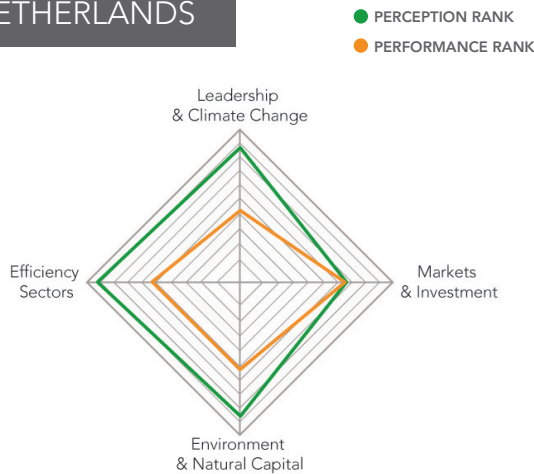
MOZAMBIQUE

● PERCEPTION RANK
● PERFORMANCE RANK



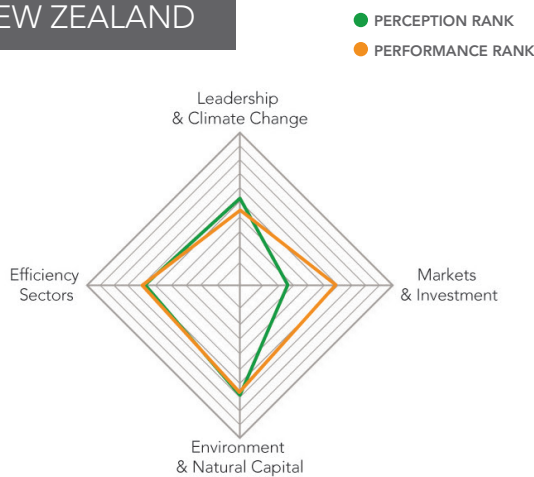
Mozambique ranks poorly overall, both in terms of its perception and performance, indicating that the country needs to make significant progress in nearly all areas measured by the GGEI. Mozambique does perform relatively well on the Leadership & Climate Change dimension due to the relatively low carbon intensity of its economy, but it ranks near the bottom in terms of expert perceptions, suggesting a need for better communications on these topics by Mozambique’s leadership. Continued focus on Mozambique’s Green Economy Roadmap and its recently approved Plan of Action will bolster this effort. Mozambique should also pay close attention to its low performance score on the Environment & Natural Capital dimension, particularly the forestry and water sub-categories.

NETHERLANDS



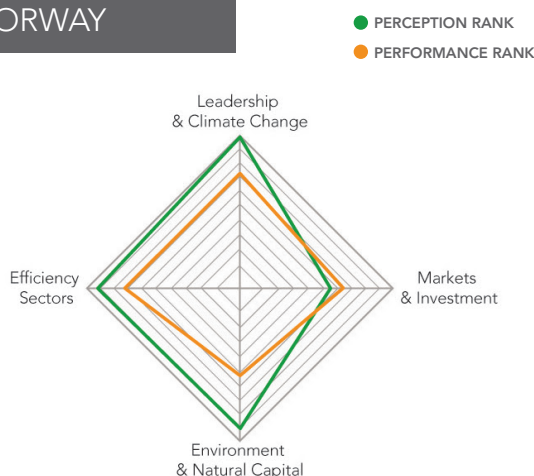
The GGEI results for the Netherlands reveal strong standing on the perception survey, but weaker results in terms of performance on the four main GGEI dimensions. The Dutch green brand appears to be firmly entrenched, scoring in the top 10 of every category of the GGEI perception survey. The area needing focus is performance, particularly with regards to the environment, climate change and to a lesser extent, efficiency sectors. The Netherlands has one of the lowest GGEI scores in the EU for climate change (a finding confirmed by the 2014 Climate Change Performance Index), and the relative carbon inefficiency of the Dutch economy drags down its performance on the Efficiency Sectors dimension as well. Focusing green policies and new technologies on improving sector efficiency should improve the Netherlands' future GGEI performance results.

NEW ZEALAND



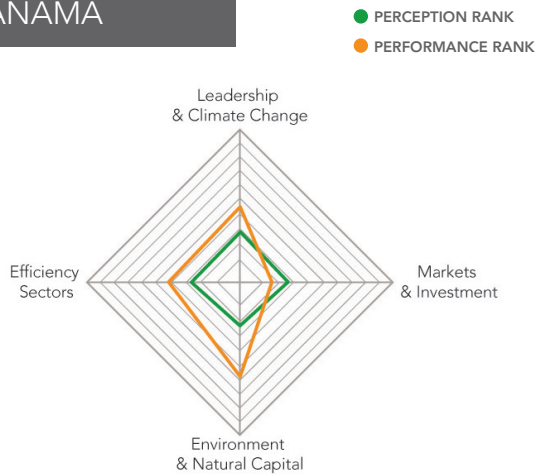
New Zealand has long dominated the sustainable tourism category of the GGEI, and continues to rank in the top 20 for both perception and performance in this year's GGEI, which measures a wider range of sectors beyond tourism. Our survey respondents give New Zealand consistently good marks, with the exception of Markets & Investment, where it received the lowest score of any OECD country. This extremely low score on the perception survey should be a call to action for leadership there, particularly as New Zealand performs in the top 10. While the country appears to be firmly recognized as a green country brand in a broad sense, outreach in the future should focus more on business opportunities related to the green economy in order to better educate global markets.

NORWAY



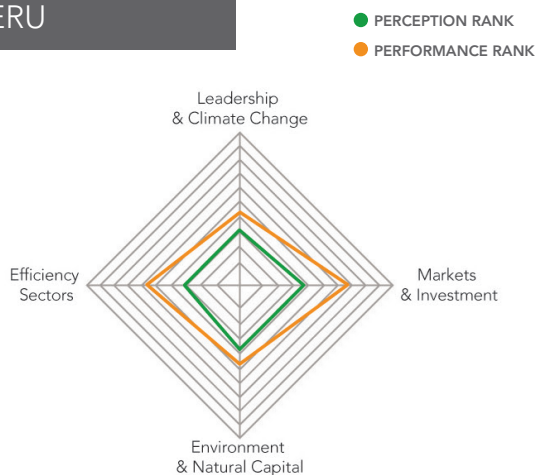
Norway receives high marks in terms of perception and performance, ranking in the top 10 for both. Despite being a significant exporter of oil and gas, Norway takes care of its green economy at home, and our survey respondents clearly applaud these efforts. Norway exhibits unusually high results throughout the GGEI and other nations endowed with significant fossil fuel reserves should take note of Norway's approach and successes in this realm. One area for improvement might be the Markets & Investment dimension, where our survey respondents place Norway below the other Nordics as an attractive target for green investments, a perception matched by Norway's performance score. Norwegian leadership can better convey these market opportunities in the future, and these efforts will likely improve the GGEI results.

PANAMA



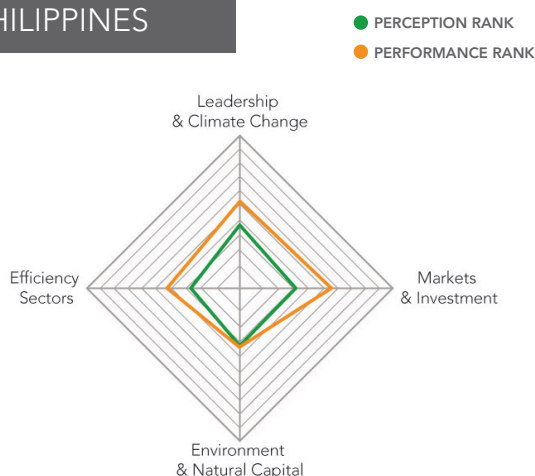
Panama places nearly last in its overall perception ranking, and though it slightly exceeds this in its performance scores, it is clear that Panama must make a concerted effort to improve in most areas of the GGEI. Contrary to how experts perceive it, Panama performs relatively well on the Environment & Natural Capital dimension due to excellent scores in the agriculture and biodiversity sub-categories. That said, Panama ranks quite poorly in Markets & Investments, indicating that promoting renewable energy and other green investment opportunities must become a priority for Panamanian leadership. Attracting outside investment will help bolster performance scores in low-performing Efficiency sectors, such as transport, and improve international recognition of Panama as it moves towards developing its green economy.

PERU



Covered for the first time, the GGEI reveals a variety of areas for Peru to build upon as it positions its green economy globally. Overall, Peru's performance exceeds perceptions of it, suggesting that communications should be one priority focus area. In terms of the four dimensions, Peru performs quite well in each area, but still has a ways to go to seriously compete with larger South American economies like Brazil or powerful green brands like Costa Rica. Peru should continue its high-level advocacy for green economic growth by heads of state and through partnerships with capacity-building international efforts. Once a clear green economy roadmap is defined, Peruvian leadership can employ strategic communications to begin building the country's global green brand.

PHILIPPINES



The Philippines' first year being covered on the GGEI reveals that perceptions and performance of its green economy are generally aligned, both overall and within each of the four dimensions. The country's strongest perception survey results are found on the Leadership & Climate Change dimension, as survey respondents give recognition to the head of state and applaud the Philippines' efforts through international forums. On the performance side of the ledger, the Philippines scores particularly poorly on the Environment & Natural Capital dimension and to a lesser extent, Efficiency Sectors. A genuine focus on improvement in these two realms should help enhance the country's green reputation overall for the future.

POLAND

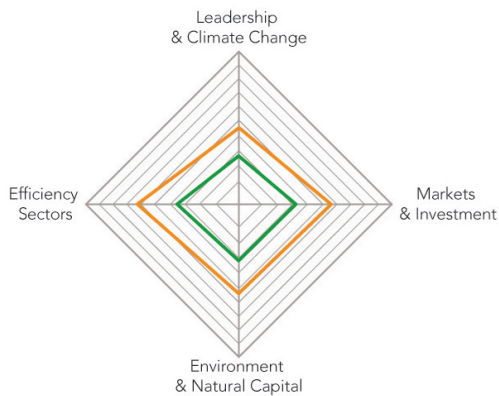
● PERCEPTION RANK
● PERFORMANCE RANK



Hosting the COP19 in December of 2013 in Warsaw does not seem to have positively impacted Poland's global green reputation. Poland ranks near the bottom of EU countries overall on the GGEI perception survey, and this poor result is also observed on the perception results associated with the four GGEI dimensions. The performance results are also weak for Poland across the board, most notably its low score related to engaging on green economy issues through international forums. The COP19 in Warsaw seems to have highlighted Poland's green economy in a negative light according to the GGEI, and it is unlikely future results will be any different in lieu of a sharpened policy focus in this area by Polish leadership.

PORTUGAL

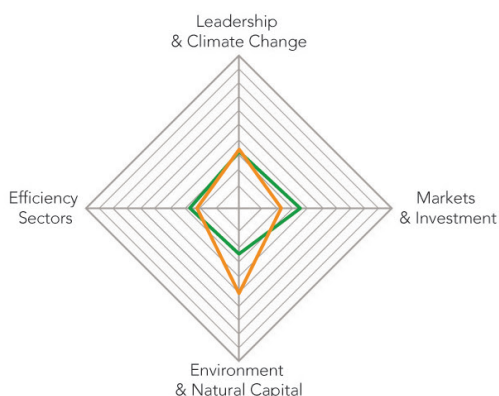
● PERCEPTION RANK
● PERFORMANCE RANK



Portugal is a case where better communications are clearly needed to advance global understanding of its green economy and associated market opportunities. Overall, Portugal's performance result exceeds its perception one and this gap is observed throughout the four dimensions of the GGEI. And while Portugal tends to perform better than it is perceived, the country lacks one area with superior performance, making it difficult to identify priority areas to focus on from a communications point of view. One place to start could be its Markets & Investment opportunities, as Portugal performs ahead of many EU states as a target for renewable energy investment.

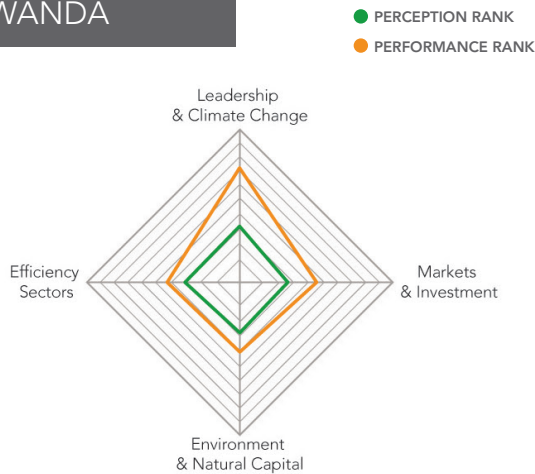
QATAR

● PERCEPTION RANK
● PERFORMANCE RANK



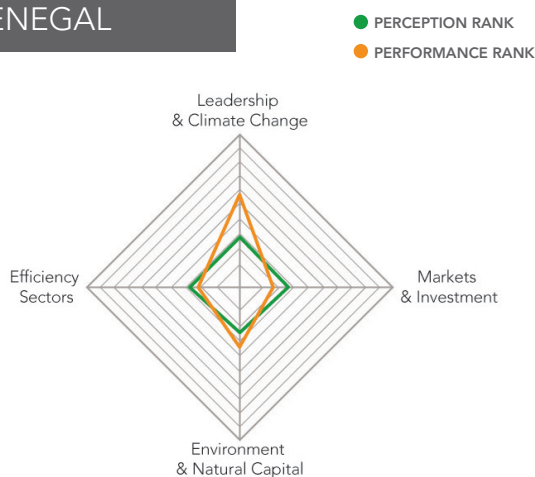
Qatar's first year being covered on the GGEI reveals that leaders there have a lot of opportunities to improve both the country's green economic performance and perceptions of it. Qatar received low recognition in our survey for its efforts around green economy, suggesting that better communications are needed to inform global practitioners of their policies and goals in this realm. The carbon intensity of Qatar's economy is a significant factor in its low performance score in the GGEI, as this impacts their rank on the Leadership & Climate Change and Efficiency Sectors dimensions. One positive area might be the Environment & Natural Capital dimension, where Qatar actually performs slightly better than it is perceived.

RWANDA



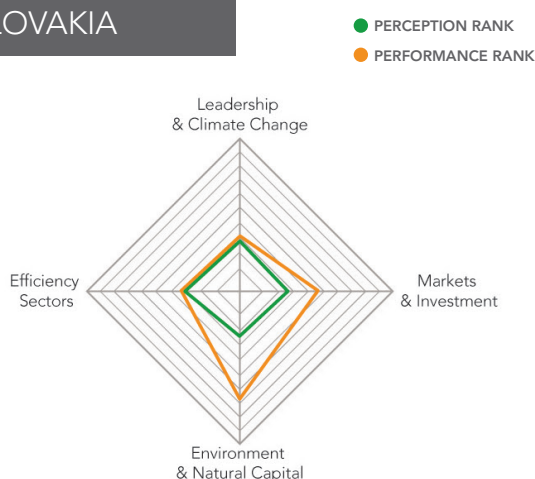
Rwanda is a clear case where better communications are required to advance global understanding of its green economy and associated market opportunities. Overall, Rwanda's performance score greatly exceeds its perception one, and with continued focus on green economic growth Rwanda could quickly become the top performing African nation on the GGEI. Already, Rwanda ranks as the top African performing nation on the Markets & Investment dimension, but its corresponding perception rank here is extremely low, near the bottom of the GGEI. A similar narrative is observed with regards to Leadership & Climate Change and Efficiency Sectors. As a small country, Rwanda has an opportunity to pursue a focused approach to communicating its green economic merits globally, and these actions should help improve its GGEI score for the future.

SENEGAL



Senegal's first year being covered on the GGEI reveals that leaders there have a lot of opportunities to improve both the country's green economic performance and perceptions of it. Senegal received low recognition in our survey for its efforts in the four dimensions of the GGEI, suggesting that better communications are needed to inform global practitioners of their policies and goals in this realm. A good place to start might be for leaders there to continue their constructive engagement through international forums and the media related to green economy. Greater engagement here, coupled with better articulation of its approach to the other dimensions of the GGEI should help to improve Senegal's results in the future.

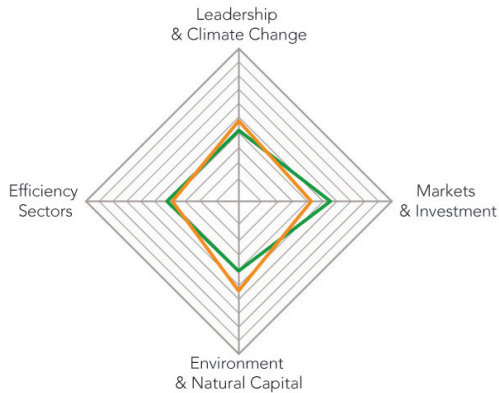
SLOVAKIA



Slovakia's GGEI performance reveals a mixed picture. On the one hand, the country exhibits strong environmental performance, ranking near the top 10. But much like the Czech Republic, Slovakia is near the bottom of performance on both the Efficiency Sectors and Markets & Investment dimensions. To improve this performance for the future, and hopefully perceptions as well, Slovakian leadership should focus on building carbon efficiencies in sectors, something already observed somewhat in the buildings sector. Another approach here could be to improve the emphasis on green investment facilitation through its government bodies, an area where Slovakia currently performs quite poorly.

SOUTH AFRICA

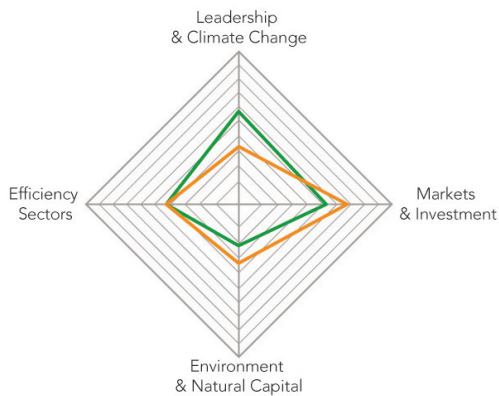
● PERCEPTION RANK
● PERFORMANCE RANK



South Africa has some encouraging results on the perception side of the GGEI, hovering around the top 20 in each of the four main GGEI dimensions. South Africa's challenge is more on performance, particularly with regards to Efficiency Sectors and Markets & Investment. South Africa's buildings and transport sectors demand efficiency improvements, something that would be aided by greater renewable energy capacity in the overall economy. South Africa performs quite well in terms of attractiveness for renewable energy investment. Building on this foundation for its broader green economy should help to improve South Africa's GGEI performance results for the future.

SOUTH KOREA

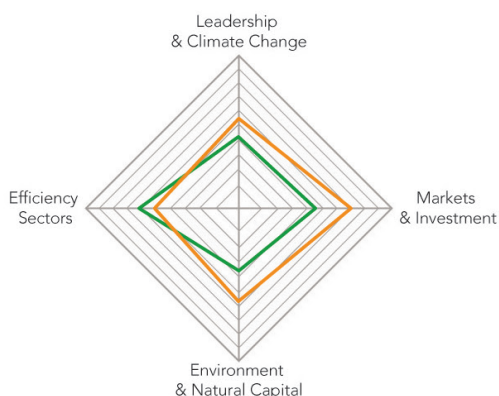
● PERCEPTION RANK
● PERFORMANCE RANK



South Korean leadership has taken concrete steps towards pursuing green growth and promoting it globally, notably through the founding of the Global Green Growth Institute (GGGI). However, the GGEI perception survey results suggest that these efforts are not translating into a stronger green reputation for South Korea. South Korea's GGEI performance result is even lower, driven by the relative carbon inefficiency of its economy and surprisingly poor environmental performance. Addressing these shortcomings and capitalizing on South Korea's stronger performance on the Markets & Investment dimension should help to improve its future results.

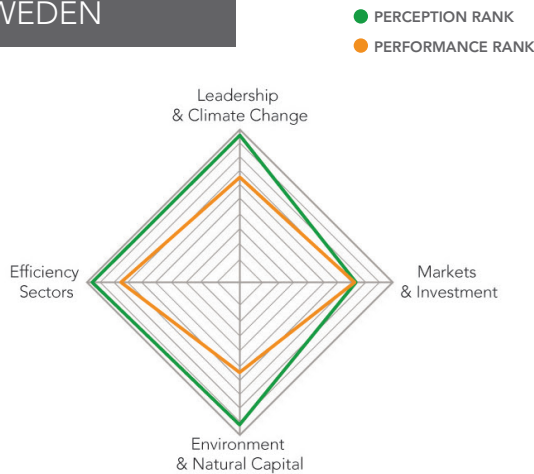
SPAIN

● PERCEPTION RANK
● PERFORMANCE RANK



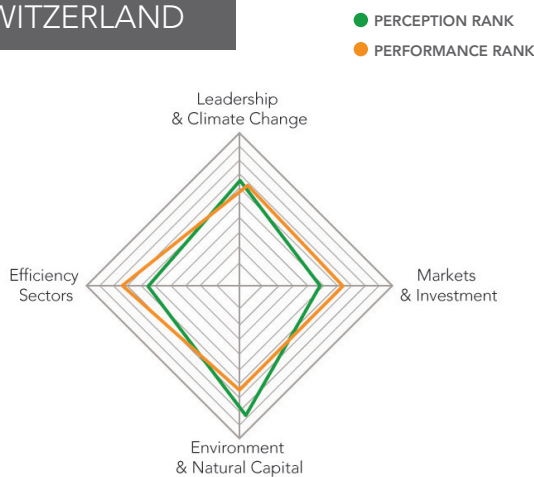
Spain is another case where better information exchange is required to advance global understanding of its green economy and associated market opportunities. This is because Spain generally performs a lot better than it is perceived, throughout most of the GGEI. While the Spanish green brand has suffered in the aftermath of the global financial crisis, its performance remains strong on the Markets & Investment dimension. And while Spain's result on the Environment & Natural Capital dimension is nearly the top of EU countries, our perception survey does not register a similarly positive result. Targeted efforts to bridge these gaps between perception and performance should serve Spain well in future editions of the GGEI.

SWEDEN



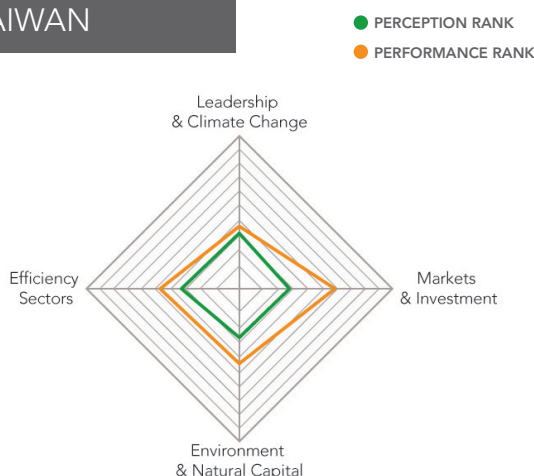
It is difficult to find a weak spot in the Sweden results on the GGEI. Highly regarded by survey respondents on all four GGEI dimensions, what is perhaps most impressive about Sweden's GGEI result is that the country does so well on both the Efficiency Sectors dimension and the Environment & Natural Capital one. Much like Germany, Sweden is a best practice case for how to translate a genuine commitment domestically to green economy into a strong global green reputation. Unlike Germany, though, Sweden still has some work to do on the Markets & Investment dimension where despite being in the top 10, there seems to be room for improvement. The various efforts already underway to better position Sweden as a target for green investments should improve this aspect of their GGEI result in the future.

SWITZERLAND



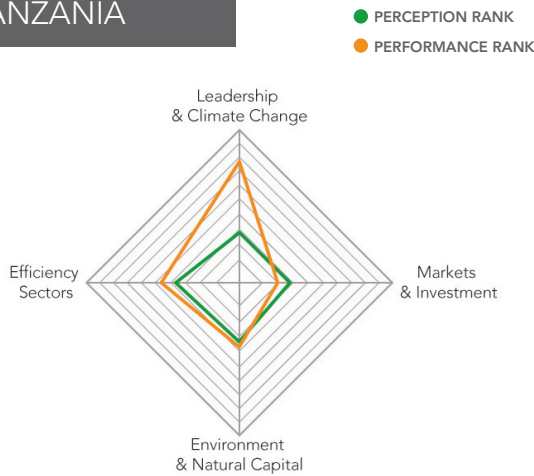
Switzerland's first year being covered on the GGEI reveals several opportunities for improvement. Overall, perceptions and performance are about equal in the top 10 for both, but a closer look at the four dimensions of the GGEI reveal growth opportunities. The general theme is that experts polled through our survey simply don't give Switzerland quite the recognition it deserves. On both the Efficiency Sectors and Markets & Investment dimensions, Switzerland's performance exceeds perceptions of it. Further efforts by Swiss leadership to embed green market opportunities in their sophisticated global communications platforms should improve this perception ranking for the future.

TAIWAN



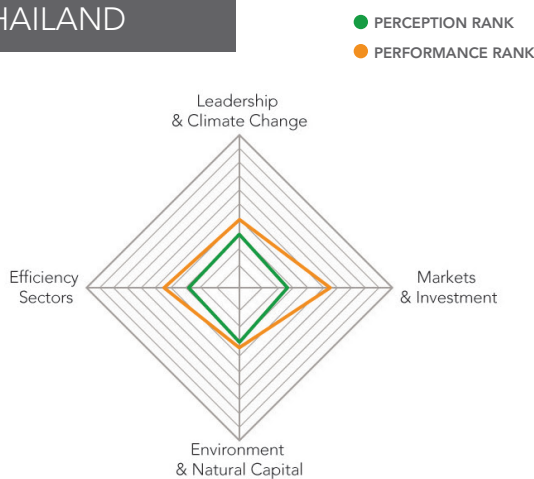
Covered for the first time, Taiwan is a case where performance exceeds perceptions of it, suggesting a need to embed Taiwan's green economic opportunities more clearly in the country's extensive international communications campaigns. Overall, Taiwan's performance is about average on the GGEI, something also reflected on the four dimensions with the exception of Markets & Investment, where Taiwan slightly outperforms the average. This finding coupled with Taiwan's surprisingly poor result in the perception survey suggests a need for strategic focus about how Taiwanese leadership intends to realize future green economic growth. Once this strategy is in place, the country's existing communications platforms should be effective channels to convey to the market what these opportunities and achievements are.

TANZANIA



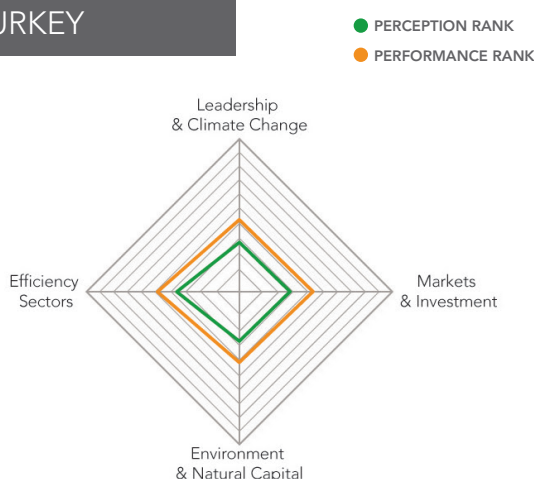
Covered for the first time this year, Tanzania’s overall perception and performance scores are equal, and about average compared to other African states. Yet a closer look at the four dimensions of the GGEI reveals significant variation in Tanzania’s performance, with very strong results related to Leadership & Climate Change and very weak ones on the Environment & Natural Capital dimension. In addition to evening out these results, Tanzanian leadership should think about what themes or sectors they intend to build their global green reputation around, and then develop the communications campaigns to educate the international community about them.

THAILAND



Thailand scores quite poorly on both perception and performance in its first year covered on the GGEI. The country’s relatively carbon inefficient economy coupled with a low contribution of renewable energy to its overall economy underlie this poor result and tends to drag down Thailand’s score on the Efficiency Sectors dimension. But there are some bright spots: Thailand performs fairly well around sustainable tourism and in some areas of the Markets & Investment dimension, most notably as a target for renewable energy investment and for national efforts to facilitate green investments. Continued focus on these relatively strong results coupled with fixing some of Thailand’s weaker ones will improve the country’s GGEI results for the future.

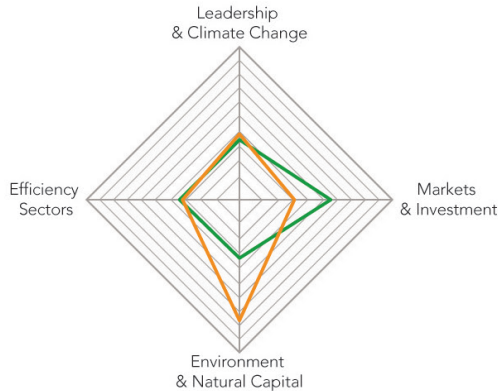
TURKEY



Turkey’s GGEI results suggest that perceptions and performance of its green economy are generally aligned, both overall and within each of the four dimensions. The country’s most concerning survey result is in the Leadership & Climate Change dimension, where Turkey ranks last of the 60 nations polled. Given its recent economic growth, one area Turkey should focus on developing is the Markets & Investment dimension. Already, Turkey has a respectable performance score in terms of its attractiveness for renewable energy investment. It also performs well in terms of national efforts to facilitate this investment. By building on these areas, Turkey can start to translate its overall economic growth into a stronger GGEI result.

UNITED ARAB EMIRATES

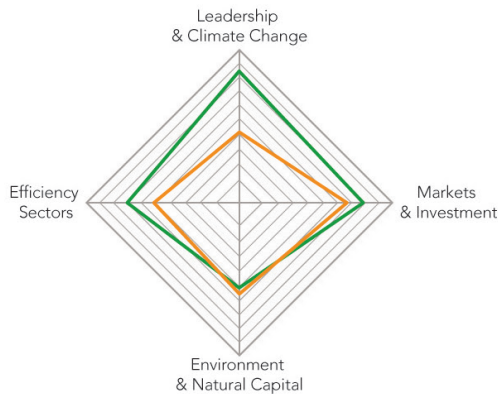
● PERCEPTION RANK
● PERFORMANCE RANK



The UAE's efforts around green branding – linked to Masdar, conference hosting, and funding for initiatives related to sustainable development – appear to be bearing fruit. The UAE's overall result on the perception survey shows significant improvement from two years ago, where the country was barely recognized. This improvement in perception is particularly notable on the Markets & Investment dimension, where the UAE joins the top 20 for the first time. On the performance side, the UAE should focus on improving its efficiency sectors, as the nation's carbon intensive economy drags down its score in the energy, tourism and transport categories significantly.

UNITED KINGDOM

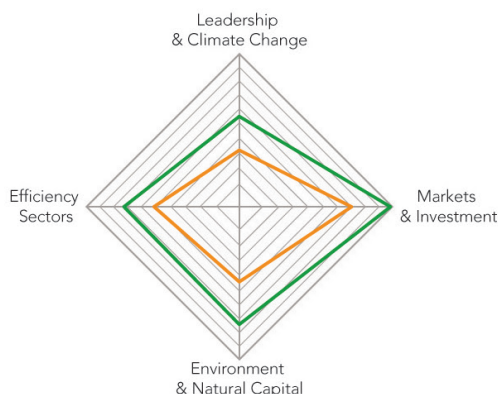
● PERCEPTION RANK
● PERFORMANCE RANK



As has been the case in previous editions, the UK's performance in the green economy remains difficult to pinpoint. Generally, the country ranks quite well in the perception survey, exceeding the corresponding performance values in most cases except for Markets & Investment, where they are basically equal. The UK seems to suffer from inconsistent and sometimes negative political rhetoric related to green economy, which in turn may send mixed signals to the marketplace about the country's policy commitment to more sustainable growth pathways. By tightening up its communications approach to the green economy, the UK could turn a good GGEI result into a great one.

UNITED STATES

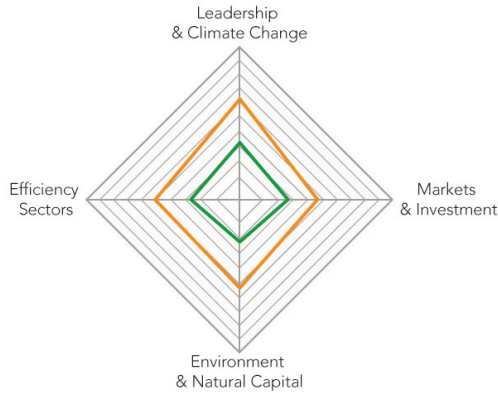
● PERCEPTION RANK
● PERFORMANCE RANK



The United States is a difficult country to measure through a global index like the GGEI due to its size and the power of individual states to dictate green policy. That said, the U.S. ranks surprisingly well in the GGEI perception survey, driven by high scores as a target for investment and green innovation, and the perception that the U.S. is successfully greening key sectors like buildings and transport. Despite also performing well in the Markets & Investment category, the U.S. has a long way to go in other areas, ranking poorly on our climate change performance measure and on many environmental categories, most notably fisheries and forests.

URUGUAY

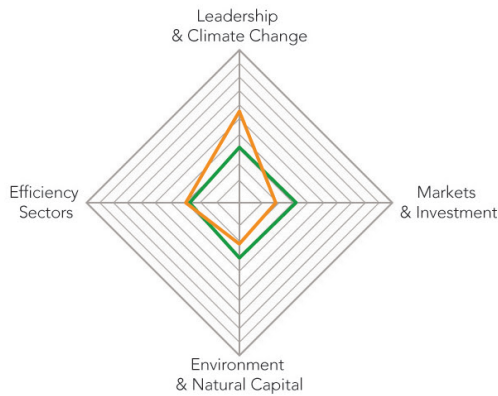
● PERCEPTION RANK
● PERFORMANCE RANK



Uruguay ranks near the bottom of the GGEI perception survey, despite being in the top 20 of the performance results. The country simply does not register with our survey respondents on any of the four main GGEI dimensions, suggesting Uruguay should focus more on communicating its green economic values to global audiences. This task should be made easier by Uruguay's strong green performance, driven by the relatively low carbon intensity of its economy and the high contribution of renewable sources to domestic electricity production. Linking these underlying strengths to Uruguay's global positioning in the green economy should improve its results on the GGEI perception survey in the future.

VIETNAM

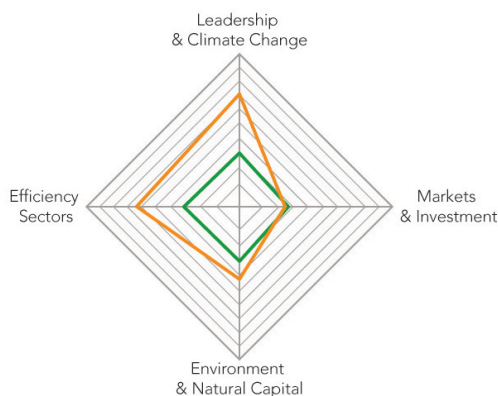
● PERCEPTION RANK
● PERFORMANCE RANK



Vietnam scores poorly on both the perception and performance measures of the GGEI. Unfortunately, there is little silver lining to Vietnam's performance score. The country exhibits poor sector performance, highlighted by a highly inefficient transport sector that is trending in the wrong direction. This translates directly into poor environmental performance, with low scores on air quality and most other categories measured through the Environmental Performance Index (EPI). With its positive GDP growth rate of late, Vietnam should focus significant resources on improving its green economic performance in order to score better in future editions of the GGEI.

ZAMBIA

● PERCEPTION RANK
● PERFORMANCE RANK



Like Rwanda, Zambia is a clear case of an African nation with an opportunity to employ communications to advance its standing in the green economy. This is because Zambia's overall performance score dramatically exceeds its perception one, with the country almost cracking the top 20 for performance yet ranking near the bottom of the perception survey. Zambia's most compelling communications story at the moment appears to be related to the Efficiency Sectors dimension, where it ranks in the top 10 overall, driven by the extent to which renewable energy is part of its economy and a strong result related to the transport sector.

THE GLOBAL GREEN ECONOMY INDEX™

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