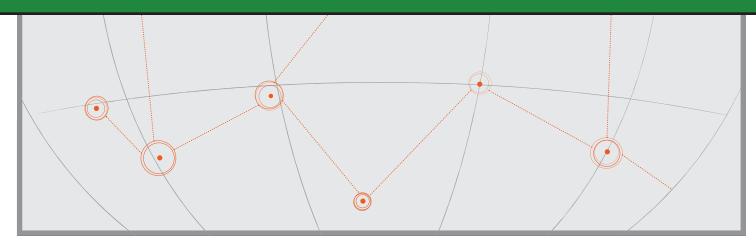


GLOBAL GREEN ECONOMY INDEX

An Analytic Tool Measuring National Green Reputations and Performance



OVERVIEW

Dual Citizen is an international consultancy that advises stakeholders in the global green economy on communications strategy and associated analytics. This is the third edition of our annual Global Green Economy Index (GGEI), an analytic tool designed to help governments, international organizations and investors improve their "green" branding and communications strategies.

The GGEI is unique for combining in-depth analysis of national green performance with perception of that performance. Specifically, the GGEI evaluates the green reputations of 27 countries as judged by expert practitioners; it then benchmarks these perceptions against Dual Citizen's proprietary, data-driven measure of national green performance.

Coupled with Dual Citizen's consulting expertise in this realm, this unique tool offers actionable intelligence to a variety of stakeholders:

- **Government ministries and leadership**: Assess gaps between the perceptions and reality of your national green performance and further strategic efforts to improve your competitive positioning and national or city green reputation.
- Industry associations, cleantech clusters and investors: Garner best practices for investment facilitation and cleantech promotion.
- International organizations: Analyze the global green economy on a national level and use the resulting insights to inform multilateral, regional and country-level policies and programs.

For each type of stakeholder, Dual Citizen offers a variety of consulting services including data delivery, gap analysis, green branding and communications, and custom research (see page 10).

The following pages summarize our findings in 2012 and outline the survey and index methodology. This year, we are pleased to share results from our green city survey for the first time (see page 9). We want to thank our new partners, Eco-Business and Solimar International, whose collaboration greatly expanded the survey's reach.

We hope this report is useful and look forward to hearing your feedback.

Sincerely,

Jeremy Tamanini

Founder, Dual Citizen Inc. Jeremy@dualcitizeninc.com

METHODOLOGY

This 3rd edition of the Global Green Economy Index is a comprehensive measure of both perceptions and performance of the largest national and city green economies.

THE **27 NATIONS** WE TRACK COMPRISE OVER **90%** OF THE GLOBAL GREEN ECONOMY:

Argentina	Iceland	Norway
Australia	India	South Africa
Brazil	Indonesia	South Korea
Canada	Israel	Spain

China Italy Sweden
Denmark Japan Turkey

Finland Mexico United Arab Emirates

France Netherlands United Kingdom
Germany New Zealand United States

CITIES TRACKED

We measure the following urban areas associated with the 27 nations in the GGEI: Abu Dhabi, Amsterdam, Auckland, Beijing, Berlin, Buenos Aires, Copenhagen, Delhi, Helsinki, Istanbul, Jakarta, Johannesburg, London, Madrid, Mexico City, New York, Oslo, Paris, Reykjavik, Rome, São Paulo, Seoul, Stockholm, Sydney, Tel Aviv, Tokyo, Toronto.

PERCEPTION SURVEY

From April to July 2012, we polled thousands of non-governmental practitioners working in climate change policy, cleantech (venture, private equity and within firms), carbon markets, think tanks, academia, and sustainable tourism. We allowed respondents one response to the survey and they received no financial incentive to participate other than a complimentary report.

SURVEY RESULTS

We received **1,440** responses to the survey from a highly diverse international sample representing a wide range of perspectives on the global green economy. Our sample represents **73** different countries, with approximately:

30% 25% 25% 20% China, Brazil & Latin America & India

INDEX DESIGN

The 2012 GGEI features both perception survey data and performance index data for the categories listed below. The index weightings result from polling and a series of interviews with practitioners working in the green economy.

NATIONAL GREEN PERFORMANCE INDEX

CATEGORY	INDICATOR	WEIGHTING	DESCRIPTION / SOURCE
LEADERSHIP	Head of State	15%	Head of State's advocacy for green issues Google Trends/Analytics, Dual Citizen Inc. Research
15%	Media Coverage	10%	Positive media coverage of national green economy Google Trends/Analytics, Dual Citizen Inc. Research
	International Forums	55%	National positions & statements in international forums Earth Negotiations Bulletin, Climate Action Network (ECO), UNFCCC Reporting
	International Aid	20%	Commitment to sustainability in aid programs Commitment to Development Index (Center for Global Development)
POLICY	Commitment to Renewable Energy	20%	Current/2020 renewables share of final energy Eurostat; National Reporting
35%	Clean Energy Policies	25%	Adoption of best practice policies Scored by Dual Citizen Inc. on scale of 0-10
	Emissions	40%	National emissions trending 2012 Environmental Performance Index (Yale)
	Renewable Energy Goals	15%	Progress towards renewable goals Eurostat; National Reporting
CLEANTECH	Investment Volume	30%	Recent investment volume in clean energy Who's Winning the Clean Energy Race? (Pew)
35%	Cleantech Commercialization	30%	Business climate for cleantech commercialization Cleantech Group reporting, Cleantech matters (Ernst & Young)
0070	Cleantech Innovation	30%	Business climate for cleantech innovation Global Cleantech Innovation Index (2012), The Clean Energy Patent Growth Index (201).
	Investment Facilitation	10%	Strength of green investment & export promotion Scored by Dual Citizen Inc. on scale of 0-10
SUSTAINABLE TOURISM	Travel & Tourism Competitiveness	45%	Country competitiveness in sustainable tourism Travel & Tourism Competitiveness Report (WEF)
15%	Accreditation Schemes	45%	Presence & strength of national schemes Destinet, Dual Citizen Inc. Research
. 3 / 0	Ministry Evaluation	10%	Strength of green tourism promotion Scored by Dual Citizen Inc. on scale of 0-10

TOP GREEN REPUTATIONS

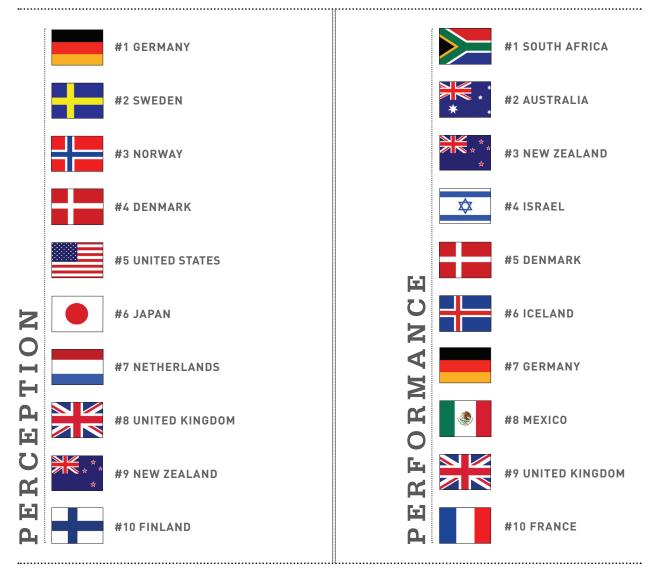
As in 2010 and 2011, Germany and Denmark top both the perception and performance measures in the GGEI, solidifying their leadership position in the global green economy.



- Despite financial upheaval in the Eurozone, Germany and Denmark have remained committed to green growth, realizing strong results on every dimension of the GGEI.
- Italy's #3 overall result suggests that a relatively strong policy framework combined with robust cleantech investment may carry Italy's green economy through an otherwise turbulent period.
- Perceptions of the United States and China remain strong as incremental improvements in each nation appear to outweigh the continuing lack of a binding commitment to emissions reductions.



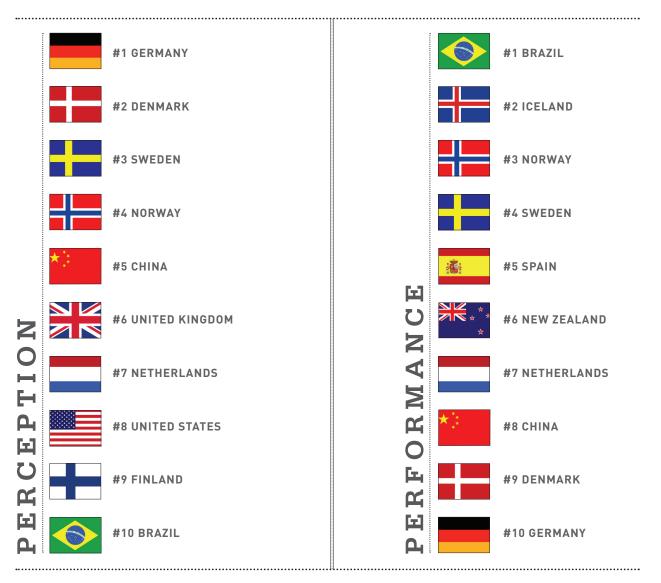
Although many government officials are green leaders, they are not recognized as such beyond their borders. This can impede progress both domestically and internationally.



- Four northern European countries continue to consolidate their leadership in the global green economy as institutions and individuals there proactively brand themselves green.
- Although South Africa got a big boost in our performance index after hosting COP17 in Durban, its green reputation did not improve commensurately.
- Smaller economies like New Zealand, Iceland, and Israel illustrate that size is not everything and nations with vocal advocates for green growth can break through.



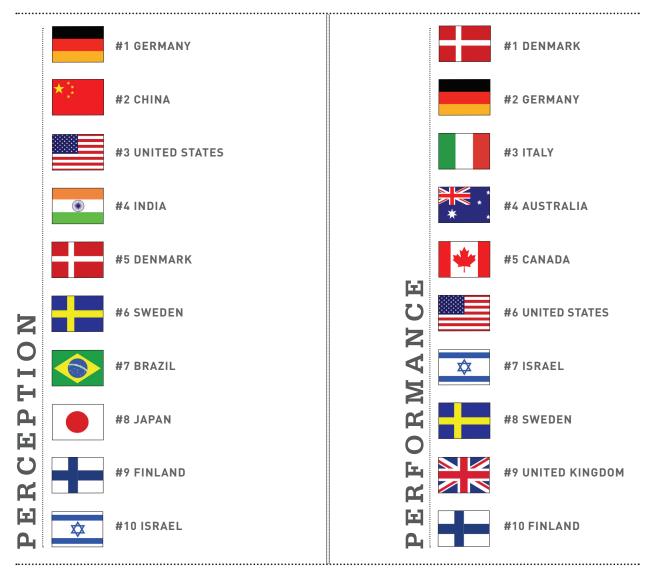
As in other areas the GGEI covers, global perception of domestic policy frameworks often had little to do with their actual impact, and several countries did not receive the recognition they deserve.



- Actively articulating 2020 renewable energy goals appears to pay off in terms of perception, but the actual pace of progress towards reaching them is uneven at best.
- Nations with a high reliance on renewable energy sources today perform well in our index, as do nations with concrete success at lowering their overall and per capita greenhouse gas emissions.
- Experts polled credit the world's largest economies with having the right policies in place to promote sustainable development, but many of these nations have failed to show significant emissions reductions.



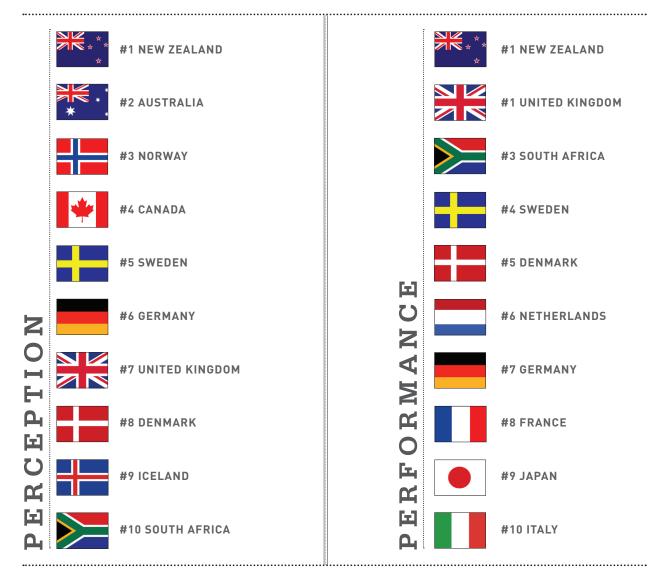
Perceptions often drive investment decisions. However, as the table below shows, there are significant gaps between how cleantech markets perform and how that performance is perceived.



- Large markets with economies of scale continue to top our perception rankings, but smaller nations including Denmark, Sweden and Israel are gaining recognition.
- Despite Italy's economic challenges, its clean energy investment in solar soared in 2011; similarly UK investment rebounded with a growing focus on offshore wind.
- Cleantech markets with high levels of investment did not necessarily exhibit strong evidence of cleantech innovation and commercialization.



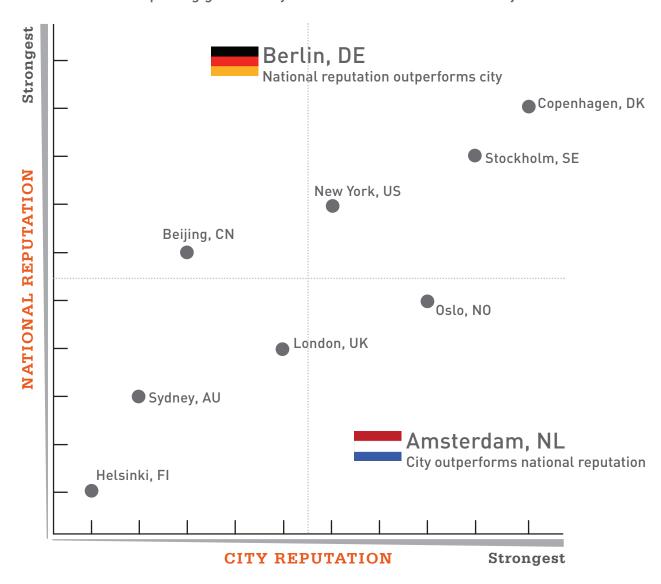
Government efforts to promote sustainable tourism are vital to green economic growth. New Zealand topped both the perception and performance rankings for the third year in a row.



- The United Kingdom is tied with New Zealand at the top of our performance index but remains underrecognized by experts for its merits in the realm of sustainable tourism.
- Most nations we cover have failed to formalize green tourism accreditation schemes, reinforcing the notion that "sustainable tourism" is abstract and hard to quantify.
- Most nations do not emphasize sustainable tourism adequately through their national tourism websites, representing a missed opportunity to attract this growing sector of travellers.

TOP GREEN CITIES

Cities are drivers of sustainable solutions and their leaders can often be more vocal advocates for green growth than their national counterparts. Understanding the relationship between city and national green reputations is critical to communicating a coherent and compelling green story to the international community.



- City and national green reputations are relatively correlated among the leading Nordic nations while perceptions of Berlin and Amsterdam diverge from their national reputations.
- Perceptions of green cities generally match the results of the Siemens Green City Index, suggesting that perceptions and performance of cities may be more closely correlated than is the case for countries.
- While cities are critical players in the green economy, the lack of uniform, city-level data and reporting impedes efforts to analyze and improve upon their performance.

WORKING WITH OUR CLIENTS

Dual Citizen developed the Global Green Economy Index to demonstrate the customized data and analysis we bring to bear in helping stakeholders improve their international branding and communications programs. Our goal is to help clients better understand their strengths and weaknesses and adapt their planning and communications strategies accordingly.

We tailor each client engagement around four areas of consulting:

→ DATA DELIVERY

A report delivering the full perception survey and index results for 27 nations and cities highlighting client's standing. This data empowers clients to track their position in the global green economy and realize actionable insights where gaps exist between perceptions and actual performance.

→ GAP ANALYSIS

An in-depth gap analysis assessing areas where perceptions underperform performance for both nations and cities -- with customized recommendations for employing branding and communications to bridge these gaps and advance green economic growth.

→ GREEN BRANDING AND COMMUNICATIONS

On-site consulting designed to translate the findings from GGEI to branding and communications initiatives managed by client teams, government ministry leadership, sector investors, cleantech clusters, and other stakeholders.

→ CUSTOM RESEARCH

Custom research to complement existing index values with desk research and interviews pertinent to client engagement, drawing on our extensive knowledge of the most relevant reporting and data sources in the marketplace.

PARTNERS



Solimar International is a sustainable tourism consulting and marketing firm that helps businesses, travelers, and destinations develop and connect to sustainable tourism experiences, the goal being to catalyze economic development, support environmental conservation, preserve cultural heritage, and enhance the lives of local residents.

The sole aim of Solimar's team of talented professionals is to develop and deliver innovative solutions to government agencies, NGOs and private sector bodies at the national and city levels. Solimar's diverse educational and industry backgrounds make them one of the most experienced groups of sustainable tourism specialists dealing with climate adaptation, green economic growth and cleantech. For more information, please visit www.solimarinternational.com.



Eco-Business.com is the leading provider of news and views for Asia Pacific's sustainable business community. Launched in 2009, it is the first of its kind dedicated to serve this region. It publishes the top stories, features, analyses and insights into the region's environmentally sustainable business scene, to keep readers informed and enable organizations to make educated decisions.

In March 2011, Eco-Business.com unveiled a new groundbreaking, innovative platform that further connects this community. Through this platform, policymakers and civil servants now have direct access to businesses that provide the solutions they are looking for. Sustainability professionals can get in touch with each other and share insights on the best practices in their field. For more information, please visit www.eco-business.com



The Global Green Economy Index (GGEI) is produced by Dual Citizen Inc., a Washington DC – based consultancy providing governments and international organizations with analytic tools and strategic communications consulting to advance their economic and policy agendas. Notable publications this year highlighting the GGEI include the United Nations' "Road to Rio+20" and the 2012 Place Branding Yearbook, to be published later in 2012 by Palgrave Macmillan.

Jon Varriano designed the GGEI with production support from David DeParolesa and copywriting by Chris Marquardt of Euphonist Editorial Services. In addition to this product, we will soon be introducing a social media analysis tool tailored to clients with a focus on policy communications, investment promotion and digital diplomacy. For more information, please visit www.dualcitizeninc.com.