



## **GOLD STANDARD**

Supply Report Q2 2016

*Better information for better  
decision-making*





## INTRODUCTION

### *About this report*

This report is a response to feedback we received from our Transparency Initiative launched in 2015 as a way to increase confidence and participation in carbon markets and aims to improve access to market information for planning and decision-making.

Published quarterly, the report provides up-to-date issuance and retirement data for Gold Standard emissions reduction projects. It also features information and articles that help build clarity around the complexities of the market, especially in regards to pricing and how it varies from project to project.

We hope you find this report insightful and we welcome any comments or feedback to help us continue improving.

[info@goldstandard.org](mailto:info@goldstandard.org)







# CARBON PRICING:

## *Why prices vary by project type?*

Investing in climate and development projects is a powerful way to contribute to the transition to a low-carbon, climate secure world. However, it can seem complex – especially answering what appears to be a simple question of how much you should pay for a carbon credit. While your carbon provider can guide you through the process, this series of articles aims to provide some clarity in how carbon credits are valued, taking into account the differences among the projects that issue them.

In the last edition of this [report](#)>> we discussed the different ways to value a carbon credit, whether by using market dynamics as a guide, pricing a project based on its cost or based on the value that a project delivers. However, pricing also varies based on the project type and can even vary within the same type of projects (see figure 1). This article highlights some of the reasons for this difference, outlining the key factors that should be considered when purchasing carbon credits.

### Value of beyond-carbon benefits

While all Gold Standard projects must deliver impacts in sustainable development beyond climate security, different project types provide different levels of benefits. For example, a large-scale wind project based in Turkey provides more country level benefits such as better access to clean technologies, local employment opportunities, more energy independence and increased social stability. Whereas an improved cookstove project based in Rwanda benefits people at a community level. It decreases indoor air pollution, improving health predominantly among women and children. Less wood is required helping to decrease deforestation and saving families money, and less time is needed for collecting wood providing

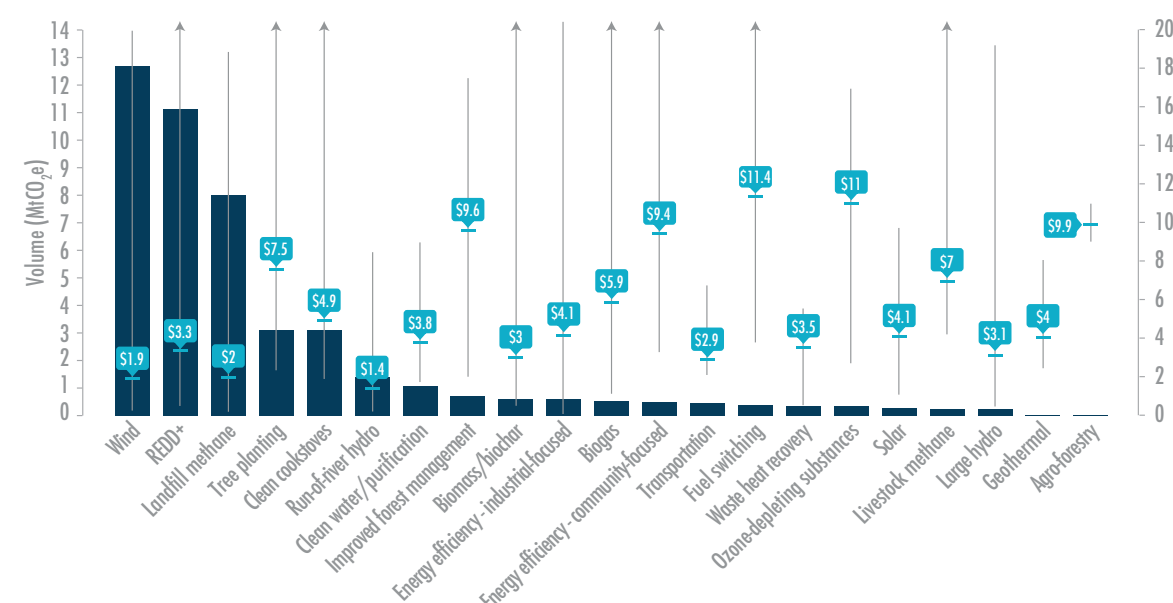
more opportunities for schooling and social activities.

Although the sustainable development benefits delivered by wind projects are also important, often carbon credits from cookstove projects will sell at a higher price. This is due to the value over and beyond carbon that a project delivers, the tangibility of these benefits and that many investors feel they can make more of a direct impact at a community level. For example, if you look at the outcomes from the impact report we commissioned (see figure 2), you can see that although wind projects provide more value in the balance of payments – i.e. the value created from reducing the amount of fossil fuel imports - the additional value it provides is just \$21 per tonne of CO<sub>2</sub> reduced. Compare this to cookstove projects that deliver \$151 in additional benefits and you can see that by investing in the same product (i.e. a carbon credit), you can make more of a direct impact on the lives and health of vulnerable communities. This greater value normally correlates to a higher cost per credit.

### Size and location of the project

The size of the project can be important when considering the cost of the credit issued. In many cases it's the

fig. 1: Transacted volume, average price and price range by project type, 2015



Source: [Ecosystem Marketplace - State of the Voluntary Carbon Market Report 2015](#)

small-scale projects that contribute the greatest positive impacts, however, these smaller projects are often more expensive to implement and produce fewer carbon credits, making it harder to reimburse the implementation costs unless the credits are sold at higher prices.

Project location can also be a deciding factor that affects price. For some countries it is difficult to implement emission reduction projects due to a lack of infrastructure, resources, or because they are considered high risk, such as those regions that suffer from conflict. However, it is often these regions that benefit the most from the implementation of climate and development projects. Tools and mechanisms have been developed to help increase the number of projects in such regions, however, to make these worthwhile within a carbon market, credits would need to be sold at a higher price.

Also, prices can vary due to the availability of credits from a particular country, for instance according to the latest State of the Voluntary Carbon Market Report published by Ecosystem Market-

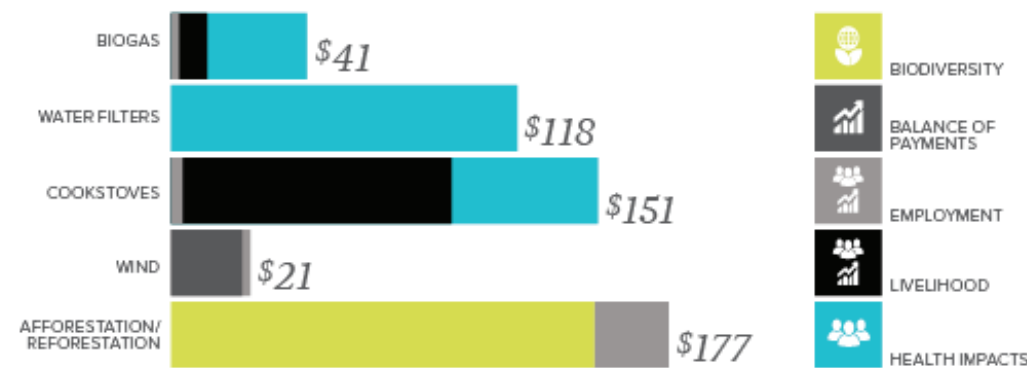
place, carbon credits from wind projects based in India (which are in abundance) sold at an average of \$1.2/tonne compared to those originating from the US, which typically sold for \$3.7/tonne.

And finally, the price a buyer is willing to pay can depend on their organisation's objectives and key priority areas. For example, some companies may pay more for a project that is closely linked to their supply chain or based in a priority region for their Corporate Social Responsibility (CSR) commitments.

### Project vintage

Another market trend that affects pricing is the age of the carbon credits; that is, when the emission reduction took place. Gold Standard maintains that – as long as it meets the criteria of a reputable standard - it shouldn't matter whether the emission reduction happened now or two years ago. In fact, because of the urgency of decarbonisation and the long-lasting impacts of carbon emissions in the atmosphere, one could argue that an emission avoided five years ago is even more crucial. Still, market dynamics sometimes show low-

fig. 2: Monetary value of Gold Standard project impacts per ton of reduced CO2 emissions



er prices for an emission reduction with an older vintage. This can be an opportunity for organisations to purchase less expensive carbon credits with older vintages from charismatic projects rather than buying cheaper but more recent vintages from other standards that lack the associated sustainable benefits.

### Differences in emission reduction methodologies

Prices can vary within the same project type and this can often be related to the methodology used for the project. For example, referring again to Ecosystem Marketplace's State of the Voluntary Carbon Market Report, offsets from avoided "unplanned" deforestation projects (where the drivers of deforestation are typically smallholder agriculture or illegal logging) earned higher prices (\$5.4/tonne, on average) compared to avoided "planned" deforestation projects (\$1.9/tonne, on average), where the driver of deforestation (typically a large landowner or company) has a legal clearing plan that is then voluntarily altered.

### Quality of the project

Like with any purchase, a key factor that influences the price is the quality of the project. In carbon markets, a project's quality can be assessed through the standard by which it is certified. Gold

Standard works to ensure that every dollar invested into a project delivers the maximum amount of benefits from both a climate and development perspective. We do this by insisting that projects take a participatory approach to design through local stakeholder engagement -- empowering them to maintain and extend the project for greater impact. Projects must adhere to environmental and social safeguards. Governance is transparent. And outcomes are long-term, consistent and comparable, providing assurance that everything claimed is real and quantifiable. It's because of this approach that we are supported by a Technical Advisory Committee of leading experts and endorsed by a network of 80+ NGO Supporters, ensuring that projects certified to Gold Standard are of the highest quality -- reducing risk for anyone wishing to purchase carbon credits. However, like anything of quality, this rigour comes at a price, which is why Gold Standard carbon credits are often sold at a premium compared to other credits in the market.

### Economies of scale and good communications

There are other factors that are not directly related to the project itself, but can affect the price paid for carbon credits. One such example is the number of credits purchased. Larger organisations that have a significant footprint

can sometimes benefit from economies of scale when purchasing large quantities of carbon credits in one-go, as project developers or retailers are able to sell at a discounted price, due to the certainty that such a purchase provides to the project.

And finally, buyers are often willing to pay more for a project if additional services are provided, such as access to communication assets (e.g. clear project details and professional project photography) or strategies that help an organisation to successfully communicate the impact they've made to their stakeholders and clients.

Valuing a project is always somewhat subjective, based on an organisations ideals, objectives and requirements. Much like the real estate market, being aware of the value a project delivers, its size, location, age and quality will help

organisations to find the right projects to meet their objectives both in price and impact.

### Transparency in pricing

Currently, disclosure of the price you pay for carbon credits is optional. As a result, historical data for prices of credits in the voluntary carbon market has relied primarily on Ecosystem Marketplace's annual State of the Voluntary Carbon Market. We believe that more transparency in this market and greater access to data will build confidence and enable more money to flow to those projects and people that need it the most.

Visit our [website>>](#) to learn more about our Climate Finance Transparency Initiative.

fig. 3: How rigour in project design leads to greater impact







## MAKE AN IMPACT

*With our Gold Standard projects*

There are a number of different considerations ranging from quality, type, size, and geographical location, when deciding on what projects to invest in and how much they're worth. The following pages provide just a couple of examples of how our projects are contributing to both climate change and the Sustainable Development Goals.







## Hifadhi – Livelihoods efficient cookstoves project in Kenya

Financed by the Livelihoods Carbon Fund and co-developed by Climate Pal and EcoAct, the Hifadhi project was launched in the Embu District to provide a more sustainable cooking solution to households and decrease deforestation. The objective is to equip 60 000 households with clean cookstoves, positively impacting the lives of 300 000 people in rural communities.

### Project Impacts

- Provides clean cooking solutions to 60,000 households
- Decreases deforestation and provides seedlings for households to cultivate their own fruit, fuel wood and medicinal trees
- Wood use and harmful smoke are reduced by more than 50%
- Women and children benefit from improved health and more time + money
- Technology is produced locally and subsidized by climate finance, helping the local economy whilst making it affordable for rural populations
- Employs 30 local workers to build the cookstoves
- Raises environmental awareness

### What's the project worth?

- Based on cost and according to Fairtrade, the MINIMUM price should be 8.20€
- Based on value delivered, a credit from a Gold Standard Cookstove project provides \$151 in additional benefits beyond carbon



When you invest in this Kenyan project, you are:

- Positively impacting the lives of 300 000 people
- Preserving the equivalent of 1200 hectares from deforestation
- Significantly reducing the number of people suffering from respiratory illness
- Empowering women through community based training
- Enabling children to focus more on educational activities





## Electricity generation from mustard crop residues in Tonk, India

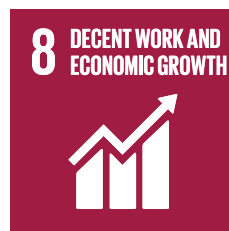
This project uses mustard crop residue, which is abundantly available in the vicinity of the site, to generate power that is sold to the national grid. The crop residues are supplied by local farmers, generating an additional income for them and their families. The electricity generated is exported to the northern regional grid, replacing a mixture of coal and gas based power generation, and thus reducing greenhouse gas emissions.

### Project Impacts

- 227,000 tonnes of CO2 emissions have been avoided
- Last year the power plant generated 53 GWh of renewable electricity, avoiding more than 42,000 tonnes of CO2
- 5,000+ farmers benefit from additional income by supplying the power plant with their mustard crop residues every year
- 49 permanent and 142 temporary employees work in the power plant
- Employees have the opportunity to participate in 33 professional training courses on topics from first aid to sustainable water treatment, whilst making it affordable for rural populations

### What's the project worth?

- Based on cost and according to Fairtrade, the MINIMUM price should be 8.10€
- Based on value delivered, a credit from a Gold Standard biogas/biomass project provides \$41 in additional benefits beyond carbon



### When you invest in this Indian project, you are:

- Avoiding emissions equivalent to taking 48,000 cars off the road for one year
- Diversifying the energy mix for India, helping the transition to a low carbon economy
- Enabling 5,000+ vulnerable households to benefit from additional income
- Providing much needed job opportunities to nearly 200 people
- Helping local communities to benefit from increased knowledge transfer





## GOLD STANDARD

### *Supply Report*

This section of the report provides our up-to-date supply data for Q2 2016. For historical data, please refer to previous editions of this [report](#)>> The report also provides our project issuance projections for the next three months.





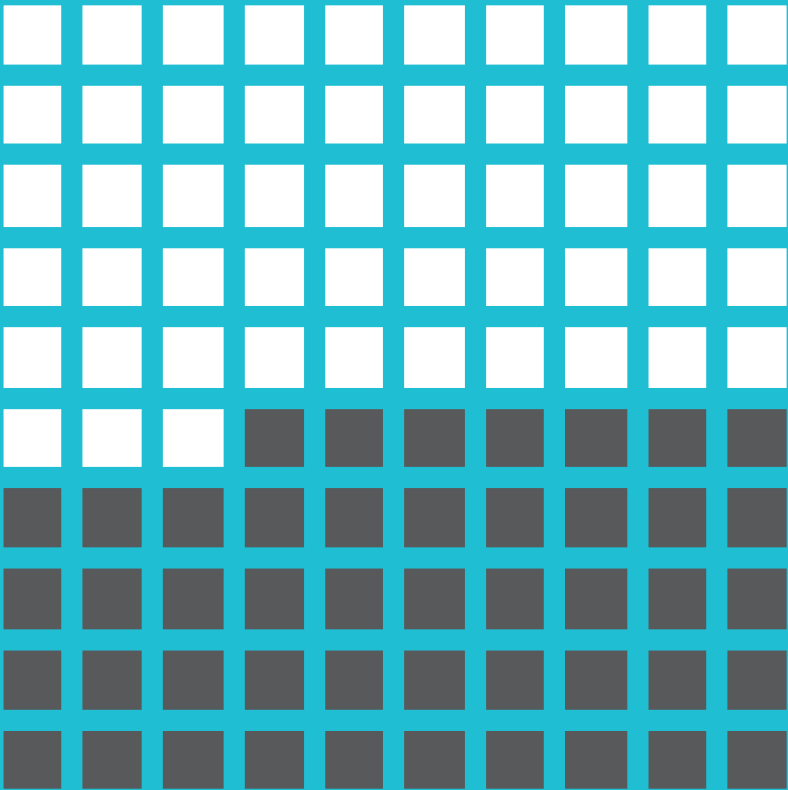
# 7 GOLD STANDARD OVERALL

*Issuances + retirements*

We have 1300+ projects in our pipeline with a potential to save more than 9 billion tonnes of CO2 per year. To date, Gold Standard projects have saved nearly 59 million tonnes of CO2 from being released into the atmosphere – the equivalent of driving around the world 5.7 million times in a car. Figure 1 provides an insight into the total supply and demand for Gold Standard Verified Emission Reductions (VERs). Just over half of our total issued VER credits have been retired.

Fig. 4

**27 million** GS VERs retired in total



**51 million** GS VERs issued in total







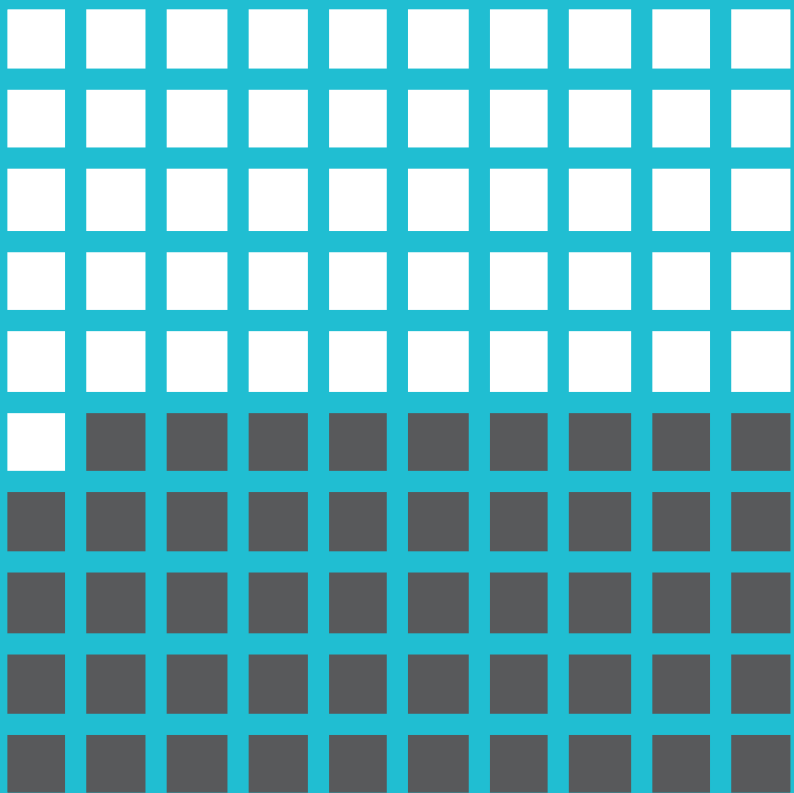
# Q2 2016

## Issuances + retirements

Figure 5 shows the supply and demand for Gold Standard VERs for Q2 2016. While more credits have been retired this quarter, compared to Q1 2016, there has been an unexpected surge in issuances from cookstove projects. This quarter, nearly 3 million cookstove credits have been issued into the market, with over 90% of the credits coming from just three projects (see figure 6 for more information).

Fig. 5\*

2 million GS VERs retired in Q2 2016



3.9 million GS VERs issued in Q2 2016

\*This graphic is for guidance only to give an indication of the market for Gold Standard credits. There may not be a direct correlation between retirements and issuances - i.e. retirements could have be made against projects issued in previous quarters.

## Q2 2016 issuances + retirements

Table 1 shows how many emission reductions were issued this quarter compared to Q1 2016. In total, 45 projects issued nearly 4.7 million carbon credits or validated A/R certificates in Q2 2016. The table also shows the VER retirements for the same period. Retirements ranged from corporations such as Eneco, Microsoft Corporation, Marks & Spencer, COOP and World Bank. It also included Sustainable Brands Conference Istanbul 2016 and the new [cool effects website](#) which aims to simplify the process for reducing carbon pollution.

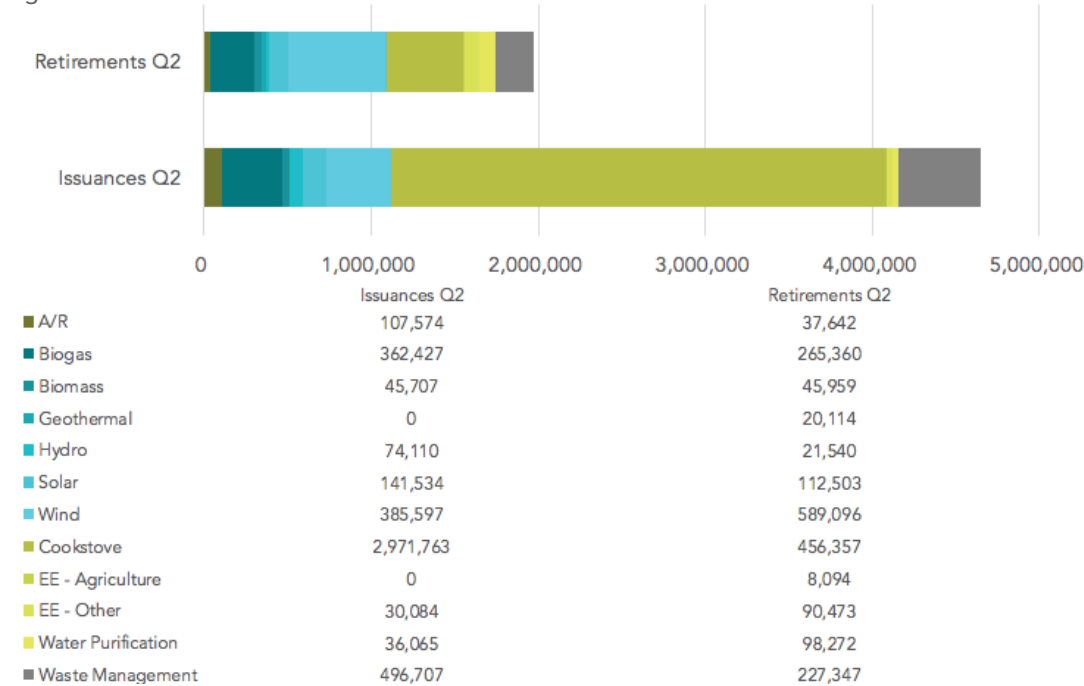
Table 1

	Q1 2016	Q2 2016	% Difference
Issued CERs	609,042	707,364	+16%
issued VERs	1,877,384	3,869,568	+106%
Validated A/R VERs	45,230	74,636	+65%
Total Issuances	2,531,656	4,651,568	+84%
Total VER Retirements	1,879,526	1,972,757	+5%

## Q2 2016 issuance + retirement volumes by project type

Figure 6 tracks the issuance and retirement volumes by project type for Q2 2016. There has been a larger issuance than expected from cookstove projects. More emission reductions from wind, water purification and energy efficiency projects, such as household lighting, were retired than issued.

Fig. 6



## Q2 2016 retirement volumes by location

Table 2 provides some insight into which regions retired credits from which countries in Q2 2016. Projects based in Africa or Asia received the most retirements.

Table 2

From ↓ To →	America	Asia	Europe	Oceania	Grand Total
Africa	29,068		506,802	8,128	543,998
America	720		15,496		16,216
Asia	27,452	5,309	1,027,344	287,071	1,347,176
Europe			1,200		1,200
Oceania			11,670	52,497	64,167
Grand Total	57,240	5,309	1,562,512	347,696	1,972,757

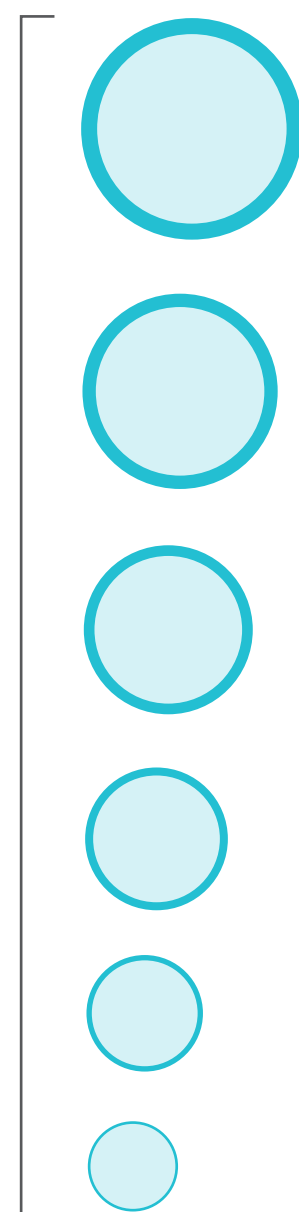


# Q2 2016 issuance volumes by location

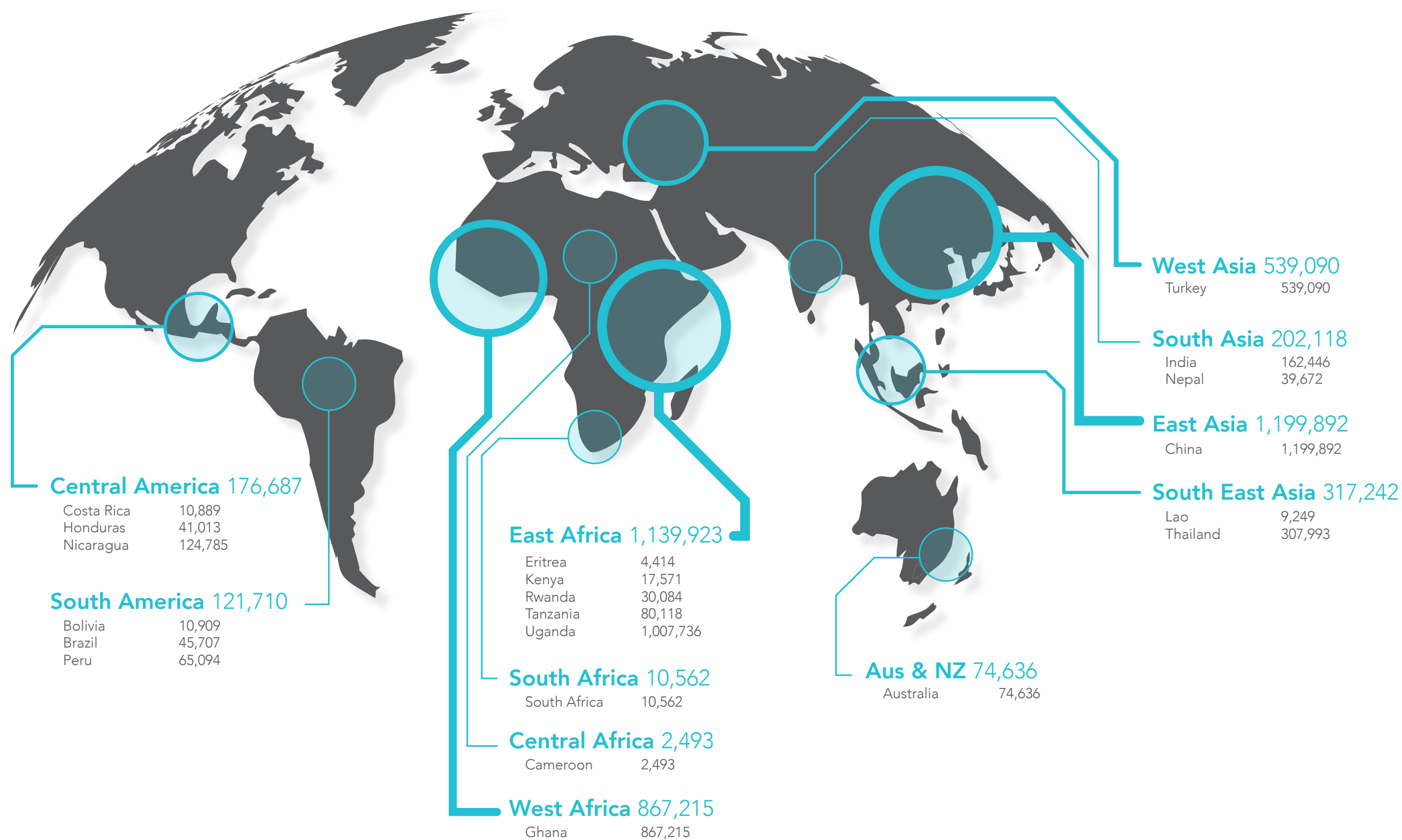
In Q2 2016 we issued carbon credits from projects based in 21 different countries around the world, 6 more countries in comparison to the previous quarter. The graph below provides an overview of where these issuances took place.

Fig. 7

> 1 million



< 100 thousand



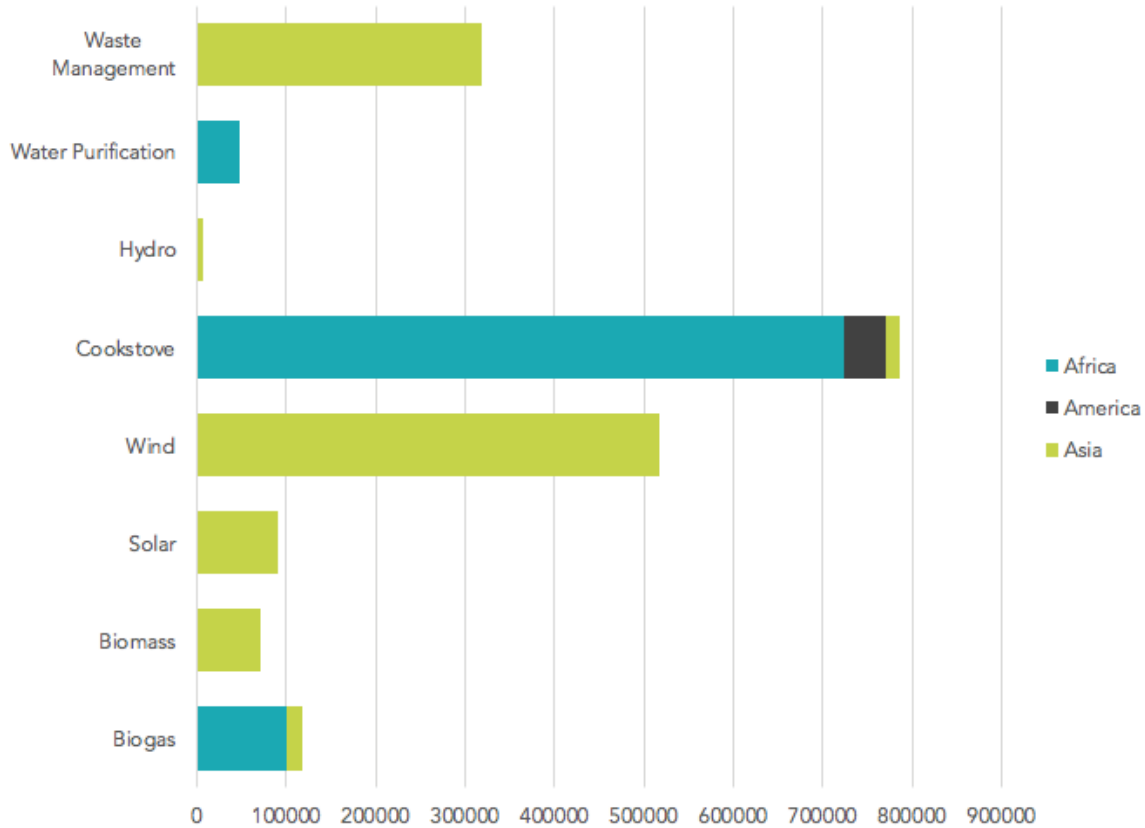




Gold Standard projections for Q3 2016

We issued more projects than expected in Q2 2016, with cookstoves projects issuing three times more than was estimated. Over the next three months, approximately 40 projects are expected to issue just under 2 million emission reductions, of which 40% are cookstoves, 26% wind and 16% waste management. Figure 8 provides a breakdown of these activities by project type and location.

Fig. 8



Projected projects for Q3 2016

Table 3

Project Type ↓ Region →	Africa	America	Asia	Grand Total
Biogas	100,158		18,356	118,514
Biomass			70,672	70,672
Solar			90,204	90,204
Wind			516,437	516,437
Cookstove	722,764	47,681	14,716	785,161
Hydro			6,912	6,912
Water Purification	47,288			47,288
Waste Management			317,440	317,440
	870,210	47,681	1,034,737	1,952,628

We hope you find this data of value, we would like to evolve and improve this report over time and welcome your comments or suggestions.

Please send any feedback to Claire Willers at [info@goldstandard.org](mailto:info@goldstandard.org).