

**VOLUNTARY CARBON MARKET**  
**Quarterly Update**  
**Q3 2021**

**05/10/2021**

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## About Trove Research

Trove Research is a specialist data, analysis and advisory firm focused on climate policy, carbon markets and the energy transition. The firm's expertise builds on 30 years' experience across research, consulting, strategy and industry M&A. We combine deep sector knowledge with leading edge analytical and forecasting tools to provide clarity and insight.

Managing the transition from an economy based on fossil fuels to one powered by clean energy is a unique global challenge, requiring unprecedented levels of investment and international coordination. Trove Research has the experience to help clients navigate the disruptions and opportunities that these changes will create.

## About Trove Intelligence

Our Trove Intelligence platform provides the data and analysis needed by corporates, investors, traders, developers and governments to navigate the increasingly complex world of voluntary climate commitments and their use of carbon credits.

The platform is built around four key data pillars – policy landscape, corporate climate commitments, carbon credit projects & transactions, and carbon credit prices – as well as a searchable database of corporate climate news articles. Together, these pillars make up the world's most comprehensive source of news, data and analysis on corporate climate commitments and the voluntary carbon market.

For more information and to enquire about subscription options contact: [info@trove-research.com](mailto:info@trove-research.com)

This short report presents Trove Research's quarterly update of the supply of credits to the voluntary carbon market. Further analysis can be found at: [www.trove-intelligence.com](http://www.trove-intelligence.com)

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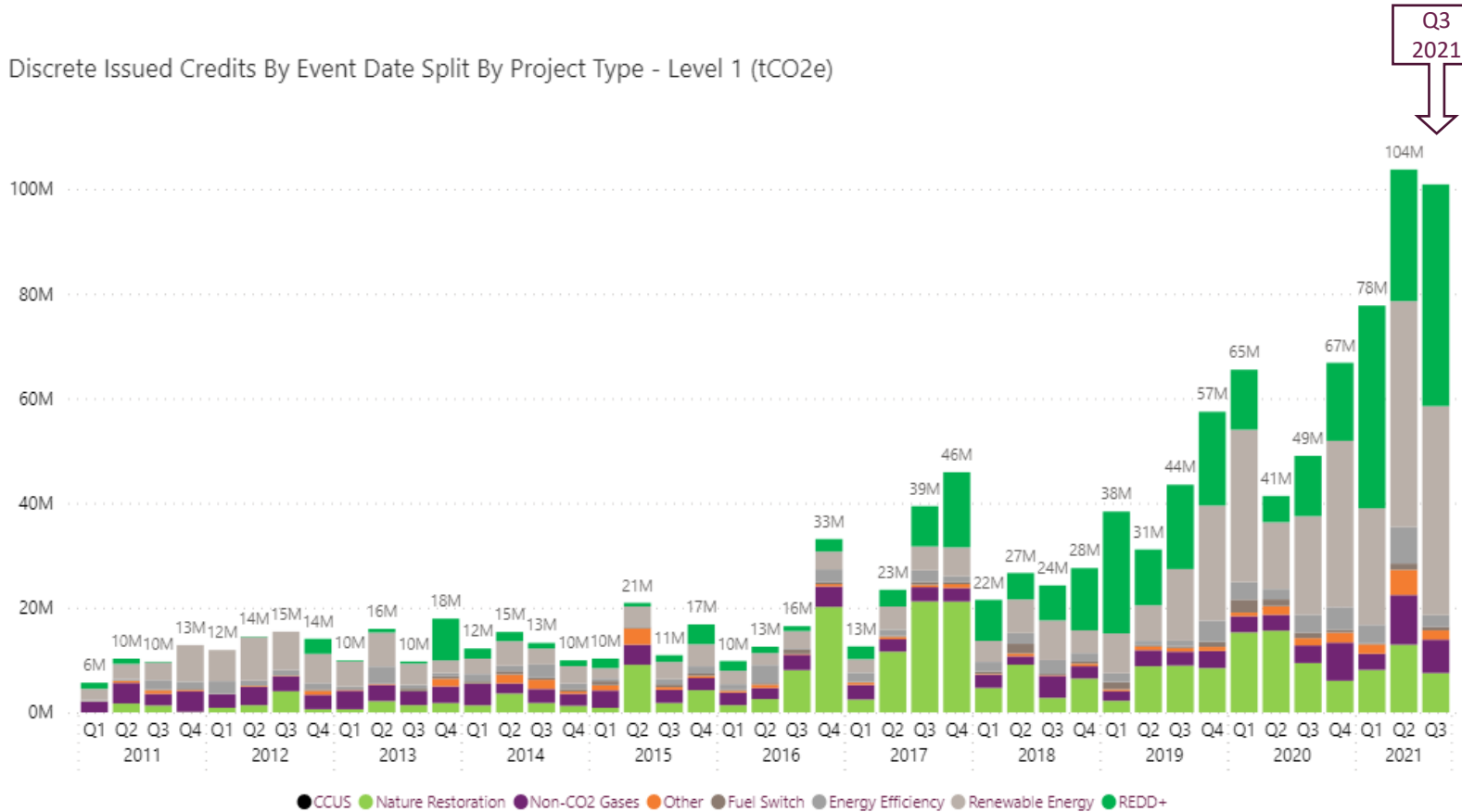
## Q3 2021 Highlights

- Second-highest quarterly issuance to date of 101Mt.
- Large increase in issuances from renewable energy projects, especially from Asia, and in particular, India.
- REDD+ and renewable energy projects dominate retirements, with both project types accounting for 77% of all retirements.
- Market surplus rises again, up 13% on previous quarter, as issuances continue to exceed retirements and cancellations. Surplus is now 4x current demand.
- Renewable energy projects now account for 38% of the market surplus.
- Early signs of a shift in demand towards Nature Restoration and geological sequestration credits.

# 1a. Carbon credit issuances by project type

## Carbon credit issuances surpass 100Mt for second consecutive quarter

Discrete Issued Credits By Event Date Split By Project Type - Level 1 (tCO2e)



Carbon credit issuances surpassed 100Mt for the second consecutive quarter in Q3 2021, representing a 106% increase on Q3 2020.

42% of all credits issued in Q3 2020 came from REDD+ projects, up from 25Mt in Q2 2021 to 42Mt – the highest number of REDD+ issuances in a single quarter to-date.

More than a quarter of all REDD+ issuances in Q3 2021 came from the Southern Cardamom REDD+ Project, Cambodia. Issued through the Verra registry, the issuances referred to emission reductions that occurred from 2015 through 2020.

Just under 40% off all issuances were renewable energy credits, amounting to 40Mt. This is the second highest issuance level of Renewable Energy credits seen in a single quarter, after Q2 2021 which saw 43Mt Renewable Energy issuances.

Nature Restoration credits – the only removal credits available today - amounted to just 7% of last quarters issuances.

Source: [www.trove-intelligence.com](http://www.trove-intelligence.com)

## 1b. Carbon credit issuances by region

### India accounted for 21% of carbon credit issuances in Q3



The Asia Pacific Region was, again, the largest issuer of credits across the quarter. The region produced 47% of total issuances, equalling the previous quarter but down from nearly 60% in Q1.

Within the Asia Pacific region, a single project - Southern Cardamom REDD+ Project, Cambodia - accounted for 26% of the quarter's issuances, amounting to 12Mt.

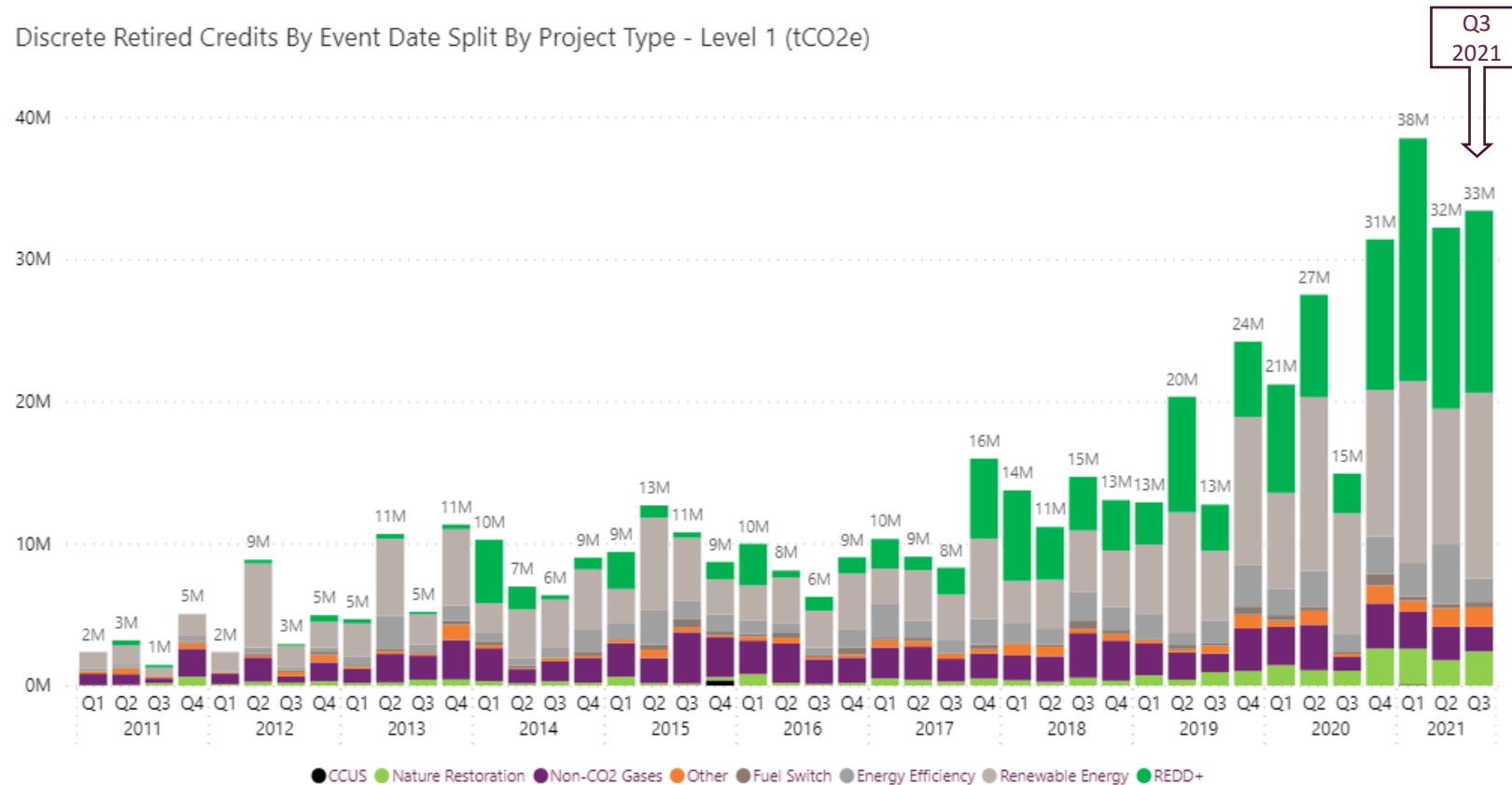
India saw its second-highest level of issuances across a quarter - totalling 21Mt - up 52% on Q3 2020. 92% of issuances in India were Renewable Energy credits, in line with its long-term total of 90%.

Brazil recorded its highest level of issuances across a single quarter - 17Mt - up 88% on the previous record of 9Mt in Q2 2021. The surge was primarily driven by the issuance of 13Mt of REDD+ credits, coming from 9 separate projects.

## 2. Carbon credit retirements by project type

By the end of Q3 2021 carbon credit retirements had surpassed the total for the year in 2020...but the rate of increase may be slowing

Discrete Retired Credits By Event Date Split By Project Type - Level 1 (tCO<sub>2</sub>e)



103Mt of retirements have been recorded in 2021, surpassing the record for a single year of 93Mt in 2020.

Q3 2021 recorded the second highest level of retirements in a single quarter at 33Mt – up from 32Mt in Q2 but down from the peak of 38Mt in Q1. This represents a 116% increase on the same period last year.

Renewable Energy and REDD+ credits continued to dominate the retirements landscape, representing 39% and 38% of all retirements across the quarter, respectively.

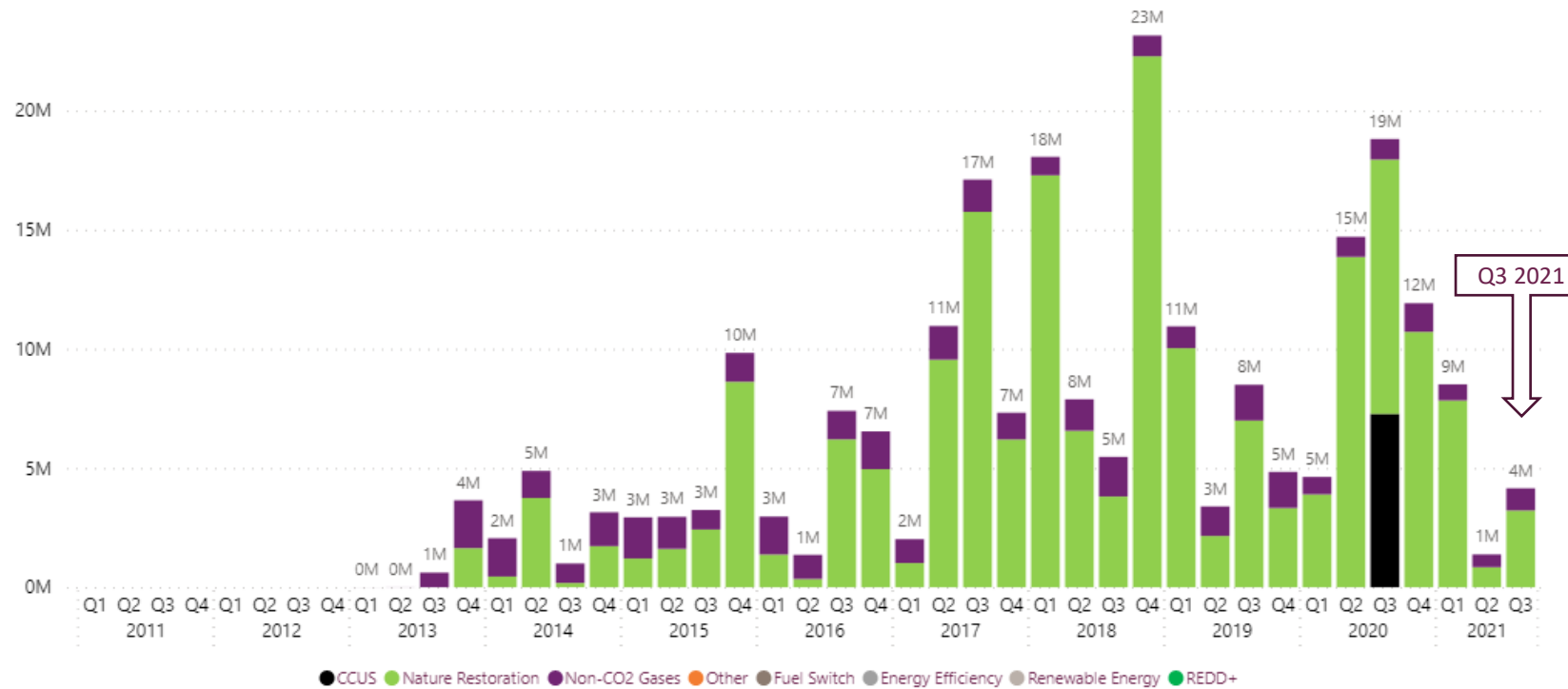
The Katingan Peatland Restoration and Conservation Project, Indonesia, saw the most retirements of any single project across the quarter with 2Mt of retirements recorded – 16% of all REDD+ retirements.

Source: [www.trove-intelligence.com](http://www.trove-intelligence.com)

### 3. Carbon credit cancellations by project type

#### Q3 carbon credit cancellations down 78% year-on-year

Discrete Cancelled Credits By Event Date Split By Project Type - Level 1 (tCO2e)



Carbon credits transferred to the California cap and trade scheme remained at a low levels, with the lowest Q3 figures recorded since 2015 - just 4Mt.

This represents a 78% decrease from Q3 2020.

The cause of the year-on-year decline was 2-fold:

- Q3 2020 saw an unusually high level of CCUS cancellations, primarily from the Salt Creek Geo-Seq project.
- Q3 2021 saw a 70% reduction in the number of Nature Restoration cancellations.

Unlike the voluntary carbon market, the California scheme restricts the use of offsets to credits from six project types: Livestock, Mine Methane Capture, Ozone Depleting, Substances, Rice Cultivation, U.S. Forests, Urban Forests.

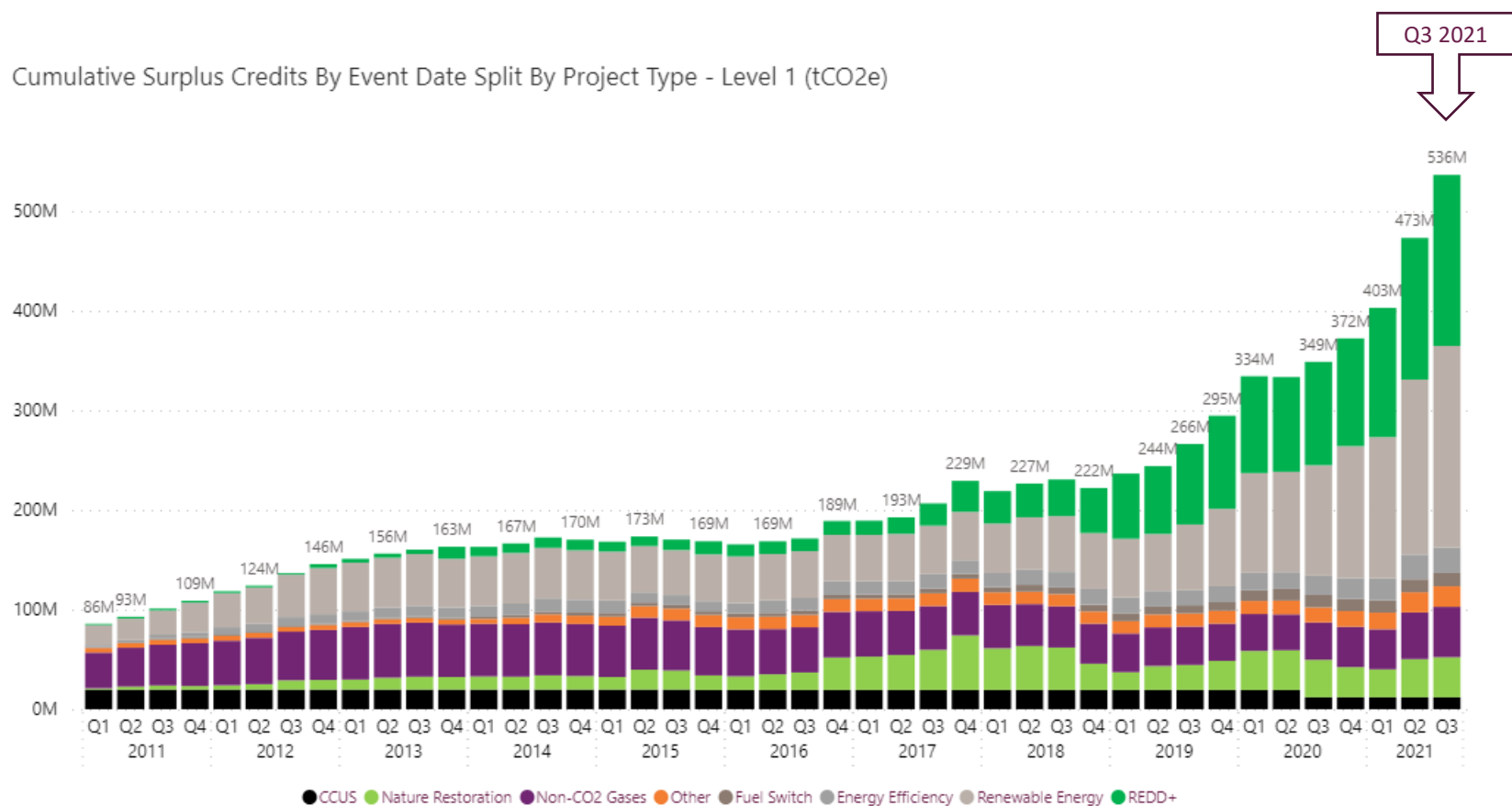
Source: [www.trove-intelligence.com](http://www.trove-intelligence.com)

Explainer: Cancellations refer to the carbon credits used in the California cap and trade scheme for compliance purposes. Entities in the scheme can use compliance offset credits to meet up to 8 percent of their compliance obligation for emissions through 2020; 4 percent of their compliance obligation for emissions from 2021-2025; and 6 percent for emissions from 2026-2030. All projects eligible for the California scheme must be from US based projects, and from 2021 onwards, at least 50% of the offsets used by an entity must be from projects that provide direct environmental benefits in the state of California.

## 4. Carbon credit surplus by project type

Market surplus continues to increase, surpassing 500Mt. This is 4x current market demand.

Cumulative Surplus Credits By Event Date Split By Project Type - Level 1 (tCO<sub>2</sub>e)



Q3 2021

The market surplus reached a new peak of 536Mt in Q3 2021, up from 473Mt in Q2 2021.

The growth in the surplus is not evenly spread across project types - REDD+ and Renewable Energy credits have seen an increase of 139Mt and 153Mt since Q1 2018, representing 92% of the increase in surplus across this timeframe.

As a result, the surplus primarily consists of Renewable Energy and REDD+ credits, which now represent 38% and 32% of the total, respectively.

The surplus of both CCUS and Nature Restoration have both declined across the same period by 38% and 27%, respectively, indicating a potential shift in demand to credits from removal projects (restoration) and geological sequestration (CCUS).

Source: [www.trove-intelligence.com](http://www.trove-intelligence.com)



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