

# Voluntary Registry Offsets Database Calculations

Each registry records issuances, retirements, cancellations, buffer pool contributions, reversals, and transitions to ARB differently. This document explains our calculations in *PROJECTS* tab by registry. You can see our equations in the rows marked with stars (\*s) in the right-most column of *PROJECTS* tab. Below we also provide column descriptions for select registry tab columns.

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Introduction	2
American Carbon Registry (ACR)	3
ACR Issuances	3
ACR Buffer Pool	4
ACR Reversals	4
ACR Retirements	5
ACR Vintage Remainders	6
REGISTRY TAB COLUMN DESCRIPTIONS	6
Climate Action Reserve (CAR)	6
CAR Issuances	6
CAR Buffer Pool	7
CAR Reversals	7
CAR Retirements	8
CAR Vintage Remainders	9
REGISTRY TAB COLUMN DESCRIPTIONS	9
Gold Standard (GS)	10
GS Issuances	10
GS Buffer Pool	10
GS Reversals	10
GS Retirements	10
GS Vintage Remainders	10
Verified Carbon Standard (VCS)	10
VCS Issuances	10
VCS Buffer Pool	11
VCS Reversals	11
VCS Retirements	12
VCS Vintage Remainders	12
REGISTRY TAB COLUMN DESCRIPTIONS	12

# Introduction

# Issuances (green and orange columns in *PROJECTS* tab)

Berkeley Carbon Trading Project tracks offset credits issued by when the reductions and removals occur (green columns by vintage year) and by when credits are issued (orange columns by issuance year). As of Version 6, issuances for ACR and CAR include only salable credits, not including credits put aside into the buffer pool, aligning with how Gold Standard and VCS report credit issuances. Also as of Version 6, issuances for ARB projects are not simply sourced from the ARB Issuances & Retirements tab, but for greater accuracy are now calculated as a sum of registry issuances, registry cancellations, and ARB issuances. Negative issuance by issuance year tallies in PROJECTS tab occur for a handful of ARB projects, and result when the year associated with credit issuance by the registry, cancellation upon transfer to ARB, reissuance by ARB, and buffer pool deductions are mismatched; for these few projects, total issuances across all years are correct even though issuances for some years appear as negative. Note that Verra's process of issuing credits differs from the other three registries. Instead of issuing all credits for a reporting period at one time, Verra allows project developers to issue credits, and pay the associated per-credit fee, in smaller batches. To align Verra issuances with the other registries, we treat all Verra credits for a single reporting period as issued if they have been approved for issuance by Verra, designated by a first issuance of credits. For this reason, our issuance totals for Verra will be shown as larger than Verra's own issuance totals.

# Retirements (blue columns in *PROJECTS* tab)

The Berkeley Carbon Trading Project tracks offset credits retired by the year in which they were retired. The entities retiring the credits are sometimes available in the registry retirements tabs. Until 2020, most ARB credits were retired in 2014, 2017, 2020, the last year of each cap-and-trade program compliance period. We include ARB's voluntary retirements and retirements for Quebec compliance in the Year Unknown column (BX), because their years of retirement are unavailable. Cancellations are included in the retirement figures except for those associated with the transfer of credits from the registry to ARB, which are included as adjustments to the issuance figures.

## Credits Remaining (red columns in *PROJECTS* tab)

Offset credits that have been issued but have not been retired are tracked by credit vintage year. As of Version 6, buffer pool credits are not included in credits remaining records.

## Buffer Pool (column R of *PROJECTS* tab)

All registries maintain a buffer pool to cover the risk that credited carbon storage, such as in forests and grasslands, is released back into the atmosphere. For each project, the buffer pool column aggregates buffer pool credits deposited across all issuance years. This column takes into account buffer pool adjustments, such as when credits are transitioned from the registry to ARB with different quantities of buffer pool deposits and when buffer pool credits are returned to the issuance pool. Buffer pool credits used to cover reversals are not deducted from the buffer pool tally. Note that not all buffer pool deposits are traceable; notably, substitute credits used to fulfill another project's buffer pool contribution requirement may not be traceable.

## Reversals (columns S and T of *PROJECTS* tab)

Column S (Reversals Covered by the Buffer Pool) tallies all reversals covered by buffer pool credits. Column T (Reversals Not Covered by the Buffer Pool) tallies all reversals not covered by the buffer pool that need to be replaced by the project proponent. Typically only "unintentional reversals", those not under the control of the project developer, are covered by the buffer pool.

#### **Cancellations**

Berkeley Carbon Trading Project records cancellations in the retirements columns with one exception. Cancellations that occur in the process of transitioning credits to ARB are considered instead as adjustments to the issuance figures. CAR and ACR have separate cancellation reports.

# American Carbon Registry (ACR)

# **PROJECTS TAB**

#### **ACR** Issuances

Total issuances by vintage (green columns) and by issuance year (orange columns).

For the associated vintage/issuance year:

- + Total Credits Issued (Column K) of *ACR Issuances* tab [ACR issuances]
- Total Credits Deposited into the Buffer Pool (Column M) of *ACR Issuances* tab [Column M includes credits issued directly to the buffer pool at the time of issuance (column N) and credits transferred to the buffer pool after issuance (column O).]

For ARB projects, issuances columns further take into account any adjustments in issuance quantity when credits are transferred from ACR to ARB:

- Quantity of Credits (Column E) of ACR Cancellations tab for ARB projects (projects listed in the ARB Issuances & Retirements tab) when account holder (column P) does not equal "ACR" (credits not held in the buffer pool) and when cancellation type (column Q) equals "Convert to ARB offset credits"
   [ACR issuances, not including buffer pool deposits, that have been canceled and reissued in the ARB registry.]
- Quantity of Credits (Column E) of *ACR Cancellations* tab for ARB projects (projects listed in the *ARB Issuances & Retirements* tab) when account holder (column P) does not equal "ACR" (credits not held in the buffer pool) and when cancellation type (column Q) equals "Removal of credits from the registry" [ACR credit adjustments of the original issuance, not including buffer pool deposits, such as credits canceled in the transition process to ARB when ARB issuance quantities differ from ACR issuances for the same reporting period.]
- + ARB Offset Credits Issued (Column I) of ARB Issuances & Retirements [ARB issuances]
- Forest Buffer Account Contribution (Column J) of ARB Issuances & Retirements [credits deposited to the ARB forest buffer pool]

#### **ACR Buffer Pool**

Total buffer pool deposits (all years together).

- + Credits Issued to Buffer Pool (Column M) of *ACR Issuances* tab [credits deposited into the buffer pool, inclusive of credits issued directly to the buffer pool at the time of issuance (column N) and credits transferred to the buffer pool after issuance (column O)]
- Quantity of Credits (Column E) of ACR Cancellations tab, for ARB projects (projects listed in the ARB Issuances & Retirements tab) when column P equals "ACR" and cancellation type (Column Q) equals "Convert to ARB offset credits" or "Removal of credits from the registry"

  [ACR buffer pool credits canceled and reissued in ARB or otherwise removed without being used]
- Credits removed from the buffer pool upon project termination not related to a reversal.
   [Cancellation of all remaining credits in the buffer pool due to early project termination, evidenced when all credits are cancelled from a project]
- + Forest Buffer Account Contribution (Column J) of ARB Issuances & Retirements [credits added to the ARB forest buffer pool]

### **ACR Reversals**

## non-ARB projects

The American Carbon Registry has no unintentional reversals to date.

**Intentional** reversals can be compensated from credit deductions from past and future issuances by the project or the cancellation of other credits. These are included under *PROJECTS* tab column T (Reversals Not Covered by Buffer Pool) and also included in *PROJECTS* tab retirement columns.

- + Quantity of Credits (Column E) in *ACR Cancellations* tab when cancellation type (column Q) equals "Compensation for Intentional Reversal"
- + Quantity of Credits (Column E) in *ACR Cancellations* tab when cancellation type (column Q) equals "Removal of credits from the registry" and vintage (column C) is the same vintage of the credits canceled from the buffer pool
- + Quantity of Credits (Column E) in *ACR Cancellations* tab when cancellation type (column Q) equals "Compensation for Early Project Termination" and the early termination is due to an intentional reversal

Credits compensated over time by future issuances are not traceable.

## ARB projects in the ACR registry

Reversals are identified in Column B (CARB Issuance ID) of *ARB Issuances* & *Retirements* tab when issuance ID is listed in the format "CAFR####-(reversal)".

Unintentional reversals are covered by the buffer pool and are identifiable as "unintentional reversals" in column AD (Comments) of *ARB Issuances & Retirements* tab.

Intentional reversals are not covered by the buffer pool and are identifiable as "intentional reversals" in column AD (Comments) of *ARB Issuances* & *Retirements* tab. Intentional reversals must be compensated in full with replacement credits by the project developer.

These reversals are accounted into *PROJECTS* tab retirement columns as their compensations are retired in similar fashion to normal retirements.

#### **ACR Retirements**

Total retirements (by retirement year) plus total cancellations (by cancellation year). The retirements columns only include cancellations that are not associated with the transition of credits from ACR to ARB, since those cancellations are already accounted for as adjustments to quantities issued. Cancellations from the buffer pool (designated when Account Holder equals "ACR") are first taken from credits held in the buffer pool and then any excess cancellations are included in the retirements columns).

- + Quantity of Offset Credits (Column D) of *ACR Retirements* tab [ACR retirements]
- + Quantity of Credits (Column E) of *ACR Cancellations* tab, when Cancelled Credits (column W) equals "Yes".

  [All cancellations not involved in the transition of credits from ACR to ARB (since these are accounted for as adjustments to issuances) and not in the buffer pool (Account holder does not equal "ACR")]
- + Quantity of Credits (Column E) of *ACR Cancellations* tab, when Buffer Pool Credits Treated as Cancellations (column Z) equals "Yes".

  [This column designates any cancellations from the buffer pool in excess of the project's total buffer pool credits and all credits when Cancellation Type equals "Compensation for Intentional Reversal" which are not covered by the buffer pool.]

### ARB projects:

- + Retired 1st Compliance Period CA (Column X) of ARB Issuances & Retirements [ARB compliance period retirements in 2014]
- + Retired 2nd Compliance Period CA (Column Y) of ARB Issuances & Retirements [ARB compliance period retirements in 2017]
- + Retired 3rd Compliance Period CA (Column Z) of ARB Issuances & Retirements [ARB compliance period retirements in 2020]
- + Retired 4th Compliance Period CA (Column AA) of *ARB Issuances & Retirements* [ARB compliance period retirements in 2022 and 2023. For the 4th compliance period, 2022 and 2023 retirements are separated using end of differences]
- + Retired Voluntarily (Column W) of ARB Issuances & Retirements
  [ARB voluntary retirements, included in the "Year Unknown" retirement column]
- + Retired for Compliance Quebec (Column AB) of *ARB Issuances & Retirements* [Quebec Compliance retirements, included in "Year Unknown" retirement column]
- + Retired Intentional Reversal (Column AC) of *ARB Issuances & Retirements* [Compensation for intentional reversals]

# **ACR Vintage Remainders**

Total credits remaining by vintage.

For the associated vintage:

- + Total issuances from the green issuances column [ACR and ARB issuances]
- All retirements as per the retirements column equation described just above

## REGISTRY TAB COLUMN DESCRIPTIONS

## ACR Cancellations

- J. Offset Credits Deposited Credits deposited into the buffer pool.
- P. Account Holder The entity in possession of the credits. Note that when account holder equals "ACR" it pertains to credits that have been canceled from the buffer pool.
- Q. Cancellation Type
  - "Compensation for Early Project Termination" pertains to credit cancellations compensated when a project resulted in premature cessation,
  - "Compensation for Intentional Reversal" pertains to credit cancellations used to compensate for intentional reversals,
  - "Convert to ARB offset credits" pertains to credits canceled then reissued as ARB, "Removal of credits from the registry" pertains to credit adjustments of the original issuance, for example credits no longer issued after a project's transition into ARB.
- S. Cancellation Year The year when cancellations took effect. Note that no year listed indicates cancellations were made before 2010 and that the Berkeley Carbon Trading Project integrated these cancellations from the ACR Credit Status report.

# Climate Action Reserve (CAR)

# PROJECTS TAB

### **CAR Issuances**

Total issuances by vintage (green columns) and by issuance year (orange columns).

For the associated vintage/issuance year:

+ Column M (Total Offset Credits Issued) of CAR Issuances tab [CAR issuances]

For ARB projects, issuances columns further take into account any adjustments in issuance quantity when credits are transferred from CAR to ARB:

- Quantity of Offset Credits (Column E) of *CAR Cancellations* tab for ARB projects (projects listed in the *ARB Issuances & Retirements* table).

  [CAR issuances that have been canceled during the transition process to ARB. These credits comprise of credits canceled and reissued to ARB (column M equals "ARB") as well as credits canceled and not reissued which are adjustments when ARB issuance quantities differ from CAR issuances for the same reporting period (column M does not equal "ARB").]
- + ARB Offset Credits Issued (Column I) of ARB Issuances & Retirements tab [ARB issuances]

Minus total amount of credits deposited into the buffer pool (see buffer pool calculations description below)

- Offset Credits Deposited (Column J) of CAR Buffer tab
- + Offset Credits Released (Column K) of CAR Buffer tab
- + Offset Credits Canceled (Column M) of CAR Buffer tab
- + Offset Credits Canceled for ARB (Column N) of CAR Buffer tab
- Offset Credits Intended for ARB Buffer Pool (Column O) of CAR Issuances tab
- Forest Buffer Account Contribution (Column J) of ARB Issuances & Retirements tab

### **CAR Buffer Pool**

Total buffer pool deposits (all years together).

- + Offset Credits Deposited (Column J) of *CAR Buffer* tab [credits deposited into the buffer pool]
- Offset Credits Released (Column K) of CAR Buffer tab
   [credits released back from the buffer pool into the issuance pool]
- Offset Credits Canceled (Column M) of CAR Buffer tab
   [this column lists cancellations for non-reversal reasons, including credits from
   CAR's buffer pool that have been re-issued to the ARB registry (only for re-issuances
   through 2012) and credit modifications when ARB issues fewer credits into their
   buffer pool than CAR]
- Offset Credits Canceled for ARB (Column N) of CAR Buffer tab [credits canceled from CAR's buffer pool to be re-issued to the ARB registry (only for re-issuances after 2012)]
- + Offset Credits Intended for ARB Buffer Pool (Column O) of *CAR Issuances* tab [credits designated to become forest buffer contributions pending registration in the ARB registry]
- + Forest Buffer Account Contribution (Column J) of ARB Issuances & Retirements [credits deposited into the ARB forest buffer pool]

## **CAR Reversals**

Non-ARB projects

**Unintentional reversals** are covered by the Reserve's buffer pool.

CAR has no unintentional reversals to date and these will be identifiable in Column L (Offset Credits Retired) of *CAR Buffer* tab.

Intentional reversals are not covered by the buffer pool, but instead are compensated by the project operator. CAR specifies that credits to be retired in compensation for intentional reversal are first covered by that project's credit issuances. Should an estimated loss be greater than the number of non-transacted issuances available, project developers can fulfill their compensation contribution with registered issuances from other projects of the same storage mechanism (e.g., improved forest management, avoided grassland conversion).

Intentional reversals are identifiable through Column D (Quantity of Offset Credits) of *CAR Retirements* tab when Column O (Retirement Reason) equals "Compensation for Avoidable Reversal".

# ARB projects in the CAR registry

Reversals are identified in Column B (CARB Issuance ID) of *ARB Issuances & Retirements* tab when issuance ID is listed in the format "CAFR####-(reversal)".

Unintentional reversals are covered by the buffer pool and are identifiable as "unintentional reversals" in column AD (Comments) of *ARB Issuances & Retirements* tab.

Intentional reversals are not covered by the buffer pool and are identifiable as "intentional reversals" in column AD (Comments) of *ARB Issuances & Retirements* tab. Intentional reversals must be compensated in full with replacement credits by the project developer.

These reversals are accounted into *PROJECTS* tab retirement columns as their compensations are retired in similar fashion to normal retirements.

### **CAR Retirements**

Total retirements (by retirement year).

- + Quantity of Offset Credits (Column D) of CAR Retirements tab [CAR retirements]
- + Quantity of Offset Credits (Column E) of *CAR Cancellations* tab, for projects that are not ARB projects (not listed in *ARB Issuances & Retirements* table) [CAR cancellations unrelated to the ARB transition process]

For ARB projects, retirements further include the California and Quebec compliance retirements, voluntary retirements, and intentional reversal retirements.

# ARB projects:

- + Retired 1st Compliance Period CA (Column X) of ARB Issuances & Retirements [ARB compliance period retirements in 2014]
- + Retired 2nd Compliance Period CA (Column Y) of ARB Issuances & Retirements [ARB compliance period retirements in 2017]
- + Retired 3rd Compliance Period CA (Column Z) of ARB Issuances & Retirements [ARB compliance period retirements in 2020]
- + Retired 4rd Compliance Period CA (Column AA) of *ARB Issuances & Retirements* [ARB compliance period retirements in 2022 and 2023. For the 4th compliance period, 2022 and 2023 retirements are separated using end of differences]
- + Retired Voluntarily (Column W) of *ARB Issuances & Retirements*[ARB voluntary retirements, included in "Year Unknown" retirement column]
- + Retired for Compliance Quebec (Column AB) of ARB Issuances & Retirements [Quebec Compliance retirements, included in "Year Unknown" retirement column]
- + Retired Intentional Reversal (Column AC) of *ARB Issuances & Retirements* (for ARB projects with listed intentional reversals in the *ARB Issuances & Retirements* table). [Compensation for intentional reversals]

# **CAR Vintage Remainders**

Total credits remaining by vintage.

For the associated vintage:

- + Total issuances from the green issuances column [CAR and ARB issuances]
- Quantity of Offset Credits (Column D) of CAR Retirements tab [CAR retirements]
- Quantity of Offset Credits (Column E) of *CAR Cancellations* tab, for projects that are not ARB projects (not listed in *ARB Issuances & Retirements* table) [CAR cancellations unrelated to the ARB transition process]
- Retired Compliance Period CA (Column X, Y, Z, and AA) of *ARB Issuances & Retirements* [ARB compliance period retirements in 2014, 2017, 2020, 2022, 2023]
- Retired Voluntarily (Column W) of *ARB Issuances & Retirements* [ARB voluntary retirements]
- Retired for Compliance Quebec (Column AB) ARB Issuances & Retirements [Quebec Compliance retirements]
- Retired Intentional Reversal (Column AC) of ARB Issuances & Retirements [Compensation for intentional reversals]

### REGISTRY TAB COLUMN DESCRIPTIONS

# CAR Buffer

- J. Offset Credits Deposited Credits deposited into the buffer pool.
- K. Offset Credits Released Credits returned to project developers from buffer pool.
- L. Offset Credits Retired Credits in the buffer pool used in compensation for an unintentional reversal.
- M. Offset Credits Canceled Credits removed from the buffer pool for non-reversal reasons, including credits from CAR's buffer pool that have been re-issued to the ARB registry (only for re-issuances through 2012) and credit modifications when ARB issues fewer credits into their buffer pool than CAR.
- N. Offset Credits Canceled for ARB Credits from the buffer pool that have been re-issued to the ARB registry.
- O. Buffer Pool Balance Credits remaining in the buffer pool, all deposits and removals as noted in columns J through N taken into account.

## CAR Issuances

- Q. Canceled for ARB Compliance Cancellations of credits transitioned from CAR to ARB. These correlate with canceled credits in *CAR Cancellations* tab column E when cancellation reason (column M) equals "ARB".
- R. Canceled Cancellations of credits not transitioned from CAR to ARB. These correlate with canceled credits in *CAR Cancellations* tab column E when cancellation reason (column M) does not equal "ARB".

# Gold Standard (GS)

**PROJECTS TAB** 

#### **GS** Issuances

Total issuances by vintage (green columns) and by issuance year (orange columns). Note that ex-ante credits, called PERs (Planned Emissions Reductions), are not included in issuances and recorded separately in column DF of *PROJECTS* tab.

For the associated vintage/issuance year:

+ Quantity (Column F) of *Gold Issuances* tab, when column J equals "VER" and "CER" [Gold Standard Verified Emission Reduction issuances and Clean Development Mechanism issuances]

### **GS Buffer Pool**

Total buffer pool deposits (all years together). Gold Standard allows substitution credits to be used to fulfill a project's buffer pool contribution. When a substitution occurs, the buffer contribution is recorded for the projects whose credits are deposited, not by the project fulfilling its buffer pool requirements with another project's credits.

+ Quantity (Column C) of *Gold Buffer* tab [credits deposited into the Compliance Buffer pool]

#### **GS** Reversals

**Unintentional** reversals are replaced with credits from the Compliance Buffer pool. The Gold Standard registry has no reversals compensating from its Compliance Buffer to date.

## **GS** Retirements

Total retirements (by retirement year) of CER & VER credits.

+ Quantity (Column E) of *Gold Retirements* tab [Gold Standard retirements]

## **GS Vintage Remainders**

Total CER & VER credits remaining by vintage.

For the associated vintage:

- + Total issuances from the green issuance column [Gold Standard issuances]
- Quantity (Column E) of *Gold Retirements* tab [Gold Standard retirements]

# Verified Carbon Standard (VCS)

# **PROJECTS TAB**

## **VCS** Issuances

Total issuances by vintage (green columns) and by issuance year (orange columns). Note that VCS issues credits differently from the other registries. Instead of issuing all of the credits for a single reporting period (vintage) at one time, VCS allows project developers the option to issue credits, and pay the associated per-credit fee, in smaller batches. To make VCS issuances comparable with the other registries, we report the total

vintage quantity as fully issued in *PROJECTS* tab if any credits from the vintage have been issued. If any credits are issued from a vintage, this means that all credits of the vintage are approved for issuance and can be issued at the request of the project developer. We use the date of that first issuance as the issuance date for the whole vintage.

For VCS and VCS-ARB Early Action projects and their associated vintage/issuance year:

+ Credits Issued (Column H) of *VCS Vintage Issuances* tab [VCS issuances including credits released from buffer account]

For VCS-ARB Compliance projects and their associated vintage/issuance year:

- + ARB Offset Credits Issued (Column I) of ARB Issuances & Retirements [ARB issuances]
- Forest Buffer Account Contribution (Column J) of *ARB Issuances & Retirements* [credits deposited to the ARB forest buffer pool]

## **VCS Buffer Pool**

Total buffer pool deposits (all years together).

Verra does allow for credits in the buffer pool to be released into the salable issuance pool, with continued verification of no disturbances to the project activity.

- + Total Buffer Pool Contribution (Column C) of *VCS Buffer* tab [credits deposited into the buffer pool]
- Credits Released (Column E) of VCS Buffer tab
   [VCS buffer credits released from buffer pool back into the issuance pool]
- + Forest Buffer Account Contribution (Column J) of ARB Issuances & Retirements [credits deposited into the ARB forest buffer pool]

# **VCS** Reversals

## non-ARB projects

Unintentional reversals are replaced with credits from the pooled buffer account.

+ Credits Canceled (Column F) of VCS Buffer tab

## ARB projects in the VCS registry

Reversals are identified in Column B (CARB Issuance ID) of *ARB Issuances & Retirements* tab when issuance ID is listed in the format "CAFR####-(reversal)".

Unintentional reversals are covered by the buffer pool and are identifiable as "unintentional reversals" in column AD (Comments) of *ARB Issuances & Retirements* tab.

Intentional reversals are not covered by the buffer pool and are identifiable as "intentional reversals" in column AD (Comments) of *ARB Issuances & Retirements* tab. Intentional reversals must be compensated in full with replacement credits by the project developer.

### **VCS** Retirements

Total retirements and cancellations (by retirement/cancellation year).

+ Credits Quantity Issued (Column J) of *VCS Issuances & Retirements* tab, when column M includes a retirement/cancellation date
[VCS retirements and cancellations for non-ARB projects and ARB Early Action projects]

# ARB Compliance projects:

- + Retired 1st Compliance Period CA (Column X) of ARB Issuances & Retirements [ARB compliance period retirements in 2014]
- + Retired 2nd Compliance Period CA (Column Y) of ARB Issuances & Retirements [ARB compliance period retirements in 2017]
- + Retired 3rd Compliance Period CA (Column Z) of ARB Issuances & Retirements [ARB compliance period retirements in 2020]
- + Retired 4th Compliance Period CA (Column AA) of *ARB Issuances & Retirements* [ARB compliance period retirements in 2022 and 2023. For the 4th compliance period, 2022 and 2023 retirements are separated using end of differences]
- + Retired Voluntarily (Column W) of ARB Issuances & Retirements
  [ARB voluntary retirements, included in "Year Unknown" retirement column]
- + Retired for Compliance Quebec (Column AB) of *ARB Issuances & Retirements* [Quebec Compliance retirements, included in "Year Unknown" retirement column]
- + Retired Intentional Reversal (Column AC) of *ARB Issuances & Retirements* [Compensation for intentional reversals]

# **VCS Vintage Remainders**

Total credits remaining by vintage.

For the associated project and vintage:

- + Total issuances from the green issuance column [VCS and ARB issuances]
- Credits Quantity Issued (Column J) of VCS Issuances & Retirements, when column M includes a retirement/cancellation date
   [VCS retirements and cancellations]
- ARB Retirements Columns CA Compliance Periods, Quebec Compliance,
   Voluntary Retirements, and Intentional Reversals (Columns W, X, Y, Z, AA, AB, and AC) of ARB Issuances & Retirements [ARB retirements]

### REGISTRY TAB COLUMN DESCRIPTIONS

#### VCS Issuances & Retirements

- I. Total Vintage Quantity Total quantity of credits associated with the reporting period.
- J. Credits Quantity Issued Total quantity of credits from reporting period that have been issued in the Verified Carbon Standard by Verra. Note that Verra issues credits differently from other registries. Instead of issuing all of the credits for a single reporting period at one time, Verra allows project developers the option to issue credits, and pay the associated per-credit fee, in smaller batches. Credits Quantity Issued lists the quantity of credits issued for each issuance batch, while the aforementioned Total Vintage Quantity lists the total number of credits associated with each reporting period.

- M. Retirement/Cancellation Date In Verra's combined issuances and retirements file, the number of credits generated for each reporting period is not only broken down into separate issuance batches as described just above, but can also be further broken down into separate retirement batches when credits are retired by different retirement beneficiaries. A date in this column indicates the day on which the credit batch was retired or canceled. If no date is listed, then the credit batch has not been retired or canceled.
- R. Credits Issued Lists a single instance of each Total Vintage Quantity per each reporting period.
- T. Credits Retired The quantity of credits (column J) that are retired or canceled, designated by a date under retirement/cancellation date (column M)
- V. Issuance Status In this new column, a designation of "Canceled" indicates that the row's quantity of credits has undergone a credit cancellation by Verra.

## VCS Buffer

- C. Total Buffer Contribution Credits deposited into the buffer pool.
- D. Total Available Buffer Credits remaining in the buffer pool, taking into account all adjustments noted in columns E, F, and G.
- E. Credits Released Credits returned to a project developer from the buffer pool.
- F. Credits Canceled Credits in the buffer pool used in compensation for an unintentional reversal.
- G. Credits on Hold Credits set aside within the buffer pool as Verra evaluates a potential reversal and/or until updated verification reports are submitted.