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## Key Summary

### A. Trading Report

- CCA prices saw a 10-cent drop throughout the week. The current front (V17 Nov 17) and benchmark (V17 Dec 17), closed the week at USD 15.13 and USD 15.15, respectively.
- OCA front and the benchmark prices now stand at CAD 19.19 and CAD 19.24, respectively.
- OI creation was marginal, having an overall negative net change of 272,000 contracts
- The traded volumes have increased from 7,328,000 tons to 7,360,000 tons

### B. Price Expectations

- Momentum to remain level in the short run as price discovery from auction falls in line with prior expectations
- Traded volume set to rise as spot volume increases after auction and Dec17 changes to front
- Ontario linkage and February auction could drive prices over USD15.30

### C. CCO Tracker

- 1.04 million CCOs were approved by ARB in the latest issuance from six projects– 3 forestry and 3 livestock
- A Livestock project and three Forestry projects were the four newest projects to be listed recently
- CCO prices have registered a minor decrease last week with CCO 8 prices with no change in CCO 3 prices
- The backlog of ROCs now stands at over 33.9million after ROCs were awarded to projects last week

### D. Key Dates

- **Nov 28** - Joint Community Meeting for Minimizing Community Health Impacts from Freight and Community Air Protection Program
- **Dec 1** - ARB will announce Auction Reserve Price and Annual Auction Budget for 2018

## Section A. Trading Report

### Auction results bring market to pre-auction norm

The California carbon allowances (CCA) prices remained at a standstill until auction results were released. CCA prices saw a 10 cent drop [after the auction result were announced](#) on Tuesday and remained at that level for the rest of the short holiday week. The current front (V17 Nov 17) and benchmark (V17 Dec 17), closed the week at USD 15.13 and USD 15.15, respectively indicating a return to price levels seen ahead of the November auction. Post-auction day activities went up with spreads of 1250 units on Dec17 and May18.

This weeks' volumes traded were concentrated within three vintages. The total traded volumes saw a modest increase from 7,328,000 tons to 7,360,000 tons which is a 0.43% increase since last week. As usual, V2017 was the major contributor with 4,860,000 tons exchanged and accounted for 66.03% of total traded volume. The second highest contributor this week is V2018 with 2,450,000 tons traded making up 33.29% of total weekly volume. Contributions from V2015 made up 0.68% while V2016, V2019 and V2020 showed no traded volumes.

Delivery-wise, majority of the trading was spread out between three months – Dec17 (4,787,000 tons), May 18 (1,250,000 tons), and Dec 19 (1,000,000 tons). These accounted for 65.04%, 16.98% and 13.59% of the total. Minor volumes were traded for Nov17 (23,000 tons) Mar18 and Dec18 (150,000 tons) which made up 0.31% and 2.04% of the total.

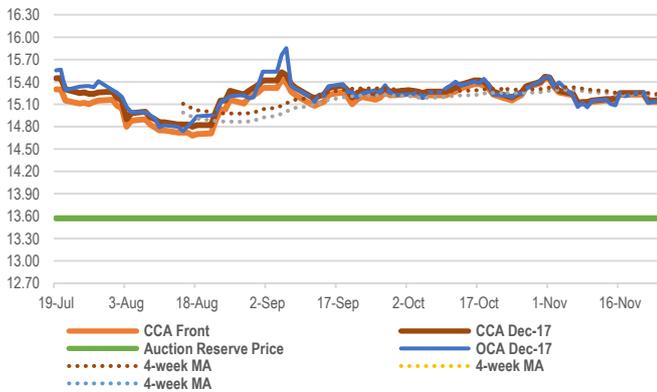
Open interest contracts saw an overall negative net change of 272,000 contracts. New contracts were seen on three deliveries– Nov17 (23,000), Dec18 (175,000) and Dec 19 (1,000,000). There was a reduction in OI contracts for Dec17 (1,420,000) and Mar18 (50,000). This might be because of the extension of the cap-and-trade program entities are setting themselves up for long-term trades because of market certainty.

While the Ontario carbon market saw no new trades last week, frequent price changes occurred in anticipation of the upcoming auction. Beginning of the week OCA gained 8 cents followed by a 26 cent drop mid-week. As of Friday (11/16) the OCA front and the benchmark prices now stand at CAD 19.19 and CAD 19.24, respectively.

Auction results bring market to pre-auction norm		
ICE Price Movements		
ICE CCA	Wk Close	Wk Δ
V17 Front	15.13	-0.10
V17 Dec 17	15.15	-0.10
V15 Dec 17	15.16	-0.10
V16 Dec 17	15.16	-0.10
V18 Dec 17	15.11	-0.10
V19 Dec 17	15.10	-0.10
V20Dec 17	15.07	-0.10
V17 Jun 18	15.37	-0.10
V17 Dec 18	15.58	-0.10
V17 Dec 19	16.00	-0.10
V17 Dec 20	16.44	-0.10
OCAV17 Dec 17	15.14	-0.07
ICE Traded Volumes		
ICE CCA	Delivery	Vol. ('000)
V 17	Dec 17	3,587
	May 18	1,250
V 18	Dec 17	1,150
	Mar 18	150
	Dec 18	150
	Dec 19	1,000
<b>Total</b>		7,360
4-week average		11,694
CCO Price Movements		
OTC	Wk Close	WkΔ
Golden '16	13.91	0.03
CCO-3 '16	13.07	0.03
CCO-8 '16	12.58	-0.01

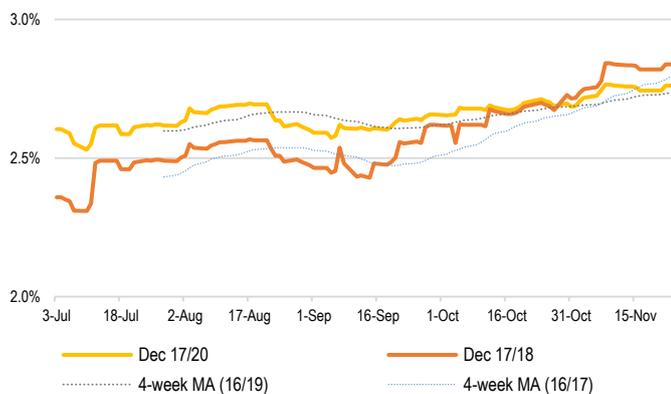
## Section B. Price Expectations

CCA Instrument Prices



CCA prices crossed below the 4-week MA of USD\$15.22 to settle at USD \$15.13, this is a return to the same levels where the market was in the quarter preceding the auction. As discussed in previous editions of the Weekly Outlook, the auction cleared near USD 15 and secondary market maintained close to its 4-month average of US\$ 15.14.

Implied Annual Funding Rates (Current)



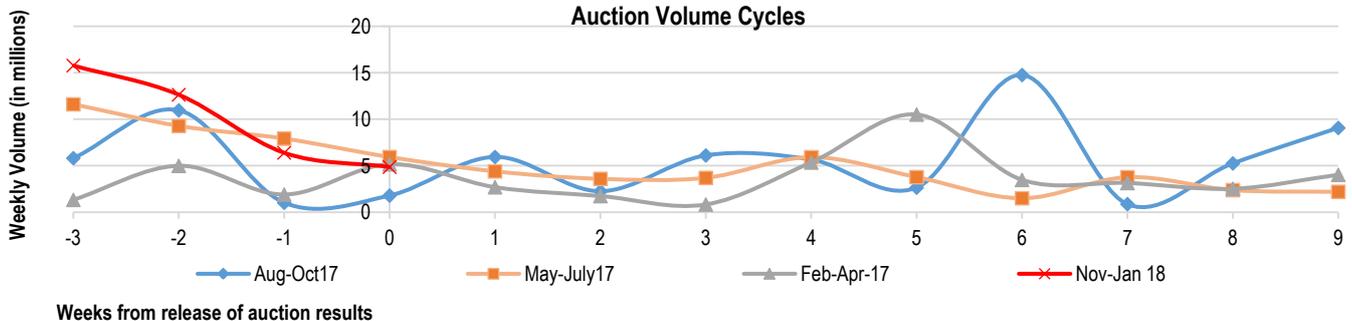
As the market is already trading well above next year's expected floor of US\$ 14.52, the conventional price spike at the end of the year is unlikely to occur this December. Any speedy momentum on prices in either direction looks unlikely as price levels are in step with the price discovery provided in the last auction. This price level seems to be the one that the market finds optimal given that there is a short-term surplus of 66.48 million while a long-term shortage is universally anticipated in the WCI.

Auction week volumes vs Subscription



Ontario's linkage next year will increase demand for CCAs in the WCI as a whole as we expect the province to be short by 2.9 million in 2018. However, Ontario's surrender deadline in 2021 allows entities time to purchase their compliance needs without urgency and as such is less likely to cause immediate shocks to the market. We expect that linkage with Ontario and the February auction expectations will be enough to pull the front prices over the current resistance of USD15.30 by December-end or early next year.

Auction Volume Cycles



Liquidity should be at a peak till the year-end as positions are rolled forward from the Dec17 delivery before it expires on December 27, 2017. Furthermore, historically the auction volume cycle shows an average volume of over 14 million on the current vintage during the first four weeks of the auction results. With over 89.2 millions added to the spot volume, liquidity is set to increase in the short run with interest largely increasing on the Dec18, Jan18, and Mar18 deliveries in the coming weeks.

## Section C. CCO Tracker

<b>Last issuance date:</b> November 22, 2017	<b>Issued CCO total:</b> 86,102,660
<b>Next issuance date:</b> December 6, 2017	<b>Quebec offsets:</b> 563,993
<b>Last ARB issuance total:</b> 1,045,213	<b>WCI offsets eligible for future compliance:</b>
<b>CCO-0s:</b> 14,819,103	54,479,373

A total of around 1.04 million CCOs were approved by ARB in the latest issuance from six projects – 3 forestry and 3 livestock. 51,016 credits were added to the third and fourth reporting period to two livestock projects.

Sierra Pacific Industries was awarded a total of over 964k credits to two forestry projects **Sacramento Canyon ARB001 (CAR1041)** and **Buck Mountain ARB002 (CAR1066)**. The former projects were also the only two California projects in the running in the latest issuances. Compatible lands foundation received over 21K ROCs for **Camp Shelby Forest Carbon project (ACR288)** which is the first project based out of Mississippi. While Origin Climate over 8K ROCs for **Green Dairy Anaerobic Digester (ACR355)**.

CCO 3 prices registered a minor increase going from USD13.04 up to USD13.07 and went unchanged throughout the week. Golden CCOs saw a gradual decrease since last week from USD14.15 down to USD13.91. Additionally, CCO 8 prices saw slight decrease mid-week and remained consistent until the end of the week.

The backlog of ROCs awaiting ARB’s approval is at **33.9million** mark due to the recent ROC issuances. Even though it is a slight decrease it will take major projects to be approved by ARB now to significantly reduce this backlog.

## Section D. Key Dates

Date	Item	Observations
Nov 28th	Joint Community Meeting	Joint Community Meeting for Minimizing Community Health Impacts from Freight and Community Air Protection Program
Dec 1st	ARB Announcement	ARB will announce Auction Reserve Price and Annual Auction Budget for 2018.

## Section F. Back Matter

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