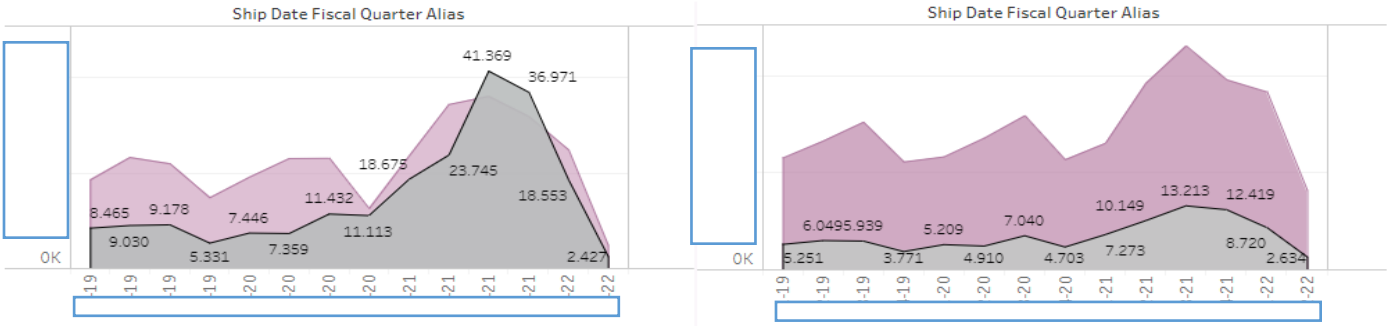
- OVERVIEW

INBOUND: | **OUTBOUND:**

CO2 EMISSION TREND across Period

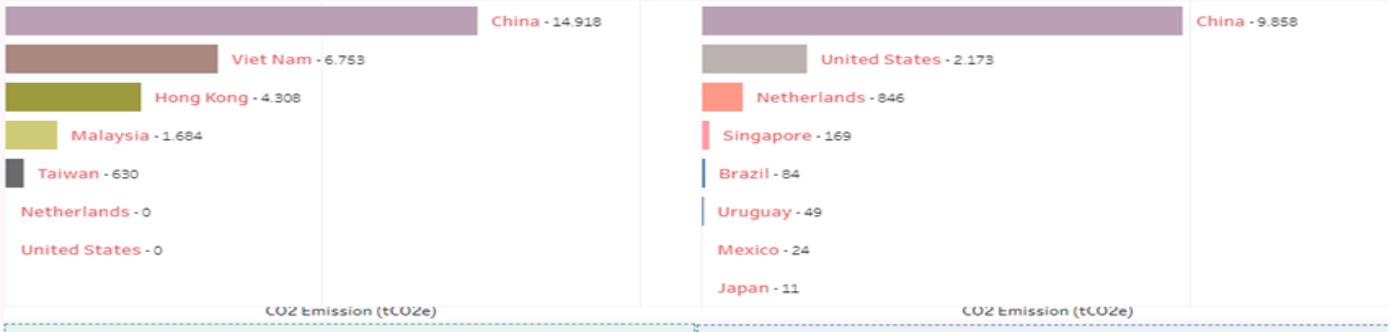


The chart shows a sharp increase in CO2 Emission (grey area) across period from FY19 to FY21.
Huge impact is within FY21, where shipment volumes are also high.
The highest point is Q3-21.

Total CO2 Emission increases gradually across quarters.
CO2 emitted is a bit lower comparing with Inbound's, even it shows a higher volumes shipped (based on color intensity).
Huge impact time range is same - FY21. The highest point is Q3-21.

TOP COUNTRY RACING CHART - CO2 Emission

Choose Time



China is always Top 1, Vietnam appears in race from Q2-20 then head to Top 2 from Q4-20, next is Hong Kong, then Taiwan and Malaysia are up and down 4th, 5th position.

China is still Top 1
Consitant Top 5 (same order at all time): China, USA, Netherlands, Singapore, Brazil.

CO2 Emision per SHIPPING MODE (Size: CO2 emission,Color Intensity: Tonnes shipepd)

- Ranking per Volume Shipped: OCEAN> GROUND>AIR>RAIL.
- Ranking per CO2 Emitted: AIR>GROUND> RAIL>OCEAN.
> Hypothesis: Overall trend relates to Shipping Method (Mode/Distance).

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- Ranking per CO2 Emitted: AIR>GROUND>OCEAN.
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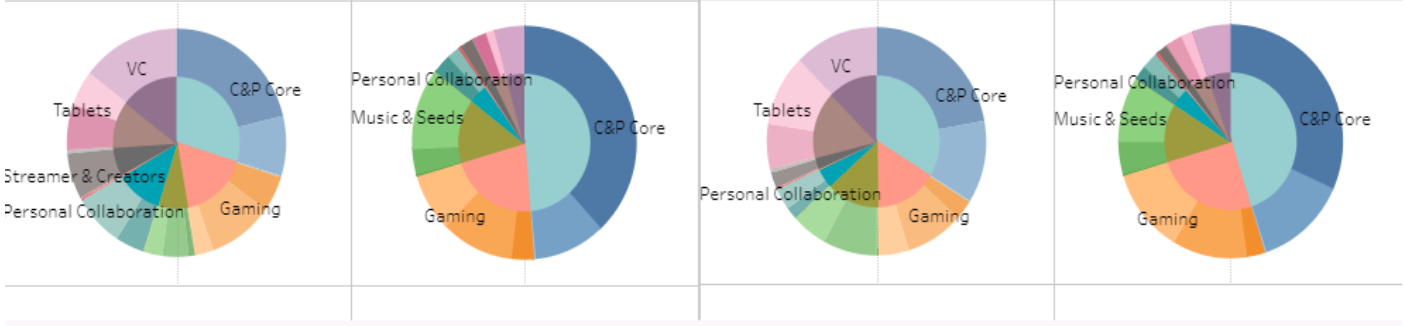
CO2 Emission per STRATEGY/PRODUCT GROUP



Top Products as per:
- Volume shipped: C&P Core, Gaming, Music &Seed, VC, Personal colllaboration, others.
- CO2 emitted: C&P Core, Gaming, VC, Personal colllaboration, Tablets, others.
> Hypothesis: Overall trend relates to PGs (Component included, manufacturing process,etc).

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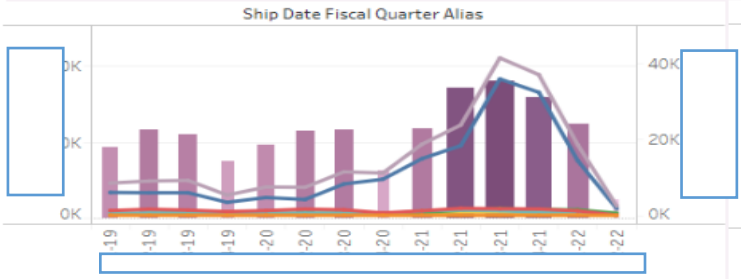
- CO2 emitted: C&P Core, Tablets, Gaming, Music & seeds, VC, others.
> Hypothesis: Overall trend relates to PGs (Component included, manufacturing process,etc).

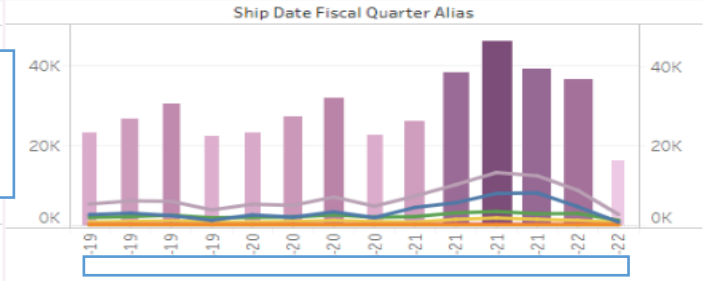
DRILL DOWN (VOLUME & COUNTRY)

INBOUND: f

OUTBOUND: f

I. VOLUME COMPARISON - CO2 Emisions (Shipping mode) & Volume (Qty shipped, Tonnes shipped)

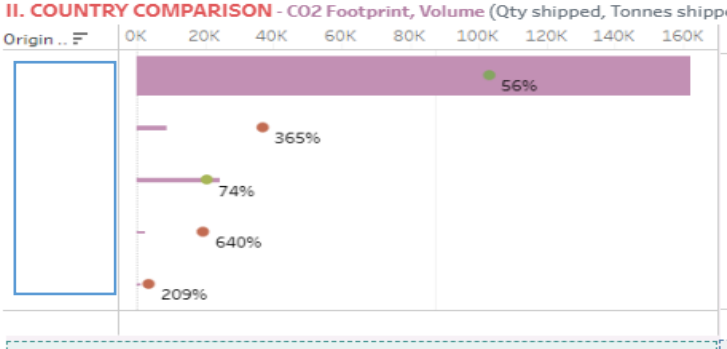


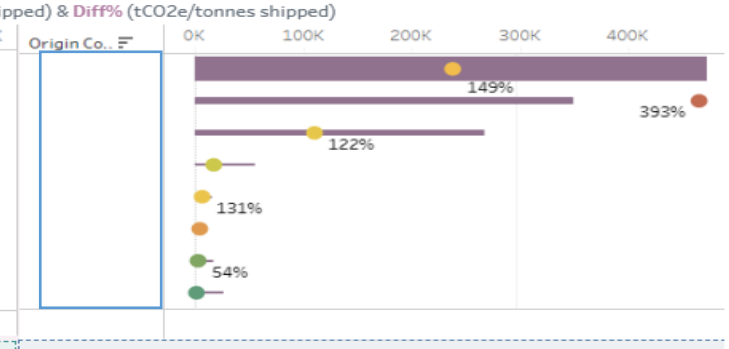


The lowest volume shipped is in Q4-20 when there was a lockdown at China - our biggest supplier.
Then a considerable increase in the qty/tonnes shipped from FY21, same trend for CO2 emission.
The highest point is at Q3-21. "Air Port to port" shipping mode has the most CO2 impact.
Q2-19,Q2-20,Q3-20, are low CO2 emitted comparing with Volume shipped.

Same trend as Inbound when CO2 emission increased when supply chain was back.
The highest point is at Q3-21.
Shipping mode "Air port to port", "Truck port to Door" contribute the huge impact from CO2 emission.
Q2-19, Q3-20 are low CO2 emitted comparing with Volume shipped.

II. COUNTRY COMPARISON - CO2 Footprint, Volume (Qty shipped, Tonnes shipped) & Diff% (tCO2e/tonnes shipped)





Inbound is "from Suppliers to DC", means Origin country is where factory locates.
High CO2 emission is mainly from manufacturing/process/transportation ect.
Ranking by CO2 emisson: China, Vietnam, Hong Kong, Malaysia, Taiwan.
Vietnam & Malaysia are countries having the highest different tCO2e/tonnes shipped %.

Outbount is " from DC to Customers", means Origin country is where Distribution Center locates.
Ranking by CO2 emission: China, USA,Netherlands, Singapore, Japan etc.
>Developed countries have better control in environment impact from CO2.

CO2 Emission progress by each COUNTRY (YoY% Tonnes shipped & Diff% CO2 Emitted)

Choose Type: Inbound

Ship Date Fiscal Year Alias / Ship Date Fiscal Quarter Alias

Origin..	FY-19				FY-20				FY-21				F
China	11.777	14.672	13.849	10.026	12.238	14.291	14.525	8.274	14.069	19.282	19.175	16.902	13.41
					11.777	14.672	13.849	10.026	12.238	14.291	14.525	8.274	14.06
	5.115	4.166	5.304	3.203	3.618	4.243	5.804	7.033	7.298	7.889	14.918	12.535	6.15
					5.115	4.166	5.304	3.203	3.618	4.243	5.804	7.033	7.29
					4%	-3%	5%	-17%	15%	35%	32%	104%	-5
					-29%	2%	9%	120%	102%	86%	157%	78%	-16
Viet Nam						187	315	451	1.031	1.790	2.344	2.179	1.68
					0	0	0	0	0	187	315	451	1.03
						31	128	532	2.132	4.336	6.753	5.194	2.89
					0	0	0	0	0	31	128	532	2.13
										856%	645%	383%	64
										13935%	5185%	876%	36
Hong Kong	1.947	2.588	2.263	1.317	1.904	1.635	1.913	1.028	1.852	3.161	2.986	3.043	2.09
					1.947	2.588	2.263	1.317	1.904	1.635	1.913	1.028	1.85
	314	426	426	304	405	317	771	301	1.349	2.072	4.308	2.434	1.25
					314	426	426	304	405	317	771	301	1.34
					-2%	-37%	-15%	-22%	-3%	93%	56%	196%	13
					29%	-26%	81%	-1%	233%	553%	459%	708%	-7
Malaysia	70	116	60	46	65	232	265	197	407	450	381	529	22
					70	116	60	46	65	232	265	197	40
	216	343	141	77	28	177	253	287	729	558	1.684	361	34

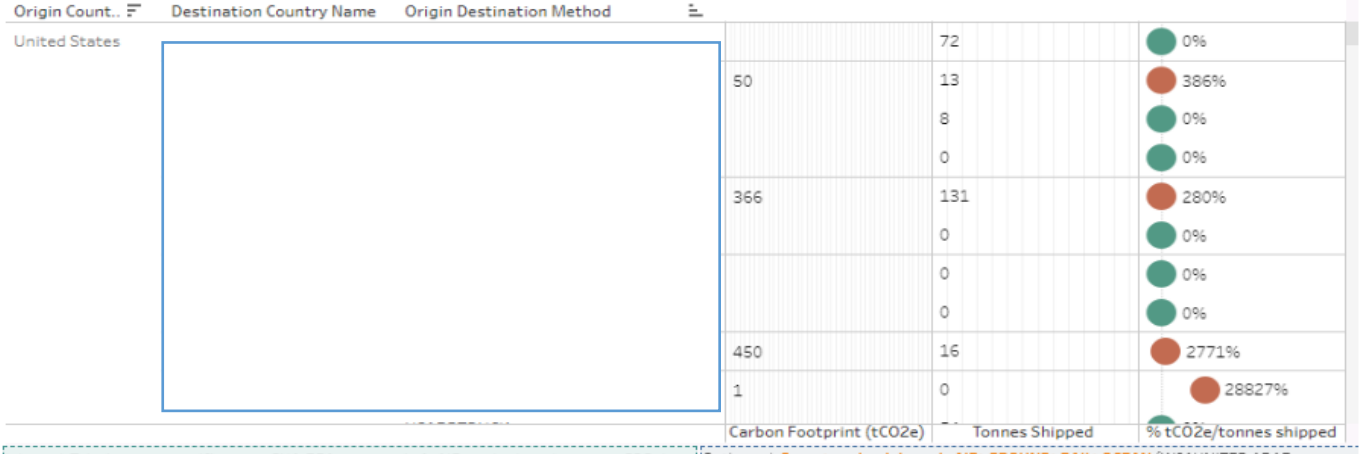
Inbound: Variance of CO2 emission(Diff%) is much high than that of Tonnes shipped (YoY%).
> Vietnam started to ship products from Q2-20, where had a big challenge to improve CO2 emission impact.

Outbound: Color become lighter for YoY% and Diff% comparing with Inbound's.
> Netherlands is shinning point, where well control CO2 emission across time.

DRILL DOWN (SHIPPING MODE - PRODUCT) & SOLUTIONS

III. SHIPPING MODE COMPARISON - CO2 Footprint, Tonnes Shipped & Diff % per ROUTING

Choose Type: Out... | Choose Route: (All)

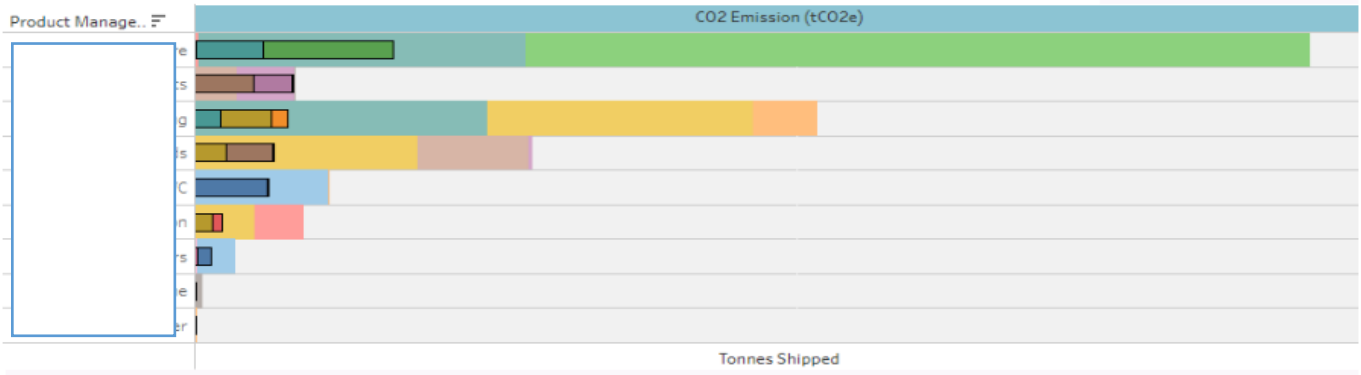


Inbound: Take into one specific route, SHA-BR1 as example 1, AIR method produce more CO2 than OCEAN. HKG-W01 is another example, CO2 emission from AIR is most, then GROUND, RAIL, OCEAN.
> CO2 Emission impact from Shipping Mode: AIR>GROUND>RAIL>OCEAN.

Outbound: Same trend as Inbound : AIR>GROUND>RAIL>OCEAN (W01UNITED ARAB EMIRATES route as an example).
Impact from Domestic trucking (US1UNITED STATESTRUCK) is less than Internal trucking (US1CANADATRUCK). >Distance play a key here.

IV. PRODUCT CATEGORY COMPARISON - CO2 Footprint, Tonnes Shipped per Product Management

Choose Type: Outbound

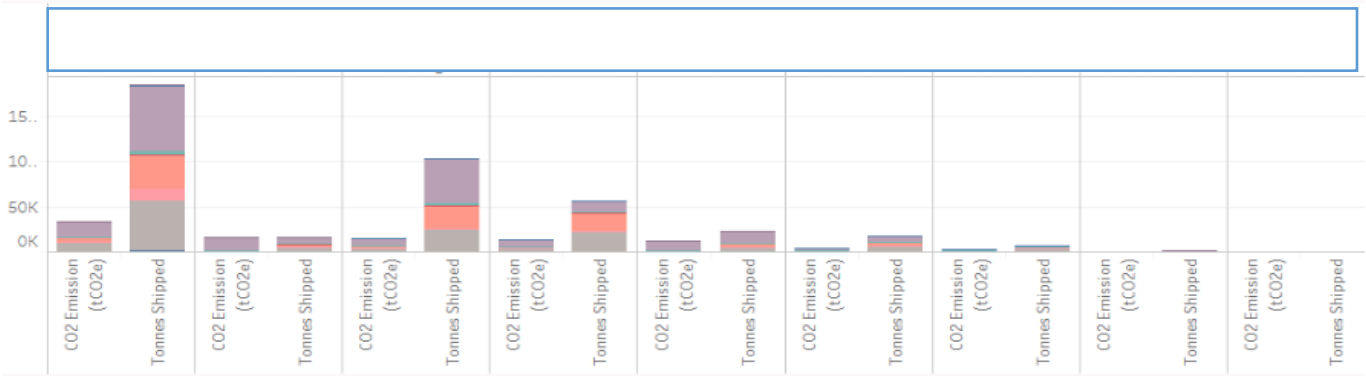


Inbound: VC, Personal Collaborarion, Tablets, Streamer & Creators are Categories having big portion of CO2 emission (smaller bordered bars)
> No much difference of CO2 emitted from Product Category in general.

Outbound: higlighted Category are Tablets, VC.
> No much difference of CO2 emitted from Product Category in general.

CO2 Footprint, Tonnes Shipped each Categoy per Origin Country

Choose Type: Outbound



Inbound: Factories produce and ship almost all product Categories, no any nominated factory for one or some specific products.

Outbound: Same when our Distribution Center also store and distribute shipment across all product categories.

OUTLOOK & SUGGESTED SOLUTIONS

OUTLOOK: CO2 Emission from Logitech trends upward, reflecting from:
- Overall pollution increase in energy use, manufacturing extension, shipping and logistics usage, ect to adapt our Growth.
- Market always find the low-cost producers/suppliers at developing countries (mostly locate at Asia, next stage might be Africa).

SOLUTIONS:
- Periodically analyse and measure our CO2 emission/environment impact to have on-time actions.
- Develop products/packaging for sustainability (design, material usage etc.)
- Promote environmentally friendly ways of working for employees (switch to public transportation, save energy, reduce waste and fight obsolescence).
- Raise Awareness amongs Partners, Clients or other Stakeholders about Environmental Sustainability.