

SCHOOL DISTRICT 63 (SAANICH)

FINANCE, FACILITIES & TECHNOLOGY COMMITTEE

**Report to the Board of October 26, 2022**

Committee Members:	Trustee Vanwell, Chair Trustee Dunford Trustee McMurphy
Staff Support:	Jason Reid, Secretary-Treasurer Dave Eberwein, Superintendent of Schools Megan Cimaglia, Director of Finance Rob Lumb, Director of Facilities Cody Henschel, Director of Information Technology
Partner Representatives:	Don Peterson, STA – regrets Nola Welsh, CUPE David Mark, SAA Ashley Sonosky, COPACS
Other Attendees:	Trustee Silzer & Trustee Stelck

**Committee Meeting**

Tuesday, October 18, 2022

**A. PRESENTATIONS AND QUESTIONS**

1. Energy Plan Presentation  
The Committee agreed to refer to a future agenda to discuss advocacy and reducing energy consumption through behavioural change.

**B. ITEMS DISCUSSED**

No Items.

**C. ITEMS FOR RECOMMENDATION**

1. Final Enrolment & Funding

**Motion:**

The Committee recommends and I, Trustee VanWell move,  
That the Board approve the proposed budget changes as presented and allocation of residual net funding from growth to increase the contingency reserve.

**Motion:**

The Committee recommends and I, Trustee VanWell move,  
That the Chair, Vice Chair and Chair of Finance, Facilities & Technology seek a meeting with the Minister of Education to discuss the current and projected budget shortfalls in School District 63.

2. Parkland Track Update

**Motion:**

The Committee recommends and I, Trustee VanWell move,  
That the Secretary Treasurer approach Sidney and North Saanich to discuss funding the immediate completion of the track and sharing the cost of funding future renewal of the track surface.

**D. ITEMS FOR INFORMATION**

No Items.

**E. FUTURE AGENDA ITEMS**

1. Charitable Trust

**Staff Recommendation:**

That staff be directed to establish the Board of Directors as recommended with the Trustee representative to be appointed by the Chair of the Board.

Energy  
Sustainability  
Plan  
Update

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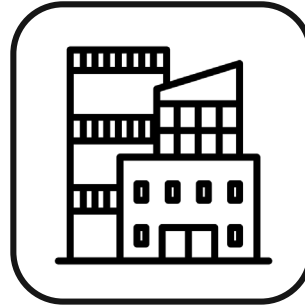
October 18, 2022

Rede

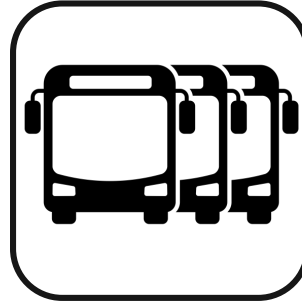
# Agenda



Baseline &  
Targets



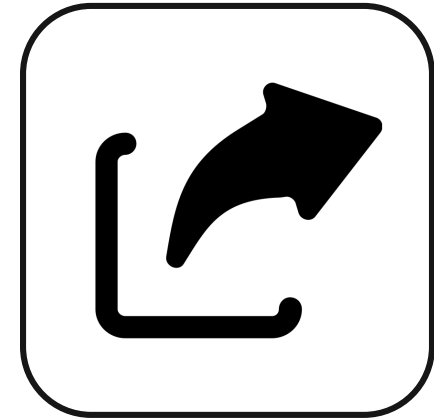
Buildings



Fleet

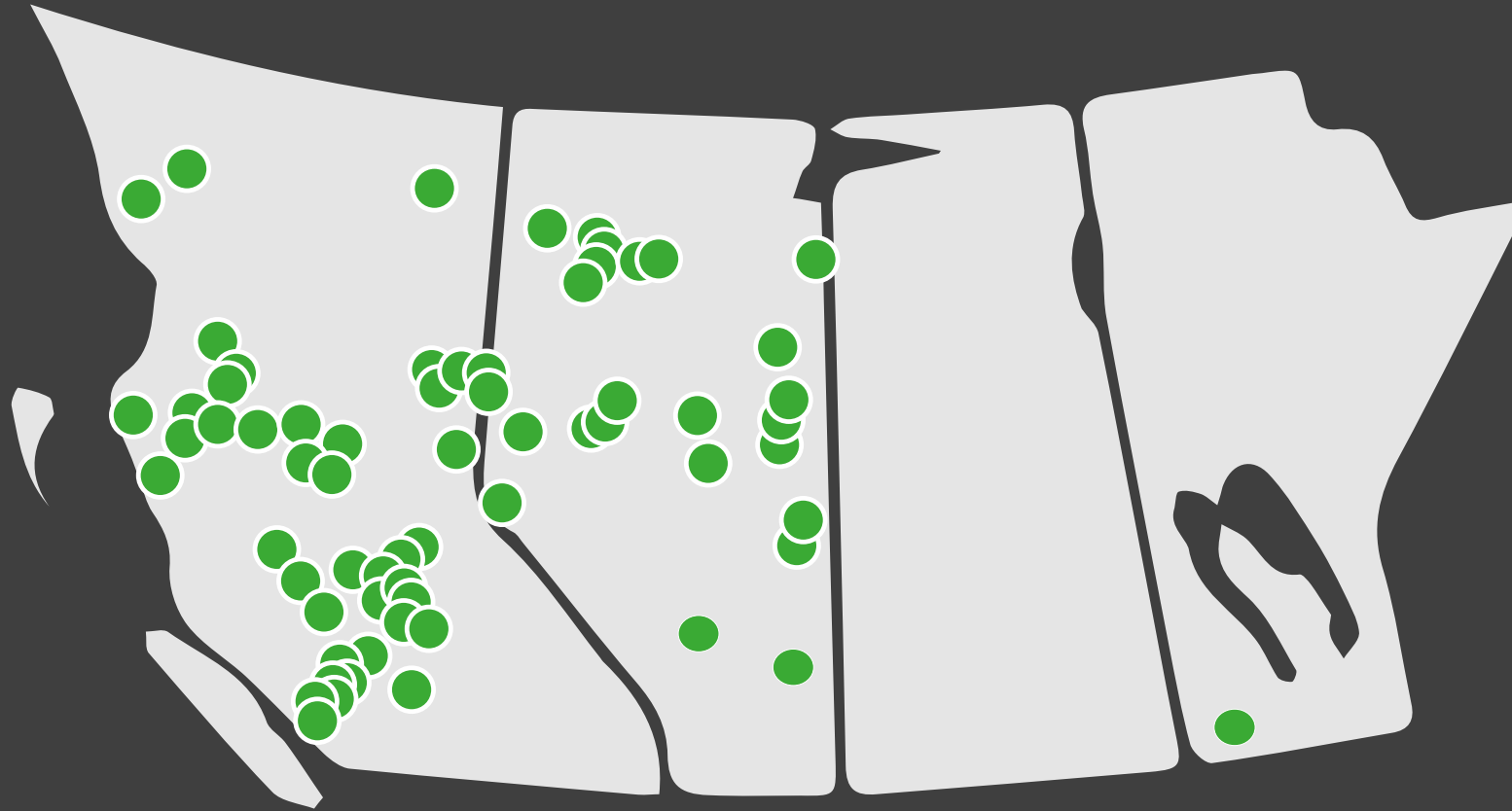


Paper



Next  
Steps

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BUILDING  
ENERGY  
EFFICIENCY

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Targets & Baseline

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# Reduction Mandate

In March of 2021, CleanBC set a sector-specific target for **buildings and communities** of

**59-64 % by 2030**

- <https://news.gov.bc.ca/releases/2021ENV0022-000561>

Rede

# Reduction Mandate

In March of 2021, CleanBC set a sector-specific target for **transportation** of

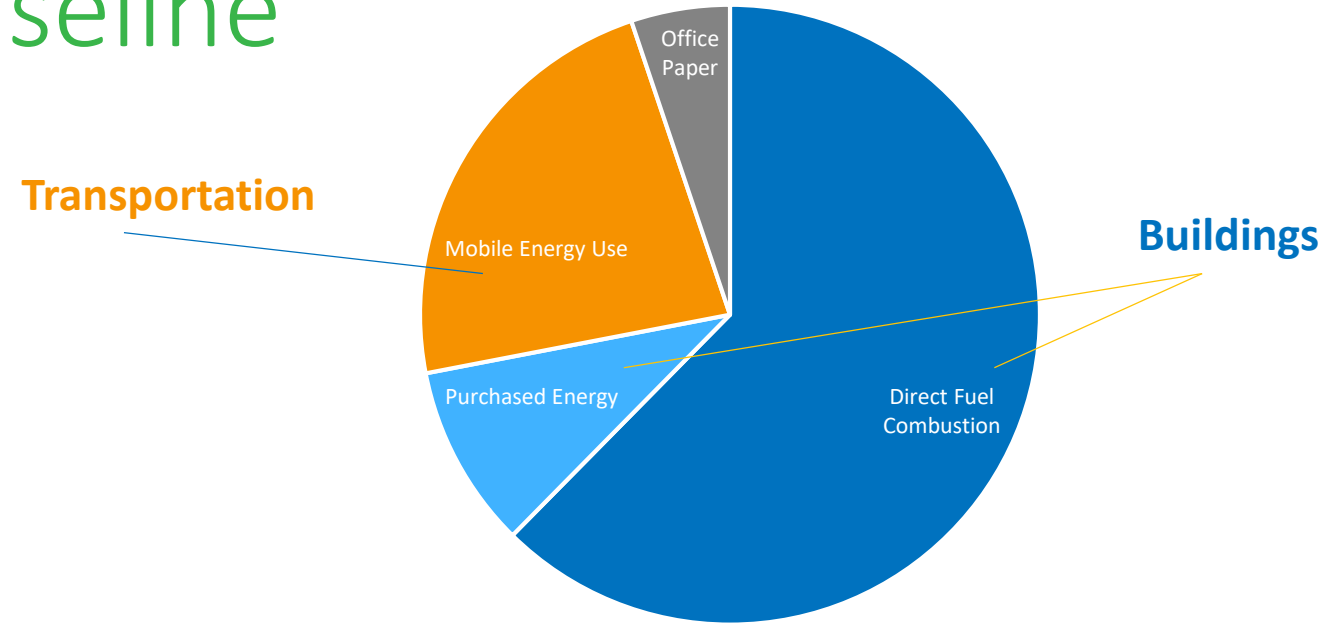
**27-32 % by 2030**

- <https://news.gov.bc.ca/releases/2021ENV0022-000561>

Rede



# Smarttool Baseline 2010



Smarttool	Buildings	Mobile Energy Use	Office Paper		
Also Known As	Natural Gas, Propane	Electricity	Vehicles	Paper	
t CO <sub>2</sub> e GHG	1,386	213	508	115	<b>2,221</b>
	1,598				

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# Apply the Targets

Smarttool	Buildings	Mobile Energy Use	Office Paper	
Also Known As	Natural Gas, Propane	Electricity	Vehicles	Paper
t CO2e GHG	1,598	508	115	<b>2,221</b>

Rede


# Apply the Targets

Smarttool	Buildings	Mobile Energy Use	Office Paper	
Also Known As	Natural Gas, Propane	Electricity	Vehicles	Paper
t CO2e GHG	1,598	508	115	<b>2,221</b>
	<b>59-64% Reduction</b>	<b>27-32% Reduction</b>	<b>59-64% Reduction</b>	

Rede

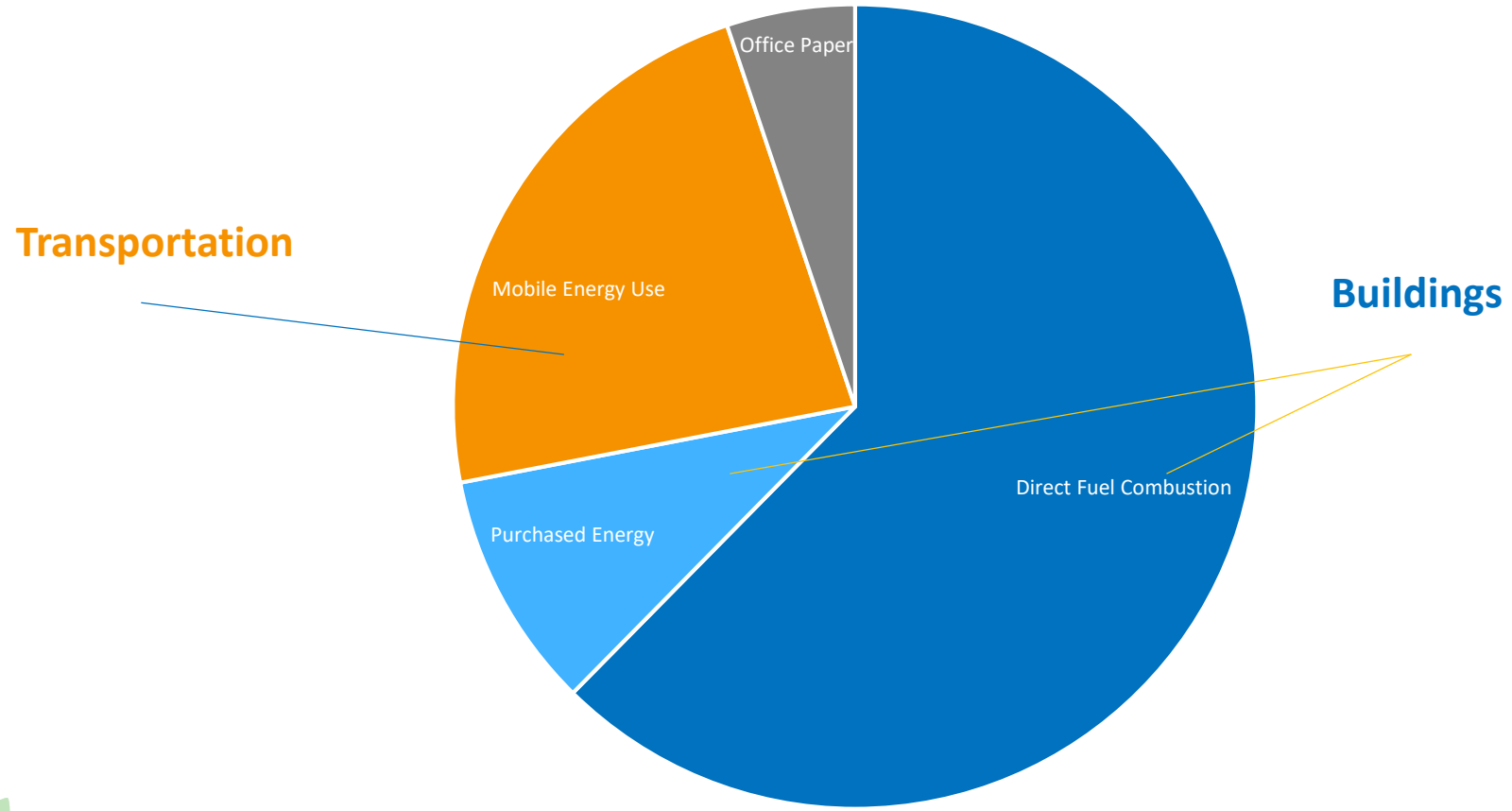
# Apply the Targets

Smarttool	Buildings	Mobile Energy Use	Office Paper	
Also Known As	Natural Gas, Propane	Electricity	Vehicles	Paper
t CO2e GHG	1,598	508	115	<b>2,221</b>
	<b>59-64% Reduction</b>	<b>27-32% Reduction</b>	<b>59-64% Reduction</b>	
Reduction Needed	943 - 1023	137 - 163	68-73	
2030 Target	575-655	345 - 371	41-47	<b>961 - 1073</b>



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# Smarttool Baseline 2010



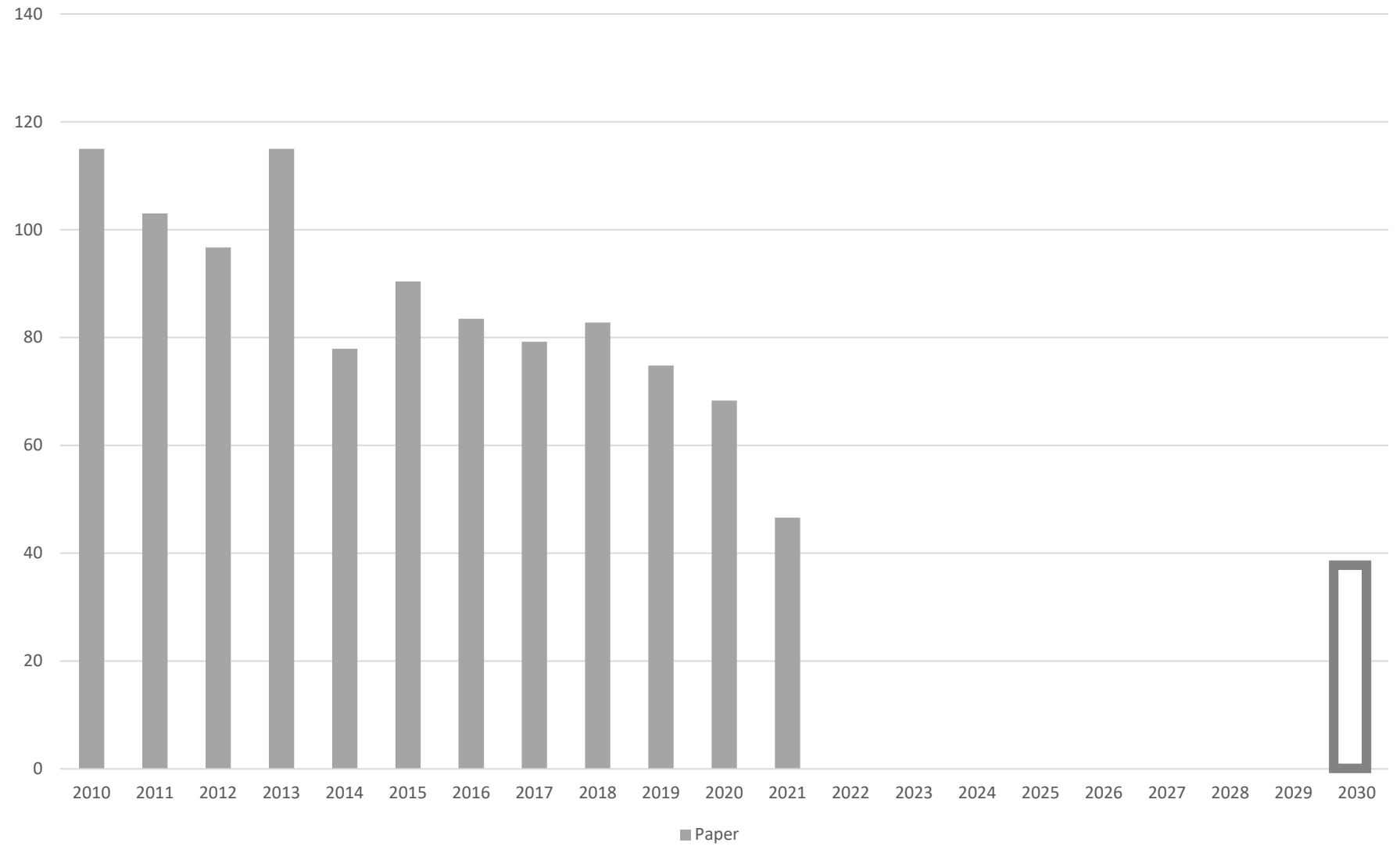
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Paper

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# Paper



# Rede

# Paper

Post  
Consumer  
Recycled  
content

Table 6: Office Paper

PCR Content (%)	Emission Factor (kg CO <sub>2</sub> e/ pkg)		
	8.5" x 11"	8.5" x 14"	11" x 17"
0	6.358	8.094	12.743
10	6.123	7.795	12.272
20	5.888	7.496	11.802
30	5.653	7.197	11.331
40	5.418	6.898	10.860
50	5.184	6.599	10.390
60	4.949	6.300	9.919
70	4.714	6.001	9.449
80	4.479	5.703	8.978
90	4.244	5.404	8.508
100	4.010	5.105	8.037

**Note:** emission factors for office paper are based on a 500-sheet package of 20-pound bond paper weighing 2.27, 2.89 and 4.55 kg, respectively, for the three paper sizes.

# Rede



# Paper

Fall 2021

Recommendation

➤ Implement purchasing policy

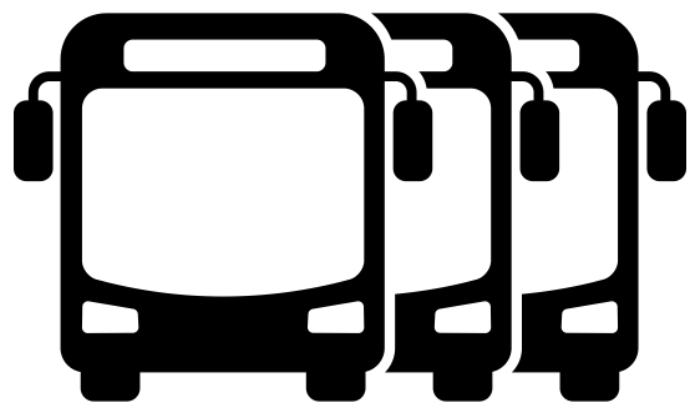
Spring 2022

Action

Schools and departments advised to use Monk-recommended “sugar sheet” paper.

Counts as 100% post-consumer recycled.

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Fleet

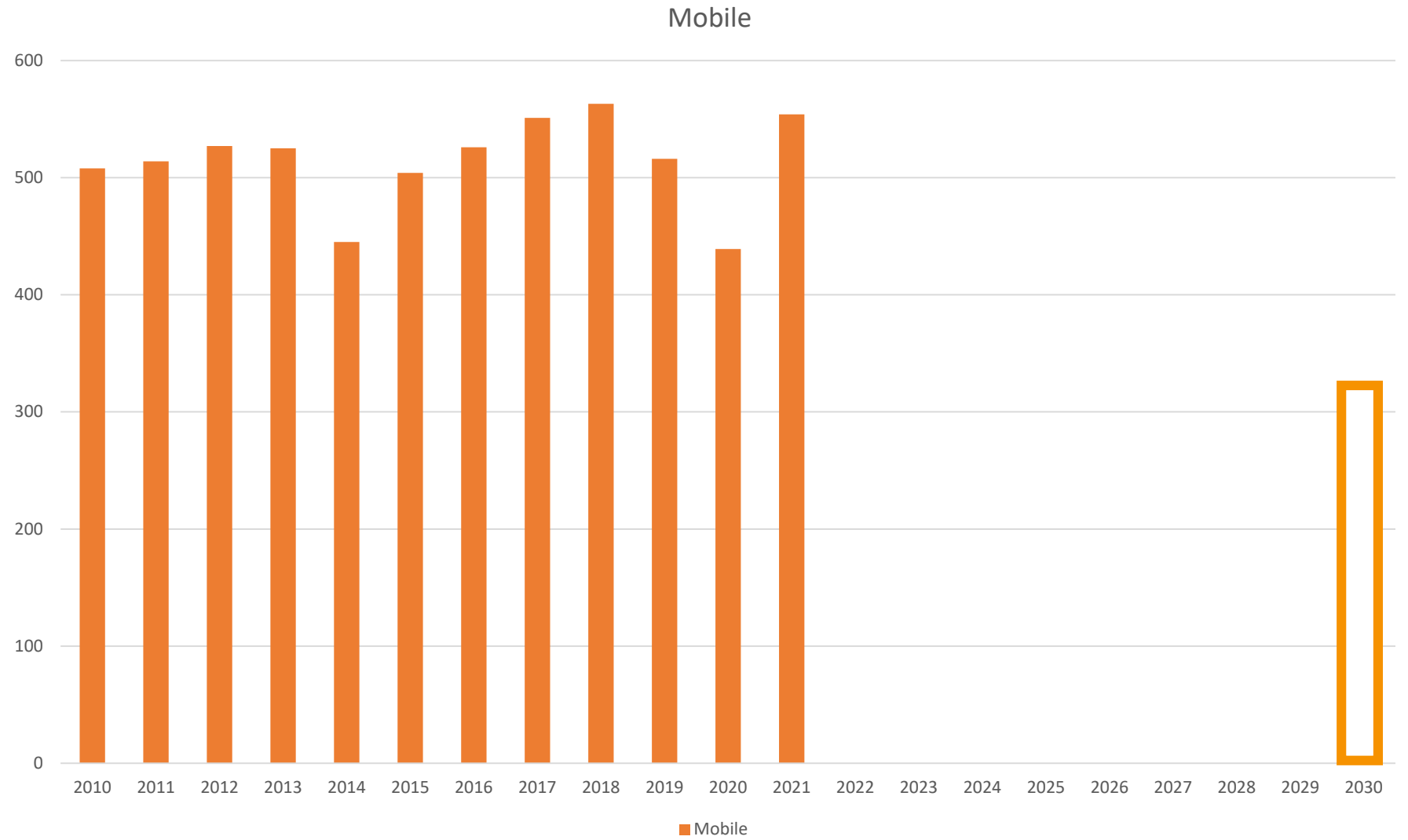
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# Fleet GHG Reduction

Smarttool	Buildings		Mobile Energy Use	Office Paper	
Also Known As	Natural Gas, Propane	Electricity	Vehicles	Paper	
<b>t CO2e GHG</b>	1,598		508	115	<b>2,221</b>
	<b>59-64% Reduction</b>		<b>27-32% Reduction</b>	<b>59-64% Reduction</b>	
<b>Reduction Needed</b>	943 - 1023		137 - 163	68-73	
<b>2030 Target</b>	575-655		345 - 371	41-47	<b>961 - 1073</b>

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# Target - Fleet



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# Fleet - Inventory

	<b>Diesel L</b>	<b>Gasoline L</b>	<b>Total L</b>	
<b>White Fleet</b>	18,561	55,216	73,777	34%
<b>Yellow Fleet</b>	141,982	844	142,826	66%
			216,603	

White Fleet = 34 trucks etc.

Yellow Fleet = 27 buses

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% Electric = 0

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# Fleet – Electrification

## White Fleet Replacement

- No suitable market-ready EV options
  - Trucks
  - Cube Vans
- Consider hybrids where possible

## Yellow Fleet Replacement

- [~13 t GHG per bus]
- 11 buses replaced = 143 t
- 13 buses replaced = 169 t

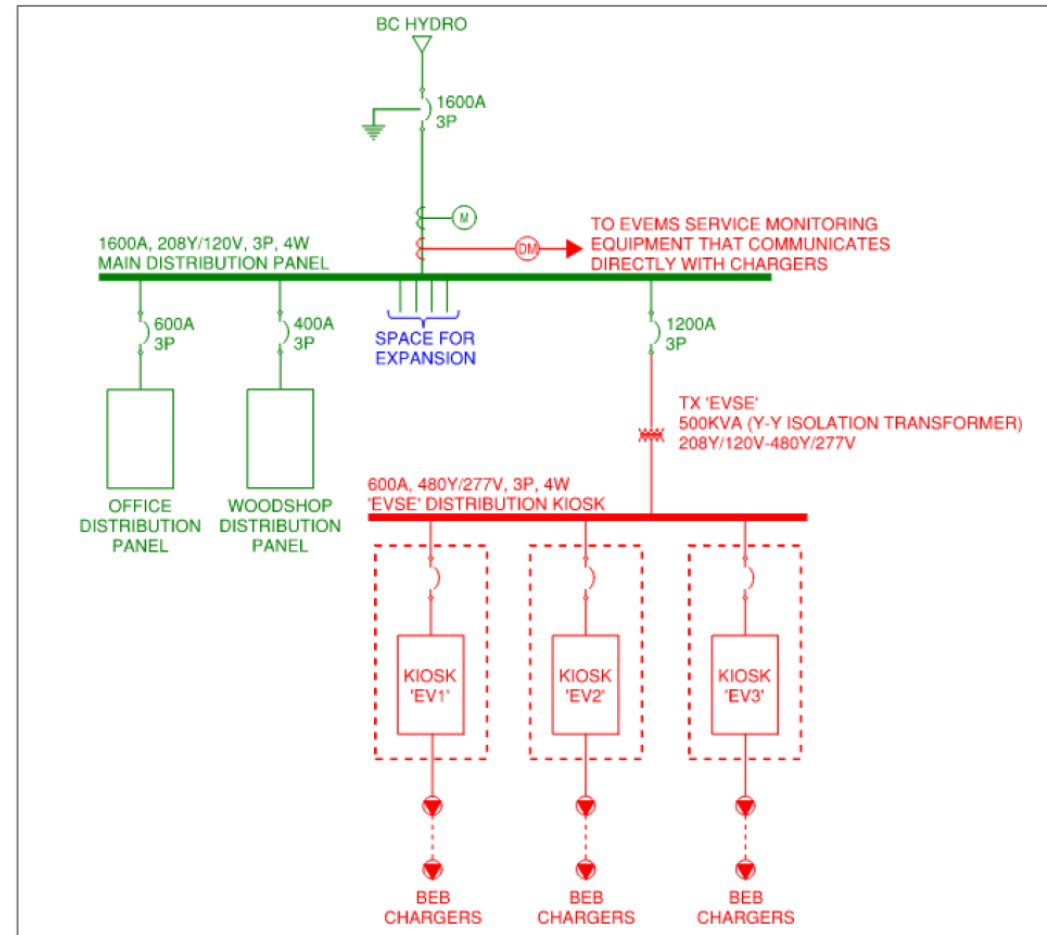
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# Fleet – EV Charging

✓ Service Upgrade Complete  
(Summer 2022)

□ EV Charging Design  
(Fall 2022)

□ 2 EV Chargers Installed  
(Fall/Winter 2022/23)



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# Fleet – Electrification



2021 Budget – Arrive 2023



2022 Budget – Arrive 2024



2023 Budget – Arrive 2025

**Needed by 2030**



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# Fleet – Costs & Incentives

**Type D  
Electric Bus**

<u>1 Bus</u>	<u>2 Buses</u>	
\$455,120	\$910,240	Base Price
\$8,805	\$17,610	Options
\$37,114	\$74,228	Tax (PST plus net GST is approx. 8%)
<b>\$501,039</b>	<b>\$1,002,078</b>	<b>Total Cost</b>
-\$204,215	-\$408,430	Core BUS Funding via EDUC (Diesel)
-\$30,000	-\$60,000	Supplementary BUS Funding via EDUC
-\$150,000	-\$300,000	CleanBC Funding
-\$50,000	-\$50,000	CNCP Funding (one time funding per SD)
<b>-\$434,215</b>	<b>-\$818,430</b>	<b>Available Funding</b>
\$66,824	\$183,648	Canada Infrastructure Bank Loan

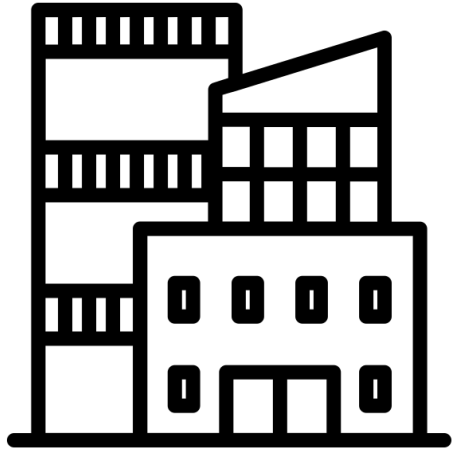
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# Fleet – Funding Gap

## Yellow Fleet Replacement

- 11 – 13 buses
- \$500K per bus
- **Total Cost \$5.5 M - \$6.5M**
  
- Basic Funding \$205K per bus
- **Total Funding \$2,255,000 - \$2,665,000**
  
- **Funding Gap = \$3.2M - \$3.8M**
  - Possible Clean BC Funding
  - Possible CIB Loans

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Buildings

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# How do we de-carbonize?



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# How do we de-carbonize?

- “Fuel Switching”
- “Electrification”
- Heat Pumps

Technology		Ground-oriented Residential	Apartment Style Residential	Small to Medium Commercial	Larger Commercial & Institutional
SPACE HEATING	Air Source Heat Pumps	●	●	●	●
	Hydronic Space & Water Heating	●	●	●	●
	Cold Climate (“Low-Ambient”) Heat Pumps	●	●	●	●
	Rooftop Air Source Heat Pump	N/A	●	●	●
	Variable Refrigerant Flow (VRF)	●	●	●	●
	Ground Source Heat Pumps	●	●	●	●
DOMESTIC HOT WATER	Heat Pump Water Heater (240V)	●	●	●	N/A
	Heat Pump Water Heater (120V)	●	●	N/A	N/A
	Central Heat Pump Water Heater	N/A	●	●	●
	Commercial Heat Pump Water Heater	N/A	N/A	●	●
	Ground Source Heat Pump with Desuperheater	N/A	N/A	N/A	●

● Market ready with multiple models available  
 ● Market evolving. Limited models available  
 N/A Technology is not applicable for this building type

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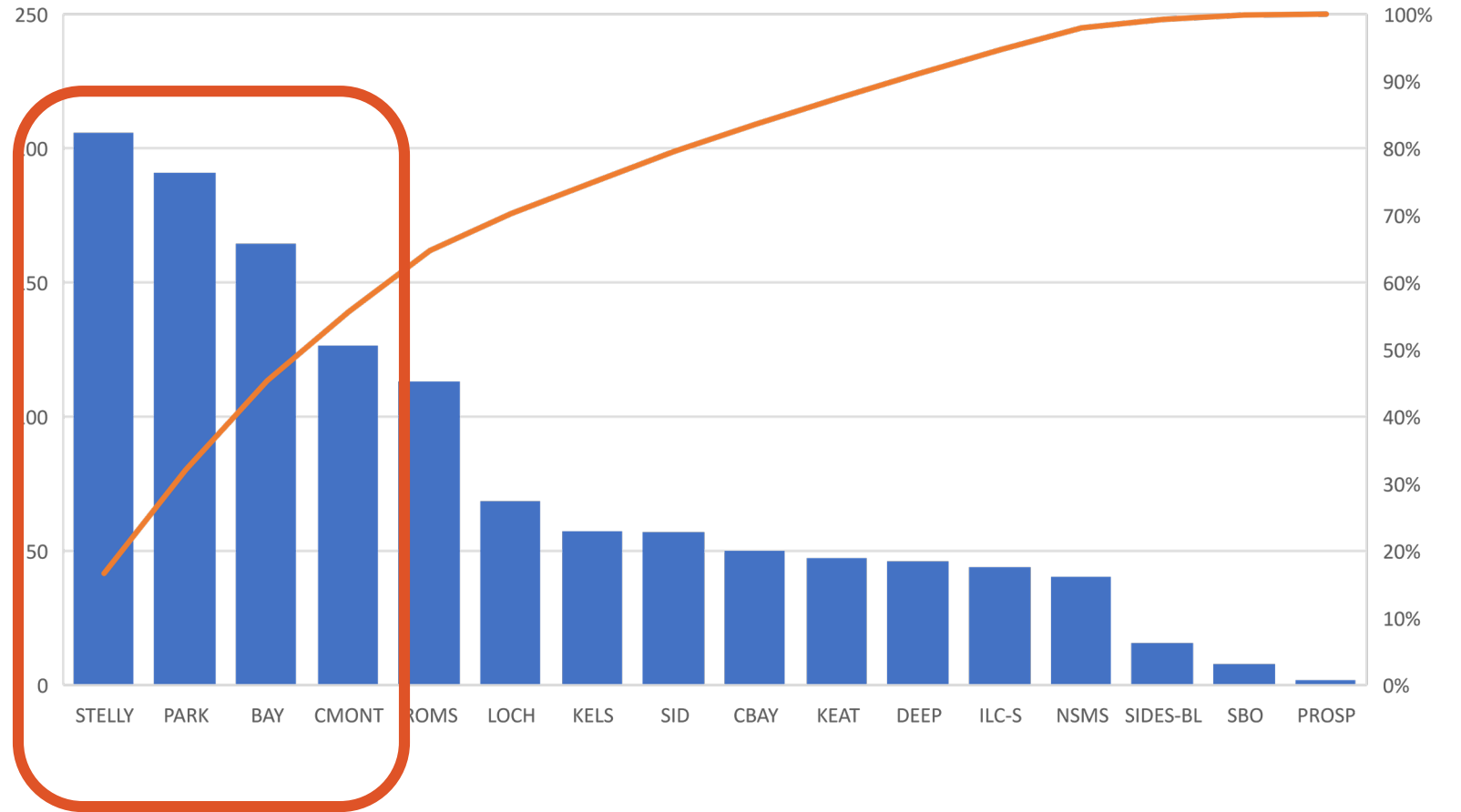
# Building GHG Reduction

Smarttool	Direct Fuel Combustion	Purchased Energy	Mobile Energy Use	Office Paper	
Also Known As	Natural Gas, Propane	Electricity	Vehicles	Paper	
t CO2e GHG	1,598		508	115	<b>2,221</b>
	<b>59-64% Reduction</b>		<b>27-32% Reduction</b>	<b>59-64% Reduction</b>	
Reduction Needed	943 - 1023		137 - 163	68-73	
2030 Target	575-655		345 - 371	41-47	<b>961 - 1073</b>

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# Strategic Priorities

4 largest consumers = 55% of gas GHGs

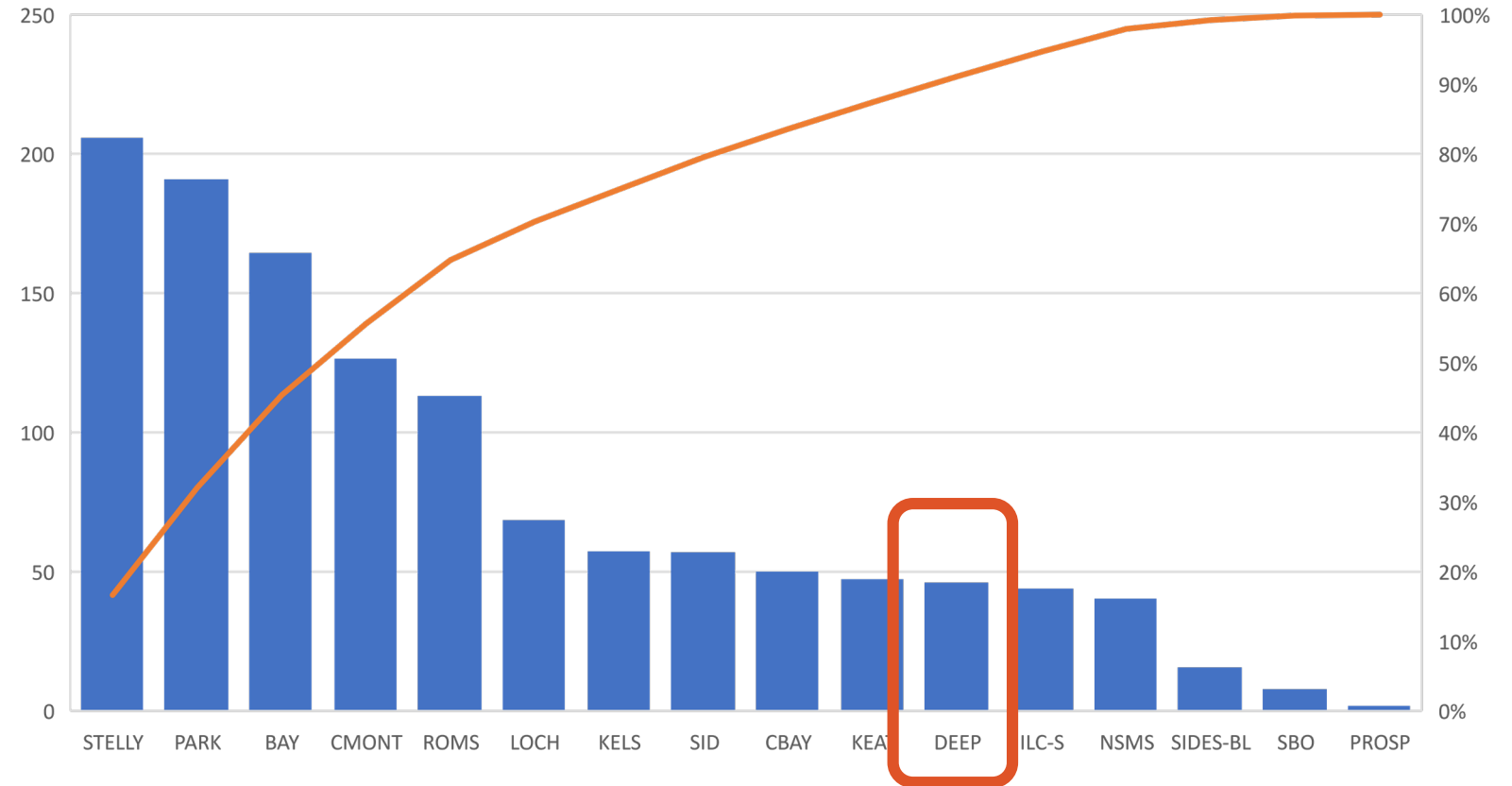


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2020 GHGs from fuels, tCO<sub>2</sub>e

# Strategic Priorities

Failing/Poor  
Systems in  
need of  
replacement



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2020 GHGs from fuels, tCO<sub>2</sub>e



# Cost to Complete

Facility	Central Plant Costs	GHG Savings (t)	Zone Costs	GHG Savings (t)	Total GHGs
Bayside Middle School	1,485,000	118		46	164
Claremont Secondary	1,235,000	80		44	124
Cordova Bay Elementary	155,000	14		32	46
Deep Cove Elementary	940,000	29		16	45
ILC - Saanichton	675,000	30		13	43
Keating Elementary & DRC	605,000	33		13	46
Kelset Elementary	750,000	36		23	59
Lochside Elementary	625,000	43		23	66
North Saanich Middle School	405,000	40			40.1
Parkland Secondary	1,225,000	119		66	185
Royal Oak Middle School	435,000	110			110
School Board Office	60,000	7			7
Sidney Elementary	565,000	54		2	56
SIDES - Beaver Lake	810,000	15			15
Stelly's Secondary	1,135,000	114		85	199
	<b>\$11,105,000</b>	<b>842</b>	<b>\$10-\$20M</b>	<b>363</b>	<b>1,205</b>

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Completed by SMCN

# Buildings – Funding Gap

- \$1.5M AFG funding
- \$1M SEP funding
- \$500k CNCP funding

~1205 t reduction

Need \$21 - \$31 M

Expecting \$4 M (\$500k x 8 years)

**Funding Gap = \$17M - \$27M**

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# Other Funding Options

## Provincial Government

### CleanBC Custom Incentives

- Max \$200,000 per project
- Max \$750,000 per customer

## Federal Government

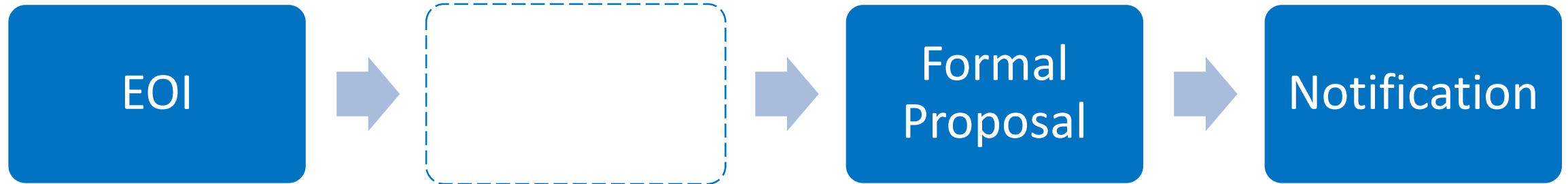
### Low Carbon Economy Fund

- Min \$1M per application
- Max \$25M per application
- 50% cost sharing



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# Low Carbon Economy Fund



March 2022  
\$20M Application  
  
District-Wide  
Electrification

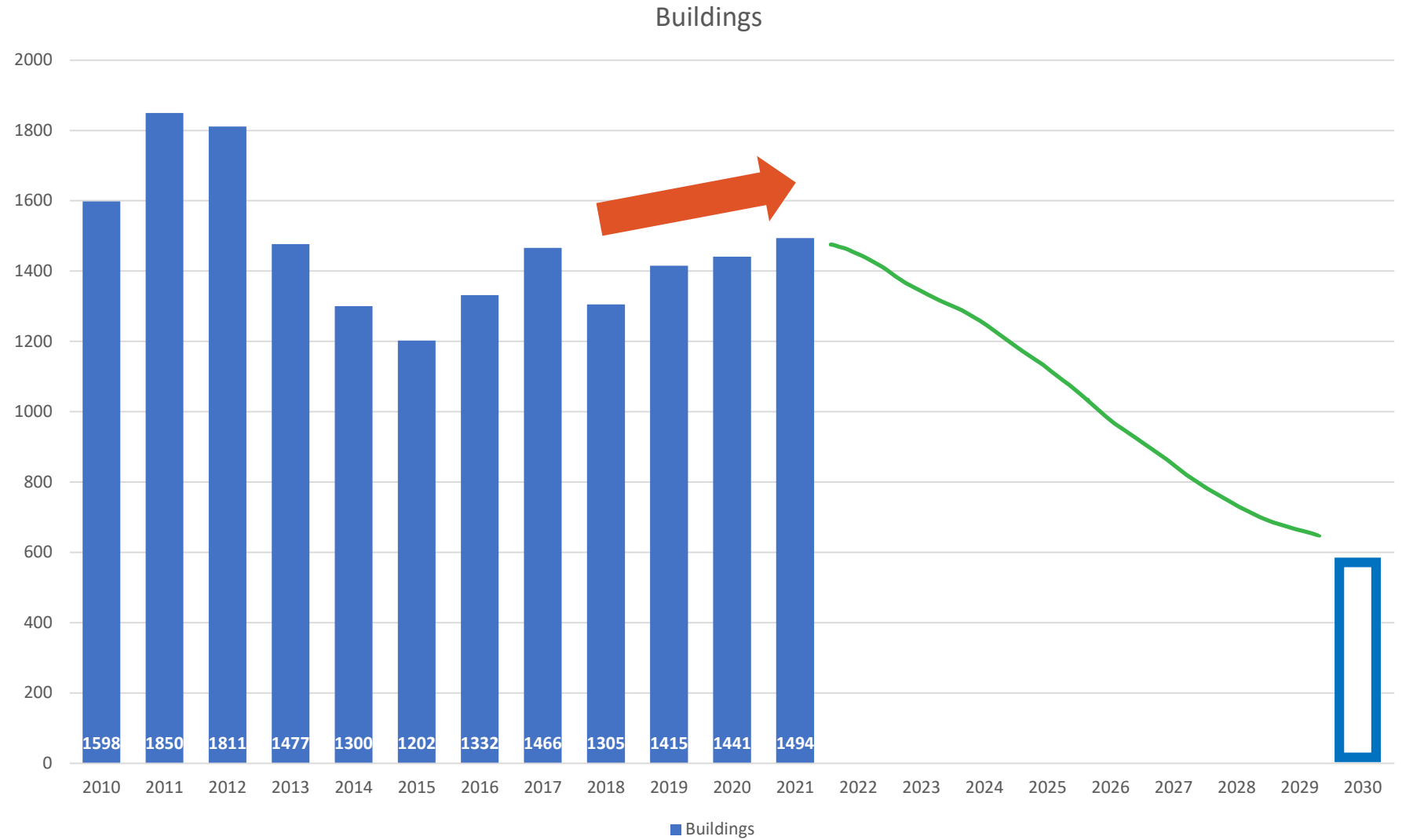
May 2022  
Approved to Proceed  
  
50% Cost-Share  
  
\$10M Loan Needed  
Permission from Ministry needed.  
Permission Declined.

July 2022  
\$5.2M Application  
  
Stelly's only  
  
\$2.5M Federal  
\$2.7M SD63  
Clean BC  
CNCP  
AFG/SEP

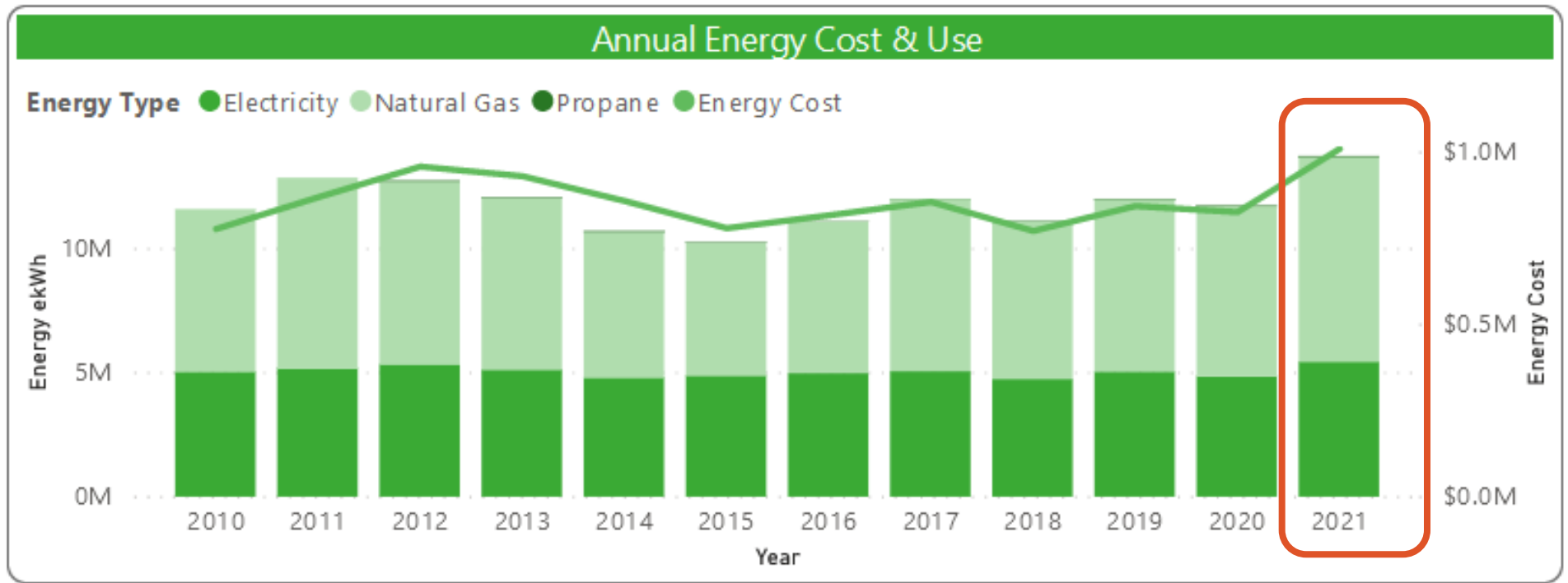
November 2022

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# Target - Buildings



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### Annual Energy Cost & Use

Energy Type	Electricity		Natural Gas		Propane		Total	
	Energy Cost	Energy ekWh	Energy Cost	Energy ekWh	Energy Cost	Energy ekWh	Energy Cost	Energy ekWh
2018	\$569,604	4,750,538	\$195,392	6,345,626	\$4,110	22,013	<b>\$769,106</b>	<b>11,118,177</b>
2019	\$602,717	5,052,305	\$234,961	6,940,854	\$3,774	21,254	<b>\$841,453</b>	<b>12,014,413</b>
2020	\$571,545	4,856,813	\$246,163	6,852,031	\$6,120	38,940	<b>\$823,829</b>	<b>11,747,784</b>
2021	\$640,304	5,447,111	\$358,386	8,252,817	\$8,838	48,504	<b>\$1,007,528</b>	<b>13,748,432</b>

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# Causes of Increase

## 1. Covid

Increased ventilation

=

Increased gas use



# Rede

Rede saw an increase of 15 – 20% across multiple clients.

# Causes of Increase

## 2. Occupant Behaviour

Open doors and windows

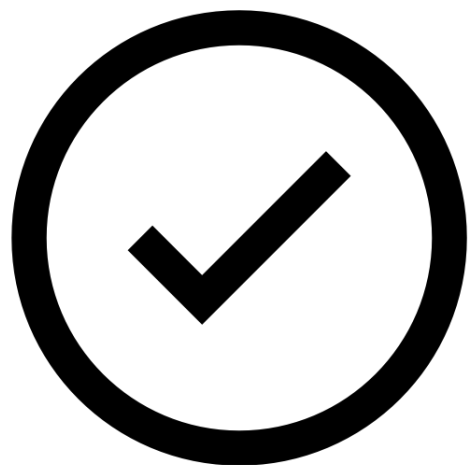
Action Needed:

- New Systems
- Enforcement



# Rede

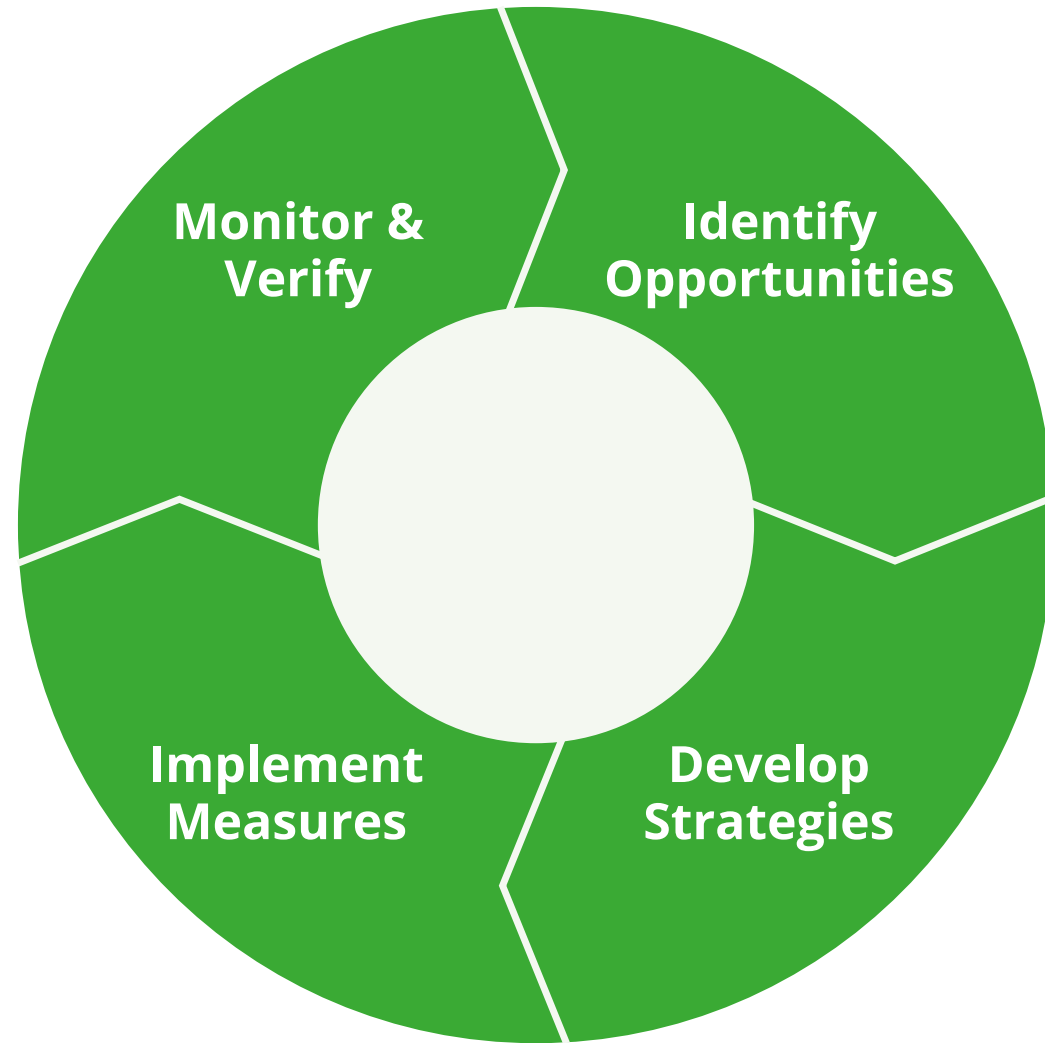




Other  
Initiatives

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# Energy Management

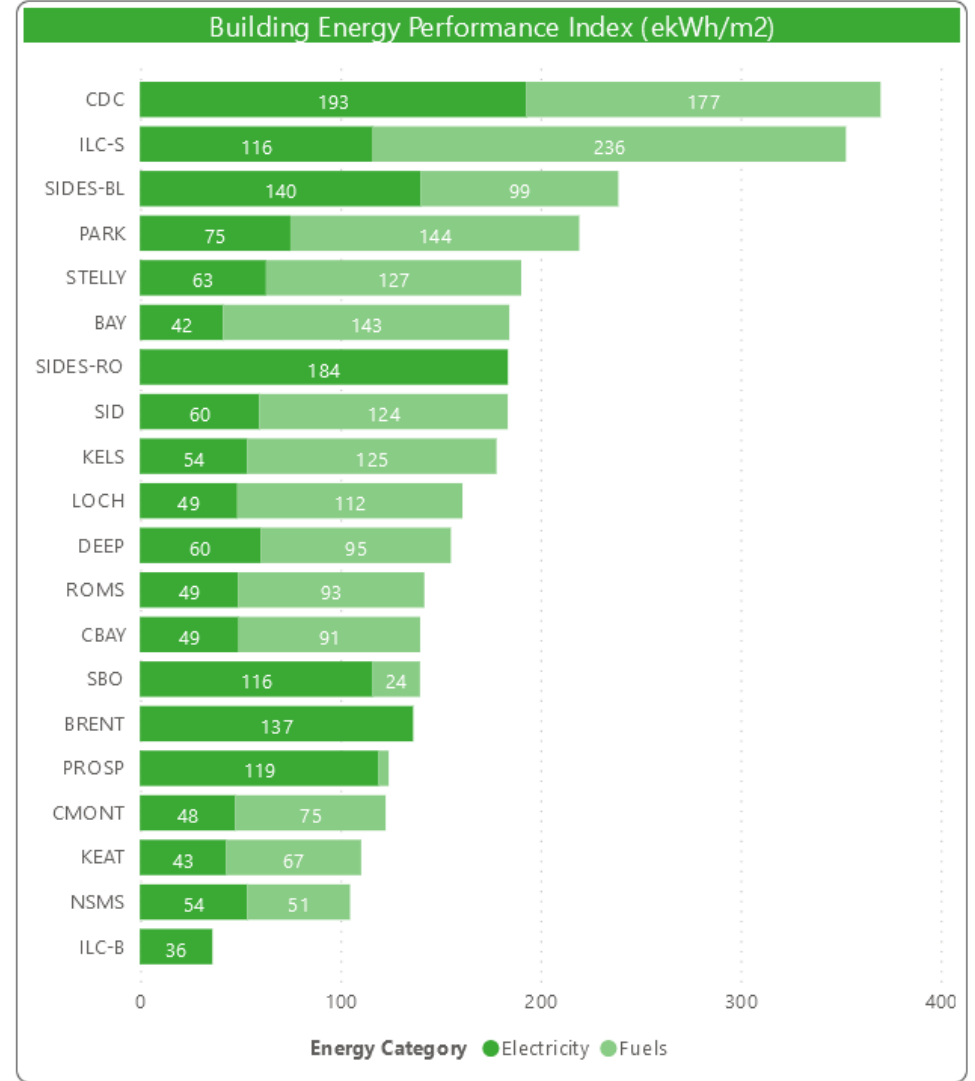
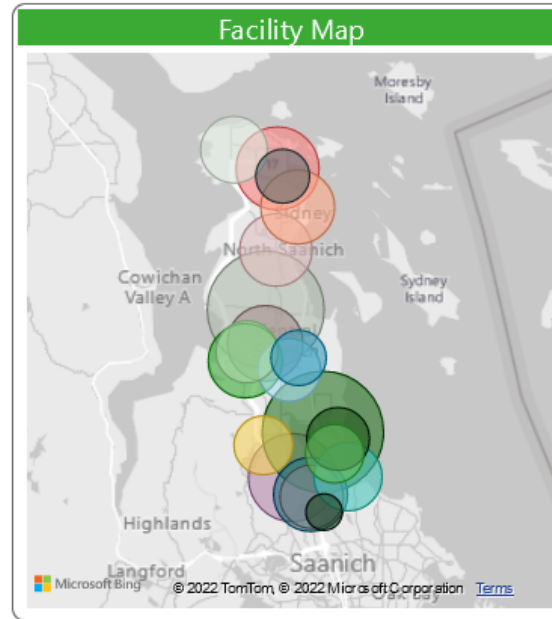


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# Utility Reporting

## SD63 Saanich School District

Organization  
**163**  
BEPI



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# BC Hydro Continuous Optimization

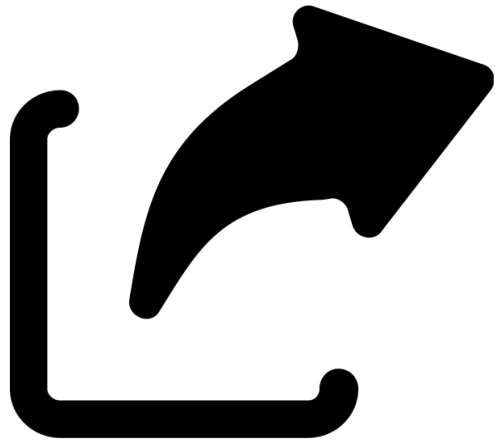


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Keating Elementary  
Lochside Elementary  
North Saanich Middle School  
Brentwood Elementary  
Cordova Bay Elementary  
Kelset Elementary  
Sidney Elementary

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Next Steps

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# Mind the Gap

Paper

Fleet

Buildings

**Funding Gap**  
**\$3.2M - \$3.8M**

**Funding Gap**  
**\$17M - \$27M**

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# Next Steps

Category	Action	Next Step
Paper	<input type="checkbox"/> Purchasing Policy	<input type="checkbox"/> Monitor efficacy
Fleet	<input type="checkbox"/> EV Charging <input type="checkbox"/> Funding	<input type="checkbox"/> Installation - Phase 1 <input type="checkbox"/> Ongoing incentive applications
Buildings	<input type="checkbox"/> Funding	<input type="checkbox"/> LCEF Notification <input type="checkbox"/> ???

Rede

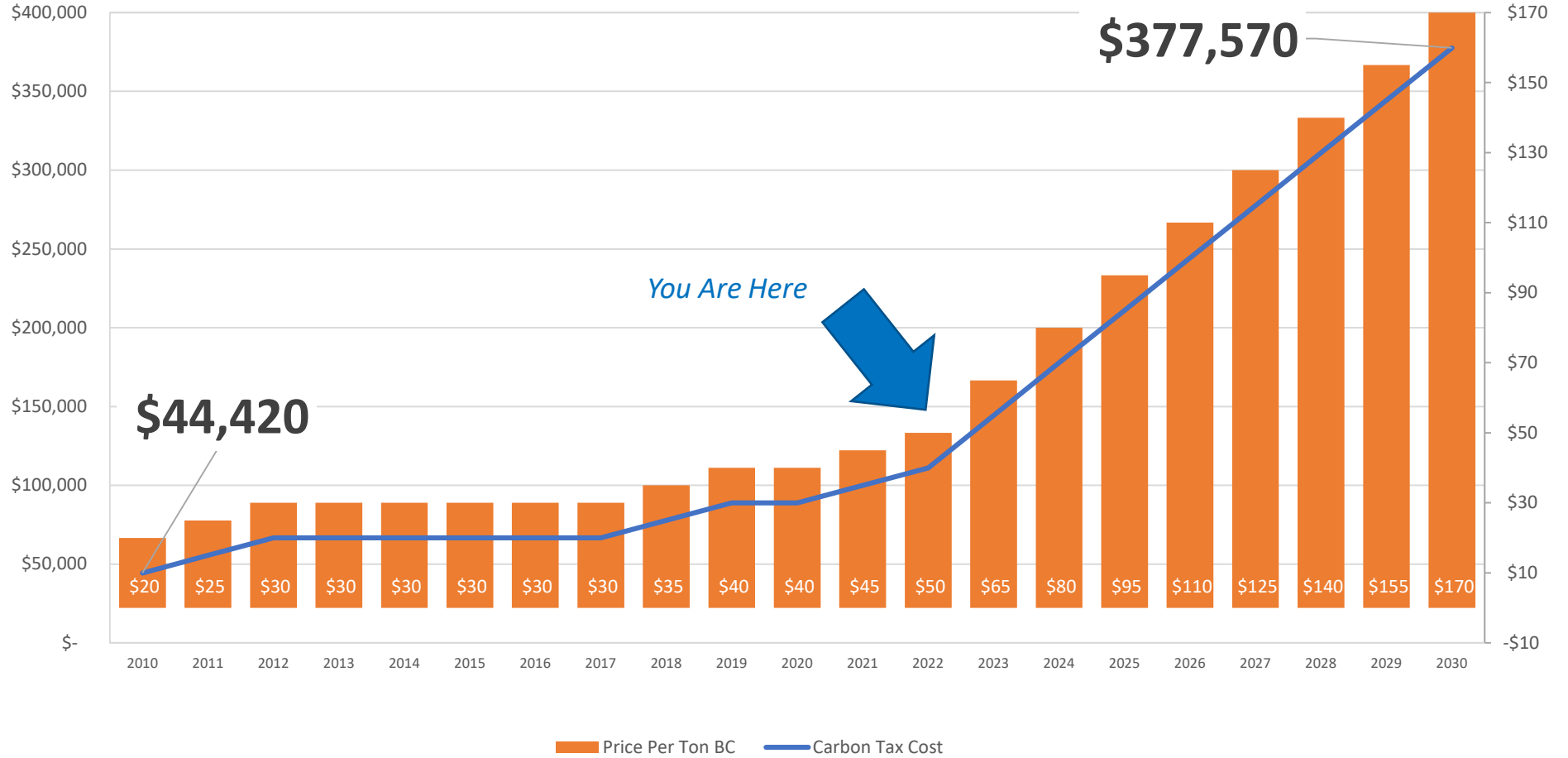
What if we don't meet the targets?

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# Carbon Tax Escalation

(does not include cost of offsets)



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Projection assuming no change in GHG emissions from 2010 Baseline

# Needed

- Advocacy for additional funding
- Action on Behaviour change

# Rede



Rede

To: Finance, Facilities & Technology Committee

Prepared By: Jason Reid  
 Secretary Treasurer

Subject: Final Enrolment and Funding

Date: October 14, 2022

**Purpose**

The purpose of this briefing note is to inform the Committee and Board of final fall enrolment and related funding, and to recommend for the Board’s approval allocation of additional funding available in forming the district’s 2022/23 Amended Annual Budget.

**Background**

Each year the Board of Education approves a preliminary budget before the beginning of the July 1<sup>st</sup> to June 30<sup>th</sup> fiscal year. An amended annual budget is then adopted during the year (before the end of February) reflecting changes that result from:

- analysis of prior year financial results and confirmation of available accumulated operating surplus;
- confirmation of fall enrolment and resulting funding and staffing costs; and,
- other circumstances that have arisen subsequent to adoption of the preliminary budget.

Prior Year (2021/22) Financial Results

For the year ended June 30, 2022 the district’s expenses exceeded its revenue resulting in an annual deficit of \$3,498,631 (2021 result was a small surplus of \$345,534). This was comprised of the combined financial results of the operating fund and the capital fund as follows:

Annual Surplus (Deficit)	June 30, 2022	June 30, 2021
<b>Operating Fund</b>	<b>(2,921,751)</b>	<b>238,630</b>
Capital Fund	(576,880)	106,904
Combined	(3,498,631)	345,534

In the operating fund, the annual deficit of \$2,921,751 resulted in accumulated operating surplus decreasing from \$6,916,708 at the beginning of the year to \$3,994,957 as of June 30, 2022. Significant factors increasing fiscal pressure in 2021/22 were increased staff replacement costs attributable to the Omicron COVID-19 variant, actual employee benefit costs being much closer to budget than in previous years, and general cost inflation in service and supplies.

As the Board appropriated \$2,530,968 in accumulated surplus (June 2022) to balance the preliminary 2022/23 budget and \$996,516 to fund non-discretionary multi-year activities, only \$476,473 remained to be allocated to the contingency reserve in September 2022.

	2021/22 Financial Statements	2021/22 Amended Budget	2020/21 Financial Statements
District Activities (multi-year funding)	592,584	984,527	984,527
School Activities (multi-year funding)	403,932	694,213	694,213
Learning Impacts of Pandemic	-	234,849	234,849
Appropriated for Budget in following year	2,530,968	2,418,503	2,757,247
<b>Total Internally Restricted</b>	<b>3,527,484</b>	<b>4,332,092</b>	<b>4,670,836</b>
Contingency Reserve (Unappropriated Surplus)	467,473	2,584,616	723,702
Unrestricted Surplus	-	-	1,522,170
<b>Total Accumulated Surplus</b>	<b>3,994,957</b>	<b>6,916,708</b>	<b>6,916,708</b>

The increased trajectory of expenditures relative to budget during 2021/22 is concerning as many of the drivers of this cost escalation are expected to continue, and the budget reductions/changes made in the 2022/23 preliminary budget only offset additional forecasted unfunded inflationary pressures (and not this additional experienced financial pressure during 2021/22). With depletion of the contingency reserve, if we experience further decline in accumulated surplus the district will face significant budget pressure in 2023/24.

**Confirmation of Fall Enrolment and Funding**

School Age Enrolment reported to the Ministry for funding is presented below in the “2022/23 Actual” column. At this stage, overall enrolment has declined by 21.4 FTE relative for forecast (“2022/23 Preliminary”); however, enrolment will likely decline further in the coming weeks as duplicate enrolments are resolved between secondary schools. Last fall secondary enrolment declined by 26.5 FTE for duplicate resolution following the reporting of enrolment to the Ministry.

	2019/20 Actual	2020/21 Actual	2021/22 Actual	2022/23 Preliminary	2022/23 Actual	Variance Increase / (Decrease)	
<b>School Age Enrolment</b>							
Elementary	2,813.0	2,783.0	2,907.0	2,963.0	2,964.0	1.0	
Middle	1,580.0	1,479.0	1,535.0	1,492.0	1,532.0	40.0	
Secondary	2,237.0	2,150.0	2,154.0	2,162.0	2,176.7	14.7	*
Continuing Education	23.0	12.0	16.0	15.0	11.4	-3.6	
Alternate Programs (ILC)	182.0	182.0	178.0	185.0	197.9	12.9	*
Online Learning (SIDES)	287.0	800.0	573.0	450.0	363.6	-86.4	
<b>Total School Age Enrolment</b>	<b>7,122.0</b>	<b>7,406.0</b>	<b>7,363.0</b>	<b>7,267.0</b>	<b>7,245.6</b>	<b>-21.4</b>	
* Secondary Enrolment will decline following duplicate enrolment validation.							

Elementary enrolment is close to forecast, and Middle School enrolment is 40 FTE above forecast. Enrolment at Secondary/CE/ILC is 24 FTE above forecast; however, we expect final enrolment may decline closer to forecast as duplicate enrolments are resolved. Forecasting the impact of the pandemic on SIDES enrolment has been challenging, and this fall actual enrolment is below forecast by 86 FTE.

The district has experienced modest overall growth in funding because designations for unique needs have exceeded forecast. The district will also receive an estimated \$172,733 in supplemental funding for enrolment decline; however, this figure will change as enrolment declines further with duplicate validation. Note that supplemental funding for enrolment decline should not fund continuing programs, as it is one-time funding. The combined impact of actual enrolment and unique needs designations relative to forecast is presented in attachment 1.

Attachment 1 also includes the following proposed budget changes in response to both enrolment/designation changes and new information:

- Inclusive Education – increase by \$400,000 for increased unique needs
- Enrolling Teacher – reduce by \$159,450 (1.5 FTE) for enrolment decline
- WorkSafe Premiums - \$70,000 increase to fund 2023 premium rate growth (rate increase was announced after the preliminary budget was adopted)
- Transportation - \$75,000 for fuel and parts inflationary cost beyond preliminary budget estimate<sup>1</sup>

Net funding from growth (after reflecting the above proposed budget changes) is \$383,571; however, this figure will change following duplicate resolution.

Given our concerns over inflationary cost pressures and contingency reserve depletion, my recommendation is that available net funding from growth be allocated to increase the contingency reserve.

Following approval of the allocation of funding from net growth, these changes will be reflected in the 2022/23 Amended Budget to be adopted by the Board in February 2023.

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<sup>1</sup> Note that inflationary costs for services and supplies are being absorbed into most budgets reducing purchasing power. However, it is not possible to absorb transportation inflationary costs without reducing service levels.

Staff Recommendations

That the Board approve the proposed budget changes as presented and allocation of residual net funding from growth to increase the contingency reserve.

With Respect,

A handwritten signature in blue ink, appearing to read "Jason Reid".

Jason Reid  
Secretary Treasurer

JR/klg

Attachments: 1 - Net Funding Growth and Final Allocations for Amended Budget

## Attachment 1: Net Funding Growth and Final Allocations for Amended Budget

	2022/23 Forecasted Enrolment	2022/23 Actual Enrolment (validation pending)	Difference	Rate	Incremental Funding
Basic Allocation	6,817.00	6,881.9375	64.94	\$7,885	512,032
Basic Allocation - Online Learning	450.00	363.6250	-86.38	\$6,360	-549,345
Homeschool	15.00	14.0000	-1.00	\$250	-250
Unique Needs - Level 1	8.00	10.0000	2.00	\$44,850	89,700
Unique Needs - Level 2	315.00	351.0000	36.00	\$21,280	766,080
Unique Needs - Level 3	230.00	251.0000	21.00	\$10,750	225,750
English Language Learning	525.00	519.0000	-6.00	\$1,585	-9,510
Indigenous Education	620.00	601.0000	-19.00	\$1,565	-29,735
Non-Graduated Adults	30.00	27.1250	-2.88	\$5,030	-14,461
Changes in other enrolment based supplements					-5,668
Increased one-time funding for enrolment decline (from \$88,205 to \$172,733)					84,528
Decreased Graduated Adult Enrolment					-85,000
Estimated Funding Reduction from Duplicate Enrolment Resolution					-215,000

**Enrolment Revenue growth relative to preliminary budget** **769,121**

**Proposed Budget Changes - Enrolment Based**

Increase - Inclusive Education	400,000
Decrease - 1.5 FTE Enrolling Teacher	-159,450
<b>Increased Staffing Budget</b>	<b>240,550</b>

**Proposed Budget Changes - Other**

Increased Worksafe BC Rate effective January 2023	70,000
Transportation - Fuel/Parts Inflation	75,000
<b>Total Expenditure Growth</b>	<b>385,550</b>

**Growth of Revenue net of Expenditures** **383,571**