

Local Government Name:	<i>The City of Courtenay</i>
Year:	<i>2022</i>
Contact Information:	
Name:	<i>Garret Wright</i>
Position:	<i>Engineering Technologist</i>
Telephone Number:	<i>250-334-4441</i>
Email address:	gwright@courtenay.ca

Stationary Emission Sources:					
Building Fuel	Units	Lookup	Consumption	Emissions Factor	Emissions (tCO2e)
01 - Fortis BC Natural Gas	GJ	01 - Fortis BC Natural GasGJ	8,764.00	0.049846500	436.85
Electricity - BC Hydro	kWh	Electricity - BC HydrokWh	4,051,308.00	0.000011498	46.58
Mobile Emission Sources:					
Vehicle Class	Units	Lookup	Consumption	Emissions Factor	Emissions (tCO2e)
01 Light-duty Vehicle - Gasoline	L	01 Light-duty Vehicle - GasolineL	89,185.91	0.002201685	196.36
02 Light-duty Vehicle - Diesel	L	02 Light-duty Vehicle - DieselL	93,726.00	0.002633008	246.78
Total Directly Delivered Services Emissions					926.58
Contracted Mobile Emission Sources:					
Vehicle Class	Units	Lookup	Consumption	Emissions Factor	Emissions (tCO2e)
14 Heavy Duty - Diesel	L	14 Heavy Duty - DieselL	130,576.42	0.002616375	341.64
01 Light-duty Vehicle - Gasoline	L	01 Light-duty Vehicle - GasolineL	5,382.75	0.002201685	11.85
Total Contracted Services Emissions					353.49
Total Corporate GHG Emissions					1,280.07

Electricity - BC - Fort Nelson Grid	MJ	Electricity - BC - Fort Nelson GridMJ	0.000135
Electricity - BC - Integrated Grid - Nelson Hydro	MJ	Electricity - BC - Integrated Grid - Nelson HydroMJ	0.000003
Electricity - BC - Integrated Grid - Penticton Electrical	MJ	Electricity - BC - Integrated Grid - Penticton ElectricalMJ	0.000003
Electricity - BC - Off Grid Diesel/River Cogen: Ah-Sin Heek, Clayton Falls	MJ	Electricity - BC - Off Grid Diesel/River Cogen: Ah-Sin Heek,	0.000003
Electricity - BC -Off Grid Diesel Standby: Atlin	MJ	Electricity - BC -Off Grid Diesel Standby: AtlinMJ	0.000003
Electricity - BC Hydro	MJ	Electricity - BC HydroMJ	0.000003
Electricity - BC- Off Grid Diesel	MJ	Electricity - BC- Off Grid DieselMJ	0.000135
Electricity - BC- Off Grid Diesel Standby: Bella Bella	MJ	Electricity - BC- Off Grid Diesel Standby: Bella BellaMJ	0.000003
Electricity - FortisBC	MJ	Electricity - FortisBCMJ	0.000003
Electricity -BC - Off Grid Diesel Standby: Dease Lake	MJ	Electricity -BC - Off Grid Diesel Standby: Dease LakeMJ	0.000003
Electricity -BC - Off Grid Diesel/River Cogen: Sandspit	MJ	Electricity -BC - Off Grid Diesel/River Cogen: SandspitMJ	0.000003
Electricity - BC - Fort Nelson Grid	GJ	Electricity - BC - Fort Nelson GridGJ	0.135000
Electricity - BC - Integrated Grid - Nelson Hydro	GJ	Electricity - BC - Integrated Grid - Nelson HydroGJ	0.003194
Electricity - BC - Integrated Grid - Penticton Electrical	GJ	Electricity - BC - Integrated Grid - Penticton ElectricalGJ	0.003194
Electricity - BC - Off Grid Diesel/River Cogen: Ah-Sin Heek, Clayton Falls	GJ	Electricity - BC - Off Grid Diesel/River Cogen: Ah-Sin Heek,	0.003194
Electricity - BC -Off Grid Diesel Standby: Atlin	GJ	Electricity - BC -Off Grid Diesel Standby: AtlinGJ	0.003194
Electricity - BC Hydro	GJ	Electricity - BC HydroGJ	0.003194
Electricity - BC- Off Grid Diesel	GJ	Electricity - BC- Off Grid DieselGJ	0.135000
Electricity - BC- Off Grid Diesel Standby: Bella Bella	GJ	Electricity - BC- Off Grid Diesel Standby: Bella BellaGJ	0.003194
Electricity - FortisBC	GJ	Electricity - FortisBCGJ	0.003194
Electricity -BC - Off Grid Diesel Standby: Dease Lake	GJ	Electricity -BC - Off Grid Diesel Standby: Dease LakeGJ	0.003194
Electricity -BC - Off Grid Diesel/River Cogen: Sandspit	GJ	Electricity -BC - Off Grid Diesel/River Cogen: SandspitGJ	0.003194
Electricity - BC - Fort Nelson Grid	KWh	Electricity - BC - Fort Nelson GridKWh	0.000486
Electricity - BC - Integrated Grid - Nelson Hydro	KWh	Electricity - BC - Integrated Grid - Nelson HydroKWh	0.000011
Electricity - BC - Integrated Grid - Penticton Electrical	KWh	Electricity - BC - Integrated Grid - Penticton ElectricalKWh	0.000011
Electricity - BC - Off Grid Diesel/River Cogen: Ah-Sin Heek, Clayton Falls	KWh	Electricity - BC - Off Grid Diesel/River Cogen: Ah-Sin Heek,	0.000011
Electricity - BC -Off Grid Diesel Standby: Atlin	KWh	Electricity - BC -Off Grid Diesel Standby: AtlinKWh	0.000011
Electricity - BC Hydro	KWh	Electricity - BC HydroKWh	0.000011
Electricity - BC- Off Grid Diesel	KWh	Electricity - BC- Off Grid DieselKWh	0.000486
Electricity - BC- Off Grid Diesel Standby: Bella Bella	KWh	Electricity - BC- Off Grid Diesel Standby: Bella BellaKWh	0.000011
Electricity - FortisBC	KWh	Electricity - FortisBCKWh	0.000011
Electricity -BC - Off Grid Diesel Standby: Dease Lake	KWh	Electricity -BC - Off Grid Diesel Standby: Dease LakeKWh	0.000011
Electricity -BC - Off Grid Diesel/River Cogen: Sandspit	KWh	Electricity -BC - Off Grid Diesel/River Cogen: SandspitKWh	0.000011
Electricity - BC - Fort Nelson Grid	GWh	Electricity - BC - Fort Nelson GridGWh	486.000000
Electricity - BC - Integrated Grid - Nelson Hydro	GWh	Electricity - BC - Integrated Grid - Nelson HydroGWh	11.498400
Electricity - BC - Integrated Grid - Penticton Electrical	GWh	Electricity - BC - Integrated Grid - Penticton ElectricalGWh	11.498400
Electricity - BC - Off Grid Diesel/River Cogen: Ah-Sin Heek, Clayton Falls	GWh	Electricity - BC - Off Grid Diesel/River Cogen: Ah-Sin Heek,	11.498400
Electricity - BC -Off Grid Diesel Standby: Atlin	GWh	Electricity - BC -Off Grid Diesel Standby: AtlinGWh	11.498400
Electricity - BC Hydro	GWh	Electricity - BC HydroGWh	11.498400
Electricity - BC- Off Grid Diesel	GWh	Electricity - BC- Off Grid DieselGWh	486.000000
Electricity - BC- Off Grid Diesel Standby: Bella Bella	GWh	Electricity - BC- Off Grid Diesel Standby: Bella BellaGWh	11.498400
Electricity - FortisBC	GWh	Electricity - FortisBCGWh	11.498400
Electricity -BC - Off Grid Diesel Standby: Dease Lake	GWh	Electricity -BC - Off Grid Diesel Standby: Dease LakeGWh	11.498400
Electricity -BC - Off Grid Diesel/River Cogen: Sandspit	GWh	Electricity -BC - Off Grid Diesel/River Cogen: SandspitGWh	11.498400
01 - Fortis BC Natural Gas	MJ	01 - Fortis BC Natural GasMJ	4.98465E-05
02 - Propane	m3	02 - Propanem3	1.544282057
05A - Light Fuel Oil (Standard)	m3	05A - Light Fuel Oil (Standard)m3	2.669379
05B - Light Fuel Oil (B5)	m3	05B - Light Fuel Oil (B5)m3	2.62449408
07A - Diesel Fuel (Standard)	m3	07A - Diesel Fuel (Standard)m3	2.650894
07B - Diesel Fuel (B5)	m3	07B - Diesel Fuel (B5)m3	2.56339
07C - Diesel Fuel (B20)	m3	07C - Diesel Fuel (B20)m3	2.160091
08 - Marine Diesel	m3	08 - Marine Dieselm3	2.59989404
09 - Gasoline	m3	09 - Gasolinem3	2.19975
11 - Biodiesel (B100)	m3	11 - Biodiesel (B100)m3	0.008014
12 - Wood Fuel - Industrial	kg	12 - Wood Fuel - Industrialkg	0.00002135
13 - Wood Fuel - Residential	kg	13 - Wood Fuel - Residentialkg	0.000393
14 - Renewable Natural Gas	MJ	14 - Renewable Natural GasMJ	2.665E-07
01 - Fortis BC Natural Gas	GJ	01 - Fortis BC Natural GasGJ	0.0498465
02 - Propane	L	02 - PropaneL	0.001544282
05A - Light Fuel Oil (Standard)	L	05A - Light Fuel Oil (Standard)L	0.002669379
05B - Light Fuel Oil (B5)	L	05B - Light Fuel Oil (B5)L	0.002624494
07A - Diesel Fuel (Standard)	L	07A - Diesel Fuel (Standard)L	0.002650894
07B - Diesel Fuel (B5)	L	07B - Diesel Fuel (B5)L	0.00256339
07C - Diesel Fuel (B20)	L	07C - Diesel Fuel (B20)L	0.002160091

08 - Marine Diesel	L	08 - Marine DieselL	0.002599894
09 - Gasoline	L	09 - GasolineL	0.00219975
11 - Biodiesel (B100)	L	11 - Biodiesel (B100)L	0.000008014
12 - Wood Fuel - Industrial	kg	12 - Wood Fuel - Industrialkg	0.00002135
13 - Wood Fuel - Residential	kg	13 - Wood Fuel - Residentialkg	0.000393
14 - Renewable Natural Gas	GJ	14 - Renewable Natural GasGJ	2.665E-07
District Energy - Tier 1	MJ	District Energy - Tier 1MJ	0.000014
District Energy - Tier 2	MJ	District Energy - Tier 2MJ	0.0000234
District Energy - Tier 3	MJ	District Energy - Tier 3MJ	0.0000329
District Energy - Tier 4	MJ	District Energy - Tier 4MJ	0.0000423
District Energy - Tier 5	MJ	District Energy - Tier 5MJ	0.0000517
District Energy - Tier 6	MJ	District Energy - Tier 6MJ	0.0000611
District Energy - Tier 7	MJ	District Energy - Tier 7MJ	0.0000705
District Energy - Tier 8	MJ	District Energy - Tier 8MJ	0.0000799
District Energy - Tier 9	MJ	District Energy - Tier 9MJ	0.0000894
District Energy - Tier 10	MJ	District Energy - Tier 10MJ	0.0000988
District Energy - Tier 1	GJ	District Energy - Tier 1GJ	0.014
District Energy - Tier 2	GJ	District Energy - Tier 2GJ	0.0234
District Energy - Tier 3	GJ	District Energy - Tier 3GJ	0.0329
District Energy - Tier 4	GJ	District Energy - Tier 4GJ	0.0423
District Energy - Tier 5	GJ	District Energy - Tier 5GJ	0.0517
District Energy - Tier 6	GJ	District Energy - Tier 6GJ	0.0611
District Energy - Tier 7	GJ	District Energy - Tier 7GJ	0.0705
District Energy - Tier 8	GJ	District Energy - Tier 8GJ	0.0799
District Energy - Tier 9	GJ	District Energy - Tier 9GJ	0.0894
District Energy - Tier 10	GJ	District Energy - Tier 10GJ	0.0988
District Energy - Tier 1	KWh	District Energy - Tier 1KWh	0.000050
District Energy - Tier 2	KWh	District Energy - Tier 2KWh	0.000084
District Energy - Tier 3	KWh	District Energy - Tier 3KWh	0.000118
District Energy - Tier 4	KWh	District Energy - Tier 4KWh	0.000152
District Energy - Tier 5	KWh	District Energy - Tier 5KWh	0.000186
District Energy - Tier 6	KWh	District Energy - Tier 6KWh	0.000220
District Energy - Tier 7	KWh	District Energy - Tier 7KWh	0.000254
District Energy - Tier 8	KWh	District Energy - Tier 8KWh	0.000288
District Energy - Tier 9	KWh	District Energy - Tier 9KWh	0.000322
District Energy - Tier 10	KWh	District Energy - Tier 10KWh	0.000356
District Energy - Tier 1	GWh	District Energy - Tier 1GWh	50.400000
District Energy - Tier 2	GWh	District Energy - Tier 2GWh	84.240000
District Energy - Tier 3	GWh	District Energy - Tier 3GWh	118.440000
District Energy - Tier 4	GWh	District Energy - Tier 4GWh	152.280000
District Energy - Tier 5	GWh	District Energy - Tier 5GWh	186.120000
District Energy - Tier 6	GWh	District Energy - Tier 6GWh	219.960000
District Energy - Tier 7	GWh	District Energy - Tier 7GWh	253.800000
District Energy - Tier 8	GWh	District Energy - Tier 8GWh	287.640000
District Energy - Tier 9	GWh	District Energy - Tier 9GWh	321.840000
District Energy - Tier 10	GWh	District Energy - Tier 10GWh	355.680000
District Energy - Tier 1	GJ	District Energy - Tier 1GJ	0.014
District Energy - Tier 2	GJ	District Energy - Tier 2GJ	0.0234
District Energy - Tier 3	GJ	District Energy - Tier 3GJ	0.0329
District Energy - Tier 4	GJ	District Energy - Tier 4GJ	0.0423
District Energy - Tier 5	GJ	District Energy - Tier 5GJ	0.0517
District Energy - Tier 6	GJ	District Energy - Tier 6GJ	0.0611
District Energy - Tier 7	GJ	District Energy - Tier 7GJ	0.0705
District Energy - Tier 8	GJ	District Energy - Tier 8GJ	0.0799
District Energy - Tier 9	GJ	District Energy - Tier 9GJ	0.0894
District Energy - Tier 10	GJ	District Energy - Tier 10GJ	0.0988
01 Light-duty Vehicle - Gasoline	m3	01 Light-duty Vehicle - Gasolinem3	2.201685
02 Light-duty Vehicle - Diesel	m3	02 Light-duty Vehicle - Dieselm3	2.633008
03 Light-duty Vehicle - Propane	m3	03 Light-duty Vehicle - Propanem3	1.54034
06 Light-duty Vehicle - Natural Gas	kg	06 Light-duty Vehicle - Natural Gaskg	3.088628
07 Light-duty Truck - Gasoline	m3	07 Light-duty Truck - Gasolinem3	2.201685
08 Light-duty Truck - Diesel	m3	08 Light-duty Truck - Dieselm3	2.633484
09 Light-duty Truck - Propane	m3	09 Light-duty Truck - Propanem3	1.54034
12 Light-duty Truck - Natural Gas	kg	12 Light-duty Truck - Natural Gaskg	3.088628

13 Heavy Duty - Gasoline	m3	13 Heavy Duty - Gasolinem3	2.246839
14 Heavy Duty - Diesel	m3	14 Heavy Duty - Dieselm3	2.616375
17 Motorcycle - Gasoline	m3	17 Motorcycle - Gasolinem3	2.22436
18 Off-Road - Gasoline E5	m3	18 Off-Road - Gasoline E5m3	2.351135
19 Off-Road - Diesel	m3	19 Off-Road - Dieselm3	2.635479
20 Off-Road - Diesel B100	m3	20 Off-Road - Diesel B100m3	0.062199
21 Off-Road - Gasoline E100	m3	21 Off-Road - Gasoline E100m3	0.1592
22 Marine - Gasoline	m3	22 Marine - Gasolinem3	2.21479
23 Marine - Diesel	m3	23 Marine - Dieselm3	2.59941404
26 Aviation - Gasoline	m3	26 Aviation - Gasolinem3	2.44767
27 Aviation - Turbo Fuel	m3	27 Aviation - Turbo Fuelm3	2.5793535
Heavy Duty - Diesel B100	m3	Heavy Duty - Diesel B100m3	0.043095
Heavy Duty - Diesel B20	m3	Heavy Duty - Diesel B20m3	2.187495
Heavy Duty - Diesel B5	m3	Heavy Duty - Diesel B5m3	2.58957
Heavy Duty - Gasoline E10	m3	Heavy Duty - Gasoline E10m3	2.131474
Heavy Duty - Gasoline E100	m3	Heavy Duty - Gasoline E100m3	0.054904
Heavy Duty - Gasoline E15	m3	Heavy Duty - Gasoline E15m3	2.016109
Heavy Duty Natural Gas	kg	Heavy Duty Natural Gaskg	3.123775216
Heavy Duty Propane	m3	Heavy Duty Propanem3	1.54034
Light-duty Truck - Diesel B100	m3	Light-duty Truck - Diesel B100m3	0.060204
Light-duty Truck - Diesel B20	m3	Light-duty Truck - Diesel B20m3	2.204604
Light-duty Truck - Diesel B5	m3	Light-duty Truck - Diesel B5m3	2.606679
Light-duty Truck - Gasoline E10	m3	Light-duty Truck - Gasoline E10m3	2.08632
Light-duty Truck - Gasoline E100	m3	Light-duty Truck - Gasoline E100m3	0.010056
Light-duty Truck - Gasoline E15	m3	Light-duty Truck - Gasoline E15m3	1.970955
Light-duty Vehicle - Diesel B100	m3	Light-duty Vehicle - Diesel B100m3	0.059728
Light-duty Vehicle - Diesel B20	m3	Light-duty Vehicle - Diesel B20m3	2.204128
Light-duty Vehicle - Diesel B5	m3	Light-duty Vehicle - Diesel B5m3	2.606203
Light-duty Vehicle - Gasoline E10	m3	Light-duty Vehicle - Gasoline E10m3	2.08632
Light-duty Vehicle - Gasoline E100	m3	Light-duty Vehicle - Gasoline E100m3	0.00975
Light-duty Vehicle - Gasoline E15	m3	Light-duty Vehicle - Gasoline E15m3	1.970955
Mobile - Natural Gas R100	kg	Mobile - Natural Gas R100kg	0.386023055
Off-Road - Diesel B20	m3	Off-Road - Diesel B20m3	2.206599
Off-Road - Gasoline E10	m3	Off-Road - Gasoline E10m3	2.23577
Off-Road - Gasoline E15	m3	Off-Road - Gasoline E15m3	2.120405
Off-Road - Natural Gas	kg	Off-Road - Natural Gaskg	3.088628
Off-Road - Propane	m3	Off-Road - Propanem3	1.555975
Off-Road- Diesel B5	m3	Off-Road- Diesel B5m3	2.608674
01 Light-duty Vehicle - Gasoline	L	01 Light-duty Vehicle - GasolineL	0.002201685
02 Light-duty Vehicle - Diesel	L	02 Light-duty Vehicle - Diesell	0.002633008
03 Light-duty Vehicle - Propane	L	03 Light-duty Vehicle - PropaneL	0.00154034
06 Light-duty Vehicle - Natural Gas	kg	06 Light-duty Vehicle - Natural Gaskg	0.003088628
07 Light-duty Truck - Gasoline	L	07 Light-duty Truck - GasolineL	0.002201685
08 Light-duty Truck - Diesel	L	08 Light-duty Truck - Diesell	0.002633484
09 Light-duty Truck - Propane	L	09 Light-duty Truck - PropaneL	0.00154034
12 Light-duty Truck - Natural Gas	kg	12 Light-duty Truck - Natural Gaskg	0.003088628
13 Heavy Duty - Gasoline	L	13 Heavy Duty - GasolineL	0.002246839
14 Heavy Duty - Diesel	L	14 Heavy Duty - DieselL	0.002616375
17 Motorcycle - Gasoline	L	17 Motorcycle - GasolineL	0.00222436
18 Off-Road - Gasoline E5	L	18 Off-Road - Gasoline E5L	0.002351135
19 Off-Road - Diesel	L	19 Off-Road - Diesell	0.002635479
20 Off-Road - Diesel B100	L	20 Off-Road - Diesel B100L	0.000062199
21 Off-Road - Gasoline E100	L	21 Off-Road - Gasoline E100L	0.0001592
22 Marine - Gasoline	L	22 Marine - GasolineL	0.00221479
23 Marine - Diesel	L	23 Marine - Diesell	0.002599414
26 Aviation - Gasoline	L	26 Aviation - GasolineL	0.00244767
27 Aviation - Turbo Fuel	L	27 Aviation - Turbo FuelL	0.002579354
Heavy Duty - Diesel B100	L	Heavy Duty - Diesel B100L	0.000043095
Heavy Duty - Diesel B20	L	Heavy Duty - Diesel B20L	0.002187495
Heavy Duty - Diesel B5	L	Heavy Duty - Diesel B5L	0.00258957
Heavy Duty - Gasoline E10	L	Heavy Duty - Gasoline E10L	0.002131474
Heavy Duty - Gasoline E100	L	Heavy Duty - Gasoline E100L	0.000054904
Heavy Duty - Gasoline E15	L	Heavy Duty - Gasoline E15L	0.002016109
Heavy Duty Natural Gas	kg	Heavy Duty Natural Gaskg	0.003123775

Heavy Duty Propane	L	Heavy Duty PropaneL	0.00154034
Light-duty Truck - Diesel B100	L	Light-duty Truck - Diesel B100L	0.000060204
Light-duty Truck - Diesel B20	L	Light-duty Truck - Diesel B20L	0.002204604
Light-duty Truck - Diesel B5	L	Light-duty Truck - Diesel B5L	0.002606679
Light-duty Truck - Gasoline E10	L	Light-duty Truck - Gasoline E10L	0.00208632
Light-duty Truck - Gasoline E100	L	Light-duty Truck - Gasoline E100L	0.000010056
Light-duty Truck - Gasoline E15	L	Light-duty Truck - Gasoline E15L	0.001970955
Light-duty Vehicle - Diesel B100	L	Light-duty Vehicle - Diesel B100L	0.000059728
Light-duty Vehicle - Diesel B20	L	Light-duty Vehicle - Diesel B20L	0.002204128
Light-duty Vehicle - Diesel B5	L	Light-duty Vehicle - Diesel B5L	0.002606203
Light-duty Vehicle - Gasoline E10	L	Light-duty Vehicle - Gasoline E10L	0.00208632
Light-duty Vehicle - Gasoline E100	L	Light-duty Vehicle - Gasoline E100L	0.00000975
Light-duty Vehicle - Gasoline E15	L	Light-duty Vehicle - Gasoline E15L	0.001970955
Mobile - Natural Gas R100	kg	Mobile - Natural Gas R100kg	0.000386023
Off-Road - Diesel B20	L	Off-Road - Diesel B20L	0.002206599
Off-Road - Gasoline E10	L	Off-Road - Gasoline E10L	0.00223577
Off-Road - Gasoline E15	L	Off-Road - Gasoline E15L	0.002120405
Off-Road - Natural Gas	kg	Off-Road - Natural Gaskg	0.003088628
Off-Road - Propane	L	Off-Road - PropaneL	0.001555975
Off-Road- Diesel B5	L	Off-Road- Diesel B5L	0.002608674