2020 Data Supplement

Workforce

INFORMATION ON EMPLOYEES AND OTHER WORKERS					
Topic	Metric	Unit	2020	2019	2018
Employment	**Total Employees**	Employees	3,016	2,987	3,036
	Employees by Region:				
	U.S.	Employees	1,989	1,940	2,012
	Canada	Employees	422	435	416
	U.K.	Employees	605	612	608
	Employees by type:				
	Full Time	Employees	2,968	2,925	2,920
	Part Time	Employees	17	20	85
	Temporary	Employees	31	42	31
	Employees covered by collective bargaining agreements[2]	Percentage	17%	17%	17%
	Entry level wage relative to local minimum wage (U.S.)[3]	Percentage	288%	288%	279%
	Entry level wage relative to local minimum wage (Canada)[3]	Percentage	240%	292%	234%
Diversity and inclusion	Employees by gender:				
	Male	Employees	2,599	2,577	2,616
	Female	Employees	417	410	420
Tenure	Employees by tenure:				
	0-5 years	Employees	1,240	1,347	1,489
	6-10 years	Employees	831	690	568
	11-20 years	Employees	475	442	432
	21+ years	Employees	470	508	547

[1]All data in this section is as of December 31 of the reporting year.
[2]See also GRI Disclosure 102-41 – Collective bargaining agreements.
[3]See also GRI Disclosure 202-1 – Ratios of standard entry level wage by gender compared to local minimum wage.

AVERAGE HOURS OF TRAINING PER YEAR PER EMPLOYEE	
Region	Average Hours
North America	31
United Kingdom	26

NEW EMPLOYEE HIRES AND EMPLOYEE TURNOVER

New Hires	Under 30		30-50		Over 50		Total	
Gender	M	F	M	F	M	F	M	F
U.S.	58	7	65	21	21	9	144	37
Canada	10	3	16	3	0	0	26	6
UK	7	2	8	3	4	1	19	6
Total	75	12	89	27	25	10	189	49

Turnover	Under 30		30-50		Over 50		Total	
Gender	M	F	M	F	M	F	M	F
U.S.	20	3	41	8	40	15	101	26
Canada	7	5	7	1	18	1	32	7
UK	3	2	2	3	19	2	24	7
Total	30	10	50	12	77	18	157	40

Turnover	Voluntary		Involuntary		Total	
Gender	M	F	M	F	M	F
U.S.	71	21	30	5	101	26
Canada	27	7	5	0	32	7
UK	22	5	2	2	24	7
Total	120	33	37	7	157	40

Topic	Metric	Unit	2020	2019	2018	2017
Turnover	New Hires	Employees	238	294	331	304
	Terminations	Employees	197	247	265	283
	Voluntary Terminations	Percentage	77.7%	78.1%	83.4%	74.2%

All data in this section is as of December 31 of the reporting year.
New hires includes 12 new hire employees who were terminated in the same year
New hires includes Regular Employees, Co-Ops, and Temporary Employees (Including Interns)
Turnover by age group, gender and region includes all termination types excluding release from LTD -Includes Regular Employees, Co-Ops, and Temporary Employees (Including Interns)

PARENTAL LEAVE

In the U.S., UK and Canada, CF offers a Parental Leave program for all employees. Our U.S. employees do not have a paternity leave program available to them, but we do offer one for our Canadian and UK employees.

Data for the reporting period	U.S.	Canada	U.K.
Total number of employees who were entitled to parental leave	284 females and 0 males	64 females and 349 males	65 females and 540 males
Total number of employees who took parental leave	7 females took maternity leave	3 females took maternity leave and 3 male took paternity leave	2 females took maternity leave and 11 males took paternity leave
Total number of employees who returned to work in the reporting period after parental leave ended	7 females	2 females and 3 males	2 females and 11 males
Total number of employees who returned to work in the reporting period after parental leave ended who were still employed 12 months after their return to work	6 females[1,2]	2 female[1] and 3 males	2 females and 11 males[1]
Return to work and retention rates of employees who took parental leave	86%	83%	100%

[1] A 12-month period following the leaves has not transpired as of the December 31st reporting period. 2 Others who started their parental leaves in 2020 are still on leave in 2021.

DIVERSITY OF GOVERNANCE BODIES AND EMPLOYEES

Board of Directors by Age and Gender (All Locations):

Age Group	Male		Female		Total	
	Count	Percentage	Count	Percentage	Subtotal	Percentage
30-50	-	-	1	8.33%	1	8.33%
Over 50	10	83.34%	1	8.33%	11	91.67%
Total	10	83.34%	2	16.66%	12	100.00%

Workforce by Age and Gender (All Locations):

Age Group	Male		Female		Total	
	Count	Percentage	Count	Percentage	Subtotal	Percentage
Under 30	421	14%	66	2%	487	16%
30-50	1,460	49%	191	6%	1,651	56%
Over 50	681	23%	147	6%	828	28%
Total	2,562	86%	404	14%	2,966	100%

Diversity of Employees by Age and Gender (All Locations):

Gender	Under 30		30-50		Over 50		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
U.S.	266	38	1,015	138	423	108	1,704	284
Canada	34	9	226	41	79	14	349	64
UK	93	10	262	28	185	27	540	65
Total	393	57	1,513	207	687	149	2,593	413

RATIO OF BASIC SALARY AND REMUNERATION OF WOMEN TO MEN

Mean Gender Pay Gap in Hourly Pay	20.8%	Median Gender Pay Gap in Hourly Pay	25.8%
Mean Gender Pay Gap in Bonus Pay	18.9%	Median Gender Pay Gap in Bonus Pay	46.1%

Proportion of gender in each pay quartile		Proportion of gender in each pay quartile	Male	Female
Males receiving a bonus	96.7%	Upper Quartile	93.4%	6.6%
		Upper Middle Quartile	98.7%	1.3%
Females receiving a bonus	96.9%	Lower Middle Quartile	95.4%	4.6%
		Lower Quartile	70.9%	29%

All data in diversity of governance bodies and employees section is as of December 31 of the reporting year.
18 percent of the Board of Directors are considered to be a member of a minority group. "Minority Group" in the United States is defined as non-white ethnicity of any gender.
U.S. and Canada data excludes Temporary and Co-Op employees.
[1]Renumeration data comes from UK's statutory Gender Pay Gap Reporting available every April of the reporting period, containing 12-month data from April to March.

UK Gender Pay Gap Data:

April 2019 (Snapshot Date April 5, 2019)	1st – 30th
Pay period containing snapshot date	April 2020[1]
Total number of relevant employees (no. of employees paid in April 2019)	609
Total number of employees less than full pay	(3)
Total number of full pay employees (April 2019)	606
Total male employees	544
Total female employees	65
Percentage of male employees	89.3%
Percentage of female employees	10.7%

Occupational Health and Safety

WORK-RELATED INJURIES					
Health, Safety and Security Management	Unit	2020	2019	2018	2017
Employee Health and Safety[1]:					
Fatality rate	Total/200,000 hrs.	0.00	0.00	0.00	0.00
Total injuries	Injuries	4	14	18	17
Lost time incident rate	Total/200,000 hrs.	0.00	0.17	0.23[2]	0.07
Recordable incident rate	Total/200,000 hrs.	0.14	0.48	0.60	0.57
Contractor Health and Safety[1]:					
Fatality rate	Total/200,000 hrs.	0.00	0.00	0.00	0.00
Total injuries	Injuries	6	18	21	16
Lost time incident rate	Total/200,000 hrs.	0.16	0.26	0.17	Not tracked
Recordable incident rate	Total/200,000 hrs.	0.32	0.94	0.87	0.92

[1] According to the Occupational Safety and Health Administration (OSHA), incidence rates can be used to show the relative level of injuries and illnesses among different industries, firms or operations within a single firm. Because a common base and a specific period of time are involved, these rates can help determine both problem areas and progress in preventing work-related injuries and illnesses. An incidence rate of injuries and illnesses may be computed from the following formula: (Number of injuries and illnesses X 200,000) / Employee hours worked = Incidence rate. The 200,000 figure in the formula represents the number of hours 100 employees working 40 hours per week, 50 weeks per year would work, and provides the standard base for calculating incidence rate for an entire year. In 2018, the company expanded the reporting of its recordable incident rate and lost time incident rate to include all employees as opposed to only manufacturing and distribution employees as had been done previously. Data since 2016 has been updated to reflect the change.

[2] Data was corrected from what was reported in the previous year.

Environment

Energy

ENERGY CONSUMPTION WITHIN THE ORGANIZATION				
	2020	2019	2018	2017
Total natural gas consumption (MMBtus)	364,059,137	360,271,343	347,489,235	356,952,097
Total electricity consumption[1] (GJ)	9,164,612	9,288,605	9,087,051	9,138,235
% electricity procured from renewable sources	22	23	-	-
ENERGY INTENSITY				
	2020	2019	2018	2017
Gas	384,104,233	380,274,368	366.345.066	376,351,913
Gross Ammonia Production (Metric Ton)	9,391,681	9,295,111	8,895,252	9,339,240
Energy Intensity	40.90	40.91	41.18	40.30
REDUCTION OF ENERGY CONSUMPTION				
	2020	2019	2018	2017
Reduction in natural gas consumption from prior year (GJ)	-3,829,865	-13,929,302	10,006,847	-

[1]Electricity consumption includes purchased and self-generated electricity

Emissions

GHG EMISSIONS INTENSITY					
	Denominator	2020	2019	2018	2017
GHG emissions intensity Ratio	Gross Ammonia Production	1.91	1.97	1.88	1.89

REDUCTION OF GHG EMISSIONS					
Unit: Tonnes	Denominator	2020	2019	2018	2017
Total GHG reductions:	Type of GHG emissions that have been reduced Direct (Scope 1) Indirect (Scope 2)	467,835	-1,543,348	857,381	-2,194,793

DIRECT (SCOPE 1) GHG EMISSIONS				
	2020	2019	2018	2017
Total CO_2e Scope 1 Emissions (in million Tonnes CO_2e)	17.9	18.4	16.7	17.6
Scope 1 CO_2 (in million Tonnes CO_2e)	12.7	12.6	11.9	12.8
Scope 1 N_2O (in million Tonnes CO_2e)	5.1	5.7	4.8	4.7
Scope 1 CH_4 (thousand Tonnes CO_2e)	108.2	57.8	36.8	45.2

ENERGY INDIRECT (SCOPE 2) GHG EMISSIONS				
	2020	2019	2018	2017
CO_2e Scope 2 Emissions (Tonnes)	789,037	883,682	896,392	866,638

NITROGEN OXIDES (NOX), SULFUR OXIDES (SOX) AND OTHER SIGNIFICANT AIR EMISSIONS				
Unit: Tonnes	2020	2019	2018	2017
PM10	900	872	807	820
PM2.5	749	760	734	747
NO_x (Nitrogen oxides)	10,762	9,984	9,684	9,995
SO_2	28	29	30	29
VOCs (volatile organic compounds)	744	882	1,835	2,320
NH_3	8,777	10,384	9,203	8,723

Emissions intensity baseline year (2015) = 2.28

For the 2020 reporting year, CF changed the calculation for its energy intensity number from MMBtus/Nutrient Tonne to Gigajoules/Tonne of Gross Ammonia Production. This modification ensures consistency with our CO2e emissions intensity calculation.
In 2020, CF updated its GHG intensity calculation to better reflect the new strategy of the organization. GHG intensity is calculated as Scope 1 CO2 equivalent emissions/gross ammonia production. Previous intensity numbers have been updated to reflect this change in methodology.
CF has set a target to reduce total direct CO2 equivalent emissions by 25% per ton of product by 2030 (2015 baseline year).
GHG emissions are linked to production, largely based on natural gas consumption in the production of ammonia. The marginal change between 2019 and 2020 is due to reliable and efficient operation of our production facilities.

Water and Effluents

WATER WITHDRAWAL				
Total water withdrawals (in megaliters):	2020	2019	2018	2017[1]
Third-Party water / Municipal intake	22,993	21,066	25,463	26,041
Surface water / River intake	100,335	102,453	80,973	87,569
Groundwater / Well Water intake	19,391	20,026	19,696	19,127
Total water withdrawal	142,719	143,545	126,132	132,737
Surface water breakdown (in megaliters):	2020	2019	2018	2017
Freshwater (total)	100,335	102,453	80,973	87,569
Groundwater breakdown (in megaliters):	2020	2019	2018	2017
Freshwater (total)	19,391	20,026	19,696	19,127
Third-party water breakdown (in megaliters):	2020	2019	2018	2017
Freshwater (total)	22,993	21,066	25,463	26,041
WATER DISCHARGE				
Total water discharged to (in megaliters):	2020[1]	2019[1]	2018[1,2]	2017[2]
Third-Party water / Municipal intake[3]	4	2	1	-
Surface water / River intake	81,745	81,614	60,088	59,926
Groundwater / Well Water intake[3]	1,349	1,508	1,438	-
Totals	83,098	83,124	61,527	59,926
WATER CONSUMPTION				
Total water consumption (in megaliters):	2020[1]	2019[1]	2018[1,2]	2017[2]
Total water consumption	59,621	60,420	64,582	72,811

[1]Reported values do not include contribution from Distribution Facilities.

None of the withdrawals or consumption were from areas with water stress, based upon cross-referencing of the facility withdrawal areas against the World Resources Institute "Aqueduct Water Risk Atlas." All withdrawals were of Freshwater (Total Dissolved Solids ≤ 1,000 mg/L).

[1]Reported values include contributions from Distribution Facilities.
[2]Reported data includes more detailed classification and broader analysis of previous years' water withdrawal and discharge volumes.
[3]Discharges to Groundwater and Municipal / Publicly Owned Treatment Works (POTW) only apply to Distribution Facilities and these data were not previously captured in the 2016-2018 GRI Content Indices.

Effluents and Waste

WASTE BY TYPE AND DISPOSAL METHOD					
Waste by disposal option (in K Tonnes)	2020	2019	2018	2017	2016
Hazardous Waste Sent for Incineration	0.08	0.01	0.71	0.33	1.41
Hazardous Waste Sent for Landfill	3.62	0.82			
Hazardous Waste Sent for Recovery/Energy Recovery	<0.01	0.54	0.25	0.22	0.18
Hazardous Waste Sent for Recycling	0.11	0.28			
Hazardous Waste Sent for Reuse	0.04	0.40			
Non-Hazardous Waste Sent for Composting	0.29	0.01	N/A	N/A	N/A
Non-Hazardous Waste Sent for Incineration	0.02	0.01	28.84	19.57	22.36
Non-Hazardous Waste Sent for Landfill	20.64	16.45			
Non-Hazardous Waste Sent for Recovery/Energy Recovery	0.46	0.43	18.59	29.68	17.31
Non-Hazardous Waste Sent for Recycling	9.14	16.27			
Non-Hazardous Waste Sent for Reuse	0.27	2.24			