GoSpaces

BGIS Challenge Calculations

October 2018

Roma.malik@bgis.com

Hold a Moving Meeting

Category: People

Challenge yourself to get energized by moving and hold your next 2 meetings while on the go.

Calculations

Average meeting is 1 hour

Multiply 2 for the number included in the challenge

Total: 2 * 1 = 2 Hours

Mentor a colleague

Category: People

Share your knowledge! Challenge yourself to teach a colleague a skillset you have that they want to learn!

Calculations

Effort is estimated at 1 hour

Total: 1 hour

Take the stairs

Category: People

Challenge yourself to take the stairs for the next 5 days!

Calculations

Effort is estimated at 1 hour

Total: 1 hour

Drink 8/8oz glasses of water today

Category: People

Challenge yourself to drinking 8 glasses of water today! Your body will thank you!

Calculations

Effort is estimated at 1 hour

Total: 1 hour

Ask a colleague about their work

Category: People

Challenge yourself to ask 3 colleagues in different areas of your organization about their roles.

Calculations

Effort is estimated at 1 hour

Total: 1 hour

Work in a collaborative Space

Category: People

Work in a collaboratively, either virtually or in a physical collaboration space, 3 times in the next week.

Calculations

Effort is estimated at 1 hour

Multiply by 3 for number of occurances

Total: 3 * 1 = 3 hours

Recognize an individual for their contributions

Category: People

Challenge yourself to find a way to recognize the contributions to the workplace of at least one colleague this week.

Calculations

Effort is estimated at 1 hour

Total: 1 hour

Speak at an industry event

Category: People

Find an event you're interested in and volunteer to speak! Enjoy the challenge and get experience.

Calculations

Effort is estimated at 2 hours

Total: 1 hour

Hold virtual meetings (WebEx, videoconferences and teleconferences)

Category: Planet

Challenge yourself to schedule 3 virtual meetings instead of in-person meetings this week.

Calculations

7.7 km is the average commute based on provided number

Calculation includes both ways (multiply by 2)

An average meeting includes 3 people (multiply by 3)

Carbon intensity per KM = 0.00026 tonnes (2.3 KG C02 divided by 9 km/L on average)[1]

Total: 12.012 C02 KG = (7.7 * 2 * 3 * 0.00026) * 1000 = 12.012 KG CO2

Paperless week

Category: Planet

Challenge yourself and your team to go paperless for an entire week!

Calculations

On average, employees work 240 days a year

On average, employees print 33 pages a day[2]

One piece of paper = .0092 lbs of C02[3]

To convert to metric tonnes divide by 2204

To convert to KG multiply by 1000

Multiply by 5 for a work week

Total: (33 * 5 * (0.0092 / 2204)) * 1000 = 0.688747731 KG CO2

Participate in recycling or composting initiative

Category: Planet

Challenge yourself find an additional type of waste you can recycle or compost 5 items in 1 week in your workplace and share the information with your colleagues.

[1] http://www.nrcan.gc.ca/energy/efficiency/transportation/cars-light-trucks/buying/16759
[2] https://www.linkedin.com/pulse/how-many-pages-does-average-british-employee-print-per-sam-elphick/
[3] http://www.standardcarbon.com/2008/06/do-you-really-need-to-print-that-the-carbon-footprint-of-copy-paper/

Calculations

1 plastic bottle = 83 grams of CO2[4]

To convert to KG, divide by 1000

Multiply by 5 for the number of items in the challenge

Total: 5 * (83 / 1000) = 0.415 KG CO2

Avoid using plastic straws

Category: Planet

Challenge yourself avoid using plastic straws 5 times this week.

Calculations

1 plastic straw = 0.00042 KG[5]

1 kg of plastic = 6 KG C02[6]

0.00042 multiplied by 6 KG of C02 = 0.002 KG C02

Multiply by 5 for the number of items in the challenge

Total: 5 * (6*0.00042) = 0.01 KG CO2

Avoid single use plastic bottles for a week

Category: Planet

Challenge yourself to bring your own water bottle and avoid single use plastic bottles for a week!

Calculations

1 plastic bottle = 83 grams of CO2[7]

To convert to KG, divide by 1000

Multiply by 5 for a work week

Total: 5 * (83 / 1000) = 0.415 KG CO2

[4] https://sciencing.com/carbon-footprint-plastic-bottle-12307187.html
[5] https://phys.org/news/2018-04-science-amount-straws-plastic-pollution.html
[6] https://timeforchange.org/plastic-bags-and-plastic-bottles-CO2-emissions
[7] https://sciencing.com/carbon-footprint-plastic-bottle-12307187.html

Avoid using coffee pods

Category: Planet

Yes they are convenient, but they aren't so good for the environment! Challenge yourself to switch to drip coffee or tea 5 times this week.

Calculations

1 coffee pod = 0.017 KG CO2[8]

Multiply by 5 for a work week

Total: 5 * 0.017 = 0.088 KG CO2

Try a Meatless day

Category: Planet

Challenge yourself to have a meatless day and consume protein in other ways.

Calculations

1 kg beef = 27KG C02[9]

divided by 4 for 1 portion of steak (250 grams)

Total: 27 / 4 = 6.75 KG CO2

Carpool to work

Category: Planet

Challenge yourself to find someone from your neighborhood to carpool with twice this week.

Calculations

7.7 km is the average commute based on provided number

Multiply by 4 for 2 round trips

Carbon intensity per KM = 0.00026 tonnes (2.3 KG C02 divided by 9 km/L on average)[10]

To convert to KG, multiply by 1000

Total: 7.7 * 4 * 0.00026 * 1000 = 8.008 KG CO2

---

[8] https://uwspace.uwaterloo.ca/bitstream/handle/10012/12860/Li_Jingxi.pdf?sequence=5
[9] http://www.greeneatz.com/foods-carbon-footprint.html
[10] http://www.nrcan.gc.ca/energy/efficiency/transportation/cars-light-trucks/buying/16759

Hold a paperless meeting

Category: Planet

Challenge yourself and your collegues to a paperless meeting!

Calculations

On average, employees work 240 days a year

On average, employees print 33 pages a day[11]

33 pages a day divided by 8 hours = 4.12 for 1 hour

One piece of paper = .0092 lbs of C02[12]

To convert to metric tonnes divide by 2204

To convert to KG multiply by 1000

Total: (8000 /240 / 8) * ((0.0092 / 2204) * 1000) = 0.017392619 KG CO2

Use a reusable Mug

Category: Planet

Challenge yourself to using a reusable mug for the next 5 days!

Calculations

Challenge includes 10 cups (2 cups a day for 5 days)

1 paper cup = 0.24 lbs of C02[13]

To convert to metric tonnes divide by 2204

To convert from tonne to KG multiply by 1000

Total: 10 * (0.24 / 2204) * 1000 = 1.08892922 KG CO2

[11] https://www.linkedin.com/pulse/how-many-pages-does-average-british-employee-print-per-sam-elphick/
[12] http://www.standardcarbon.com/2008/06/do-you-really-need-to-print-that-the-carbon-footprint-of-copy-paper/
[13] https://www.quora.com/What-is-the-carbon-footprint-of-coffee-paper-cup

Pack a lunch every day for a week

Category: Profit

Challenge yourself to pack a lunch full of your favorite foods for one week!

Calculations

On average, employees spend $10 on lunch

Multiply by 5 work days

Total: 5 * 10 = $50

Avoid a taxi

Category: Profit

Challenge yourself to walk, bike or car pool instead of taking a taxi.

Calculations

Average cost of 1 taxi ride is $15 based on provided number

Multiply by 2 for a round trip

Total: 15 * 2 = $30

Recommend a new idea to INNOVATION@BGIS.COM

Category: Profit

Challenge yourself to make a recommendation that reduces redundancy and increases efficiency.

Calculations

$50 DDP per hour worked[14]

Multiply by 8 hour days, 240 working days a week = $96,000 a year

Estimated 0.5% of total productivity per year gained = $480 based on provided number

Total: (50 * 8 * 240)(0.005) = $480

[14] https://www.conferenceboard.ca/hcp/provincial/economy/labour-productivity.aspx?AspxAutoDetectCookieSupport=1

Update your default print settings to print double sided

Category: Profit

Update your printer settings to automatically print double sided.

Calculations

On average, employees work 240 days a year

On average, employees print 33 pages a day[15]

Divide total number of pages used by 2

Office paper costs $0.06 a sheet

Total: (33 * 240)/2 = 3,960 * $0.06 = $237.60

:

[15] https://www.linkedin.com/pulse/how-many-pages-does-average-british-employee-print-per-sam-elphick/