



# **Table of Contents**

OUR COMMITMENT TO THE ENVIRONMENT	2
HOW WE DEFINE SUSTAINABILITY	3
OUR PRINCIPLES	4
OUR LONG-TERM GOALS	5
OUR 2023-2024 GOALS	5
OUR 2023-2024 KEY ACTIVITIES	6
OUR PREVIOUS KEY ACTIVITIES	7
CLOSING THOUGHTS AND FUTURE DIRECTION	8



#### **OUR COMMITMENT TO THE ENVIRONMENT**

At Sergio Dias Consulting we believe that climate change is an existential threat that requires immediate, dramatic action by every individual, organization, and government. All three must be united in working towards keeping earth's climate change at below 1.5C, which means reducing global greenhouse gas emissions 50% by 2030 and 90% by 2050. We only take on projects that can have a significant, positive effect in moving society towards those goals and work hard to make sure we exceed the global goals ourselves.

Our goal is to be zero GHG emission by 2028 and net-zero energy by 2030. In 2022 we reduced our GHG emissions by 57% and generated 35% of our energy, we have quite a way to go but we'll get there!

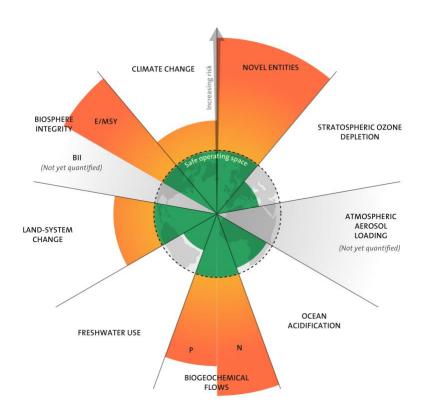




#### **HOW WE DEFINE SUSTAINABILITY**

We use two definitions to guide our sustainability efforts:

- 1) **The Natural Step**. Basically, the Natural Step approach is that a sustainable society can't release any substance, manmade or not, or degrade the earth, at a rate faster than the earth can absorb that substance or repair that degradation.
- 2) **Planetary Boundaries**. The Planetary Boundaries approach is an attempt by scientist to define the nine systems that keep the earth in balance and the "boundaries" at which those systems lose their balance. We are crossing the boundaries on six of those systems.





## **OUR PRINCIPLES**

Our principles align with and are prioritized by the planetary boundaries approach for which we can have a direct impact. Those are:

- 1- NOVEL ENTITIES: Use only natural products in our offices. Significantly reduce our consumption of any plastic products.
- 2- BIOGEOCHEMICAL FLOWS: Buy only organic products and use only organic food in any of our events.
- 3- LAND-SYSTEM CHANGE: Consume as little meat and dairy as possible.
- 4- CLIMATE CHANGE AND OCEAN ACIDIFICATION:
  Significantly reduce our direct and indirect combustion of fossil fuels. Where possible, choose non-polluting travel.
- 5- HELP OTHERS DO THE SAME: Ensure all our work moves our clients towards support of the planetary boundaries and where possible volunteer staff time to help communities do the same.





## **OUR LONG-TERM GOALS**

Our long-term goals are (today) primarily around the elimination of fossil fuels. Those goals drive our investments and decisions and are:

- 1- Reduce our Scope 1 and 2 CO2e emissions 100% by 2025. We use as our baseline July 2017 through June 2018, the year we opened our new office.
- 2- **Be 100% net-zero energy by 2025**. This includes energy for our plug-loads, our space and water heating and cooling as well as our energy consumed for automobile travel.

## **OUR 2023-2024 GOALS**

Our 2023-2024 goals support our primary goal of moving towards the elimination of fossil fuels. Those goals drive our investments and decisions and are:

- 1- Reduce our Scope 1 and 2 CO2e emissions by 65% over our baseline year. (Target is 6,300 lbs of Scope 1 and Scope 2 CO2e emissions)
- 2- Generate at least 40% of our Scope 1 and 2 energy consumption.
- 3- Maintain our Scope 3 emissions at 3,800 lbs CO2e emissions.



## **OUR 2023-2024 KEY ACTIVITIES**

Our 2023-2024 goals support our primary goal of moving towards the elimination of fossil fuels. Those goals drive our investments and decisions and are:

- 1- Heat our top two floors with heat pumps, allowing us to use renewable energy rather than natural gas. This should reduce our 2023-24 gas consumption by about 50% from our 2022-23 consumption, and should reduce our Scope 1 and 2 emissions by an additional 5% over our baseline year.
- 2- Limit our airplane travel to one international trip. This will reduce our Scope 3 emissions by about 55% over our baseline year, which will remain constant from 2022-23.
- 3- In addition, we'll be developing a more detailed definition and plan for measuring and reporting on our environmental "sustainability".



## **OUR PREVIOUS KEY ACTIVITIES**

Our key activities, to meet our emissions and energy generation goals, over the past five years are:

- 1- Installed a high-efficiency, condensing boiler in 2018. This reduced our natural gas consumption by over 30% and our Scope 1 and 2 GHG emissions by about 12%.
- 2- Purchased only 0 emissions electricity starting in 2018. This reduced our electricity GHG emissions by 100% and our Scope 1 and 2 GHG emissions by about 10%
- 3- Installed solar panels in 2020. The system was sized (3.6kw) to meet all our 2019 electricity needs plus allow us to drive 10,000 miles with an electric car. It now provides us with about 35% of our total energy use.
- 4- Purchased two electric cars in 2021, as well as a smart charger that allows us to charge from the excess solar production. This reduced our diesel consumption by 100% and reduced our Scope 1 and 2 GHG emissions by about 30%
- 5- Installed heat pumps to heat two out of our three floors in 2022. This will allow us to heat our space with renewable electricity rather than gas in 2023-2024. This should reduce our 2023-24 Scope 1 and 2 emissions by about 8%.

Note: other important activities include replacing all lights with LEDs, insulating all exterior walls, replacing failing appliances with highly efficient models, and putting sunshades on our south-facing windows.



#### **CLOSING THOUGHTS AND FUTURE DIRECTION**

Through the past six years we have made significant investments towards becoming a zero emissions business, investments that likely totaled close to \$110,000 (well, closer to \$60,000 after incentives and auto trade-in values) but that have helped us reduce our emissions by 55% last year.

Also, while we electrified all our car transportation, we've made sure that we generated enough solar energy to offset that energy consumption.

Done right, we don't think electrification has to be a strain on the electrical grid and we wanted to demonstrate that.

We also wanted to demonstrate that investments are good, not only for the environment, but also for the pocket book. Our investments saved us about \$3500 last year, and the savings will increase as energy prices continue to rise.

Although our focus has been on fossil fuel emissions and generating our own energy, we have been acting on all our other principles and believe they are critical as well. For example, we purchase approximately 90% of our food (by money spent) organic and buy only natural cleaning products for our office. We'll be looking at setting better numerical values and goals on our other priorities and to start tracking them in our 2023-2024 Sustainability Report.

We've published this report in the hopes that it inspires other companies and individuals to define what sustainability means to them, to take action to get to zero emissions, and to publicize their actions.