

What to Consider When Starting Your Journey in Sustainability?

This document should provide a framework of orientation. It condenses our experiences and points out some important aspects that are easily overlooked when new to the field. Yes, there are many steps, however, this guide should not slow you down. Therefore, it is up to you, follow the steps precisely and write your solutions down or just go over it in 10 minutes and trust your subconscious to remember the points when the time comes! What matters is that you take action and in order to avoid set-backs and desperation we help you with this guide.

A Personal Note Before You Continue

You'll probably burn to start right away. Feel all this energy and create a memory of all this passion you have. You will need it later on, believe us. The journey is not going to be easy and this document is not laboratory advice, it is a structure of inspiration of ideas – always take care of your safety, and that sample or data quality is preserved. You will find your own way, just use this guide as a support, a template to orientate you!

Please note that such a long guide can be intimidating, therefore do not overthink. Go with your gut feeling. Some things you can only learn when you take action.

Make up your mind whether you go through the steps below until 5. and continue from there for a certain category of actions, eventually reiterating this protocol for another category instead of tackling everything that comes to mind at once.

Alright, then let's go! Good to have you and don't forget, it is a journey!

0. Don't Hold Back

Goals

Nothing is more demotivating than hesitating to take action. If you have a concrete idea in mind, just go for it!

Remarks

Although this guide seems to be about thinking and planning, actions claims the throne! This is your playing field, just try what you have in mind!

During the process, you'll have time to address concerns. Take action on what you want to do without worrying about mistakes or inefficiencies. Once you start, there's no turning back, and everything will become easier.

Actions

Just go for it. Grab the low hanging fruits!

Rewards

You've demonstrated courage and determination! The first step is complete, and as you know, this is often the most difficult one.

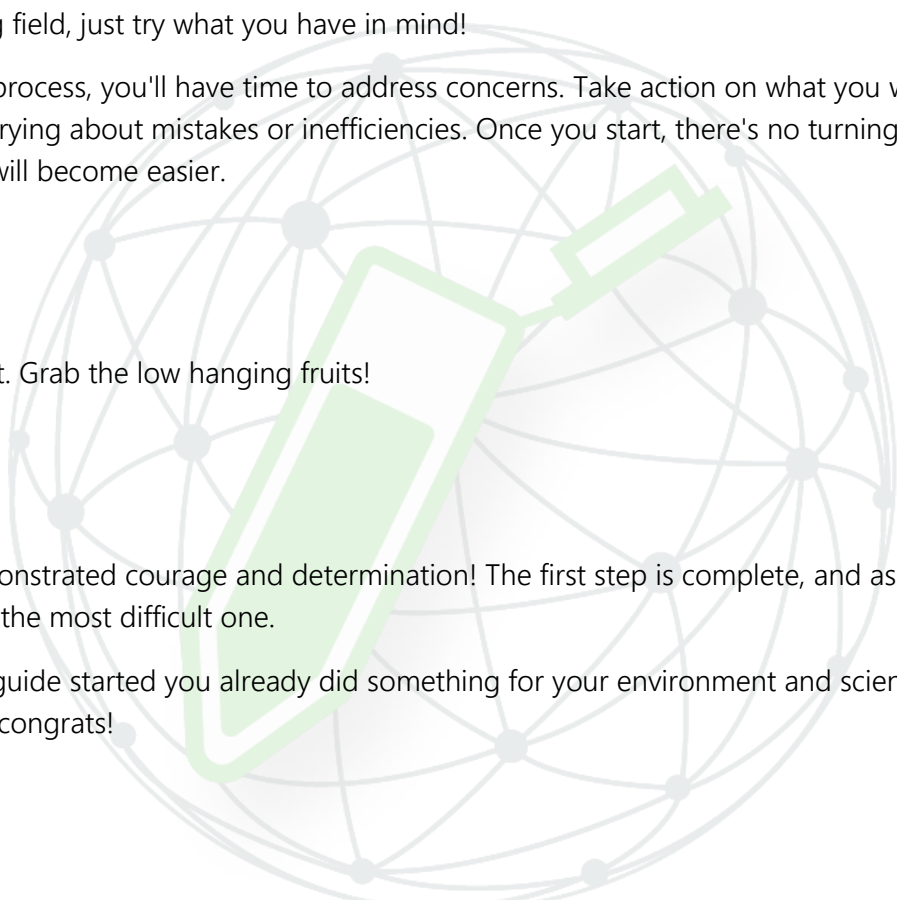
Before this guide started you already did something for your environment and scientific endeavor – congrats!

1. Get the Fundamentals Straight

Goals

Develop a feeling of what is commonly done and where to await challenges.

Remarks



It does not matter which field you work in, for now, it is about understanding sustainable practice overall.

Gather general knowledge and intuition, do not worry about developing practical actionable activities just yet.

Since sustainability movements are quite young, you will certainly have a hard time with keeping an overview. Sources offer sometimes varying information, and only a handful provide references - and a systematic structure is something you might hope for on your birthday - therefore take the time to make notes that categorize the sources or paragraphs you cut out instead of taking precise notes.

Steps

Do a brief google search and compile as many basic guides about sustainable practice as possible.

Read extensively, spending 20 minutes to 1 hour daily over a few days or weeks on topics that pique your interest.

Broaden your horizon and get to know that sustainability has multiple advantages such as saving money, making research safer and improving mental health. You should also discover that not all actions are limited to the lab - take flying-less initiatives as a great example.

Rewards

Revise and update your view - see how much you have learned in just a few days! Enjoy how much wiser and stronger you have become!

You are probably sparking from ideas, you can write them down loosely and enjoy the possibilities that await you!

2. Understanding Your Environment

Goal

Situate yourself. Develop a sense of what will be possible in the future. Become aware of your circumstances, that means the structures around you, the people you work with as well as your own habits.

Remarks

This step might seem trivial, but it will be essential to become aware of certain factors that are otherwise often just forgotten because one relies on assumptions.

Steps

About your environment

Do you want to do this journey alone or do you have members of your group or institute joining you?

Do you know somebody who already has made changes to what sustainability?

What do your colleagues think about sustainability are they critical or passionate? Are they open or anxious regarding change?

How are things structured around you?

Is there a plethora of regulations and rules because you work in the clinical or diagnostic context?

Which decisions that affect your research conduct made by single researchers, by boards or even by a certain funding bodies?

Which aspects bear a big need for teamwork and harmony and where does everybody mind their own business?

About your own nature

What drives you, what is your motivation?

How decided are you to drive change?

How ambitious are you? (small goals are discouraging for very ambitious people while for others a multitude of possibilities can become overwhelming because it trigger a sense of "I have to do so many things at once")

How much time do you have? (Decide it as long as you have not yet started, it is easy to get biased later)

What do you expect – do you think it will be fun, will it feel like a journey or like a fight?

How do you like to work?

Do you need a push to get active?

Can you work under pressure?

Do you like to try things out or do you rather think everything through thoroughly?

Do you prefer supervision or working independently?

How important are the opinions of other people for you?

Reward

Although it might not yet feel like it you've made an essential step. Many undertakings fail because of these "environmental" challenges.

You probably have found something out about yourself (now you can use the 3 month world-travel for vacation!).

Being aware of all of these aspects (potentially having explicitly written them out) enables you to consciously control, or at least steer them.

3. Identify Possibilities

Goal

Since you now have a basic understanding of sustainability and your surrounding, it is time to come up with some potential targets for taking action. Create a list with actions for all the categories and topics you learned about during the first step.

Remarks

Be creative and ambitious, write everything down that seems possible.

No need to rush, take a few days and don't try to identify all possibilities at once because you can easily get stuck. Sometimes targets will come to mind by accident. You can also let others join to compare ideas even though they are not working with you or want to change their practices.

And no worries, throughout your journey you will again and again realize how incomplete this list was (and this will feel great).

Do not forget that in this step it's not just changing your practices but potentially also products and equipment.

Steps

Organize the opportunities you identify on different levels:

Individual for your own work / involving your group and colleagues / extending to the entire institute and external third parties.

Short term / mid term / long term

Easily doable / Doable / Challenging / Oh man ...

List potential actions you can remember from the reading you did, matching them to your lab's context.

Have a look into your lab-book to walk through each experiment and identify sources for change

Imagine you have to show someone else, who's lacking a background in science your laboratory and explain them what a certain piece of equipment is for. This can help to identify things you might otherwise have overseen. And for people from biometrics do the same with your code.

Imagine the following: you have to build an institute yourself what would you need to buy and set up? Where are the possibilities for change?

Imagine managing an institute with a monthly budget of just \$500. While this may not mirror real-life circumstances, its purpose is to create pressure that aids in identifying sources of consumption. With this limited budget, the goal is to sustain as many processes as possible. This exercise allows you to pinpoint energy-intensive activities, identify reusable consumables instead of making new orders, and find ways to reduce chemical usage. Survey your laboratory, noting every necessity and utilization during a week of experiments. This helps grasp aspects that can be optimized.

This scenario entails that your local waste management service being unaffordable, leading to an inability to empty your waste bins. While this experiment can be conducted over a few weeks in each institute, it effectively highlights the amount of waste being generated when just done theoretically. The goal is to raise awareness of waste quantities and how disposal is managed. That involves that the toxicity of waste is considered because it might be dangerous to carelessly handle biohazardous waste. However, the treatment of such waste is often neglected once it's discarded into a trash bin.

Rewards

Now you have a long list of opportunities, allowing you to already visualize how your new sustainable environment will look like. Take some moments to immerse yourself in this vision!

Feel the multitude of opportunities and possibilities and remember that even in the smallest actions, there lies potential.

4. See Who Else Is Out There

Goal

Understand that you don't need to reinvent the wheel. Learn from experiences others share. Identify initiatives and people who can help you. Understand what they offer and especially why they offer it.

Remarks

This step extends what you have been digging up when trying to get an overview. Now it is about to find more precise experiences and or protocols that exactly fit you.

There's no need to network if you don't like to. Anyway, you have our word, the field is very lovely and open (still, it sometimes takes a while until people answer -answer, after you have written them the 10th e-mail - but they will apologize as many times as you banged your head on the table when you meet them - it is not that they don't want to talk to you! – and if they are rude to you, you let us know and we will take care ;)

Steps

To an extended Google search to find initiatives, networks and blogs which share experiences.

Decide whether you want to implement change according to your own pace or you want to use a program that helps you and/or certifies your laboratory as well

If you like, reach out to people that inspire you or work exactly in your field. Chat with them because they might be able to share things you have not yet had on the radar.

We would advise to join at least one initiative or network just because you should experience how reenergizing and motivating it is to be around like minded individuals and how lovely the community is.

Rewards

You avoided many setbacks and dangers at this point. You stand on the shoulders of giants. Maybe you've already begun to build your own network and to meet amazing new people that might become your friends in the future.

5. Crafting your plan

Goal

Coming up with a tenable series of actions & steps that is tailored to your circumstances.

Remarks

This part can become very tedious, therefore, do not waste hours of your time by overthinking. Be precise and concrete to avoid thinking about taking action when you are already running the experiment

Although it takes time, quantifying your impact that will boost your motivation and show you the change you can bring about

A little methodological tip: Prospective retrospective optimization

Imagine one week/month/year from now, if you have failed – why?

Imagine everything went perfectly and you exceeded your goals – why?

Steps

Take the list from the previous step and trim it to include what you want to do. Create an order when you will go for what.

Consider that you only have limited resources, limited time, and some things might not be easily achievable due to your surrounding.

NOTE: A list of attachments is available for you to go through and create your action plan.

Rewards

With this plan in your hands, there is nothing in your way anymore to take action.

Be proud that you did let greed or fear push you into rushing but that you made sure to have a strong fundament. Your plan gives you reassurance and security because in contrast to most others, you know which difficulties you will face – and, maybe more importantly, how you might solve them.

6. Communicating Your Passion

Goals

Get a sense of whom you need to talk to, whom you want to talk to and how to do so.

Remarks

If you don't feel like sharing anything, don't force yourself because your messages won't be convincing.

Differentiate whether you want to share something because you want it or whether you think it will get many clicks and help others. No hard feelings, all motivations are valid, just be aware of them in order to not be disappointed if something doesn't work.

Steps

Learn how to share, communicate and market.

To convince others especially more senior researchers, remember that sustainability is benefiting many aspects such as economical (money – e.g. due to reordering less often), mental, physical (toxicity and safety) and scientific (improved efficiency and experimental design)

Consider whether you want to share your journey.

Share on social media what you will do and have done – that motivate others and keeps you accountable.

Let your lab or institute know.

Bring it up in the lab meeting and inform others. This will be another source of accountability, it also will require you to be precise about what you want to do and what the motivation is. Additionally, it will make the others feel included and less anxious about change.

In this way you might also find other people joining your undertaking.

Let your institute or university know.

They might be an underappreciated source of support and also financial resources.

Rewards

Apart from all the benefits we already mentioned, you have not done the first step in science communication, congratulations!

It will be very freeing if people around you know what you do. Otherwise, you will always be the underdog doing something nobody understands.

7. Enough talking

Goal

Taking Action.

Remarks

Steps

Just do it!

Just do it!

Just do it!

Build a culture.

Use little habits to craft a culture, to make you and others also think green.

Allows others to participate even if they join later.

Celebrate your successes!

Rewards

It will feel great to take action and finally do what you have been planning for. Now you're officially part of the green community!

People will join when they see you have fun and you are successful, not because they are evil but because they are scared.



8. Monitor & Maintain

Goal

Just like a good friendship or a pet, sustainability needs you treat it. Therefore, you should review how everything is going from time to time.

Remarks

This step is not intended to make you an officer running around and spending your time on finding mistakes. It should just be a reminder that things need care because circumstances change.

Steps

Make sure that everybody who joined your undertaking later, is well informed and understands why they are doing what they are doing.

See whether you could you potentially invite others to join your team?

Check if anybody falling back into old habits (e.g. "because there is just not enough time at the moment"?).

Can you further refine certain practices – given that you established new habits and made new experiences?

Are you progressing as planned? With initial success, it's easy to lose sight of your broader objectives.

Strengthen your culture by celebrating your successes and deeds. Be proud of what you achieved and think about organizing an annual green retreat or party-evening.

Summary & Remarks

For every aspect and action you implemented, you can now enjoy to see that you achieved what you initially set out for!

9. Grow to open up and inspire

Goal

Keep on marching and celebrate your journey by helping others through sharing your experiences and knowledge.

Remarks

Don't think it is arrogant or you might be an imposter by sharing your insights come up they are valuable and urgently needed. And if you should still feel bad about it, just hand all your knowledge, achievements, and glory over and share it under the name of ReAdvance to make us famous ;)

Steps

Take another fresh look at your possibilities.

Can you identify new opportunities given your experience? (Maybe, they remained too difficult or intimidating because the involved institute wide changes or selecting 3rd parties or even policy change.

Compile down you experiences.

What have you done?

Which challenges did you face & how did you master them?

Which tips and tricks would you love to have had when starting out?

What other benefits apart from a lesser environmental footprint have you noticed.

Rewards

Become an example for others. You are a veteran, act accordingly, you deserved it! Sharing is a great way to help other and at the same time keep you going. Enjoy what you have built!

10. Attachments

List for 5.

How many people are involved in each action.

Does anyone need a special briefing?

How much time or how many resources do you want to commit?

What technical challenges will you face?

Which extra controls should you include to assure your experiments are still working well?

When do you want to start implementing change?

When should the goal be reached (especially for step wise or longer term action).

Whom do you need to inform before you start?

How to keep track of what you achieved and how to quantify the impact of your actions?

Will you implement a schedule to look back how your progressing?

Which person might confront you with resistance?

How might you be able to convince this person/how to talk to them?

Who or how will...?

Keep you accountable?

Help you in case of issues?

Keep pushing you to venture further and further?

If the answer is "I" three times, do not worry! You got this!

Think big and note which dreams you have and what you want to achieve in the future.

Set 3 alarms in your calendar when you want to review these dreams.



Visit us at www.Re-Advance.com or contact us at Coordination@Re-Advance.com