LEAF in your Research Department

The LEAF certification programme contains a set of tools and resources which allows research organisations to build a local capacity for sustainable research operations through self-assessment and local auditing. When introducing a sustainable lab orientated programme such as LEAF, you will need support from a range of people. Because LEAF can be introduced institute-wide, we recommend doing this with the guidance of a *green team*, dedicated to sustainable research in your organisation. This is a great way to gain support and share the efforts of rolling out sustainable lab practices within your research departments.

If your research organisation does not have a green team yet, check out the Green Labs NL resource *"How to start a Green Team"* on our website resources page.

Here you can find some recommendations and suggested stepwise guidance from Green Labs NL using our experience during the LEAF pilot in the Netherlands. Also have a look at our report "**The implementation of LEAF at public research organisations in the biomedical sciences: a report on organisational dynamics"** for further in-depth detail about our pilot findings, which can be found on our website resources page.

Terminology

- Institute (collection of faculties)
- Faculty (collection of departments making up one subdivision of an institute)
- Department (collection of research groups)
- Floor (physical space in a building)
- Lab space (physical space, usually a room or a series of rooms with dedicated equipment and a door)
- Research group (team of researchers usually headed by a principle investigator (PI), also called PI-group or lab-group or lab with a specific *"Name"* in other contexts)
- Green team (group of voluntary members dedicated to sustainability initiatives, and usually made up of representatives from various research groups/departments and employment levels)
- Sustainability manager (dedicated person(s) set in place by management to implement sustainability goals of the organisation)
- LEAF User/Administrator (two distinct levels for users of the LEAF tool)
    - User: a user is associated with a single research group as defined on the LEAF tool and has the task to fill in criteria for his/her own group.
    - Administrator: An administrator has full access rights for your organisation and is in charge of the assessment of LEAF submissions.
- LEAF Submission (submission of all the criteria within an award level (bronze, silver, gold) by research groups participating in LEAF)

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Step 1: Rally some interest

It's good to ensure that you have the support of the research management or sustainability manager, if you have one, at your department and/or institute. This helps to get LEAF accepted as an internally approved sustainable lab programme. With the help of your green team or supporting colleagues, spread the word and gather interested research groups so that you have an idea of who to invite to the *user meeting* and who you should appoint as *administrators*. It is always good to start with a few motivated research groups, rather than trying to involve an entire department in the implementation step.

Communicate to colleagues via internal sources but also just by talking to them about your sustainable initiatives at research meetings or informally.

LEAF requires a service agreement to be signed on behalf of the participating department/organisation. We recommend approaching department heads, sustainability managers or research management to ask them to be the signatory. The service agreement requires an estimated number of participating research groups so tally those that have already shown interest and use it as a way to show your managing parties the preliminary enthusiasm to use the LEAF tool.

Step 2: Gather LEAF administrators

LEAF requires institute administrators to review submitted criteria, approve certification applications, and reconfigure calculators to represent your specific organisation. This could be any staff member who is willing to show some dedication to implementing and upkeeping the use of LEAF within your organisation. Time dedication can vary from a few hours a month to a few hours a year depending on the roll-out scope of LEAF in your research department and the range of supporting colleagues to aid in tasks.
We recommend using your green team to identify suitable administrators. Depending how your institute is set up, you may appoint an administrator per faculty, department, or floor when enough supporting colleagues can be found. Having green team members in each of these (sub-)units may make it easier to get groups to sign up and participate, but it is not a strict requirement. You could also ask a few members from the green team to become administrators for the whole institute and divide tasks in a shared manner. Administrators should familiarise themselves with the contents of LEAF.

Calculators: Calculators are optional for LEAF users but can give valuable information on how much research groups and institutes as a whole are saving in terms of CO2 emissions and costs. The base figures included in these calculators can be updated so that they reflect your own organisation. Administrators can help to source these numbers through the help of members from the facilities department and national figures. As an administrator, you can pre-fill in the base information to reflect the common energy, water and waste stream costs of your organisation, but also help individual research groups with less common figures. Don't hesitate to contact Green Labs NL when sourcing information relevant to the whole of the Netherlands.

Criteria review: When a research group submits for an award level, administrators will be prompted to review the completed criteria from each group. Criteria submissions are in a free text format and users are expected to write a few sentences to explain how they met/or could not meet the criteria. Supporting evidence can be submitted internally to administrators or an in-person audit can be performed, if required. Administrators can provide feedback to individual criteria. This can facilitate continuous improvement for the research groups, as after achieving an award level they can further improve how they've addressed old criteria in a following year's submission. The aim of this exercise is to reflect on what is possible in terms of sustainability in the context of the research activities that go

on in the research group. Work together with the research group to achieve what you both regard as the best possible outcome.

Local guidance: For each criterion, LEAF offers resources in the form of background information on the topic or poster/sticker templates to use in-house. It also allows institutes to add their own local guidance and resources that may be more relevant to your location. Engage your green team to source and put these resources together or collect recommendations and initiatives coming out of research groups themselves.
Keep an eye on the Green Labs NL website for additional information and send us through any links and resources that we can share with the rest of the Dutch scientific community.

Step 3: Sussing out your research department's structure and participating entities

The definition and size of a research group can vary greatly between organisations. LEAF allows you to map and track your groups through creating an organogram, in which each organisation can define their research group setup and overarching divisions (e.g., departments, faculties, etc).

Ask your green team or LEAF (co-)administrators to map out the structure of your research department(s) and to identify the relevant participating entities. If unsure, contact the [LEAF central team](#) for guidance.

Draft an organogram to display the institute structure, highlighting research groups/departments that have already expressed interest in participating in LEAF. This scheme can be inserted in the digital interface of the LEAF tool as your institute.

LEAF is geared towards the operations of wet/dry lab users, thus focusing mainly on the actions of the research group(s) working in such lab spaces. However, take account of the following:

- Some equipment/physical spaces are shared between research groups. For some sustainability initiatives, coordination across research groups and with lab/facility managers will be necessary.
- Research groups can combine and decide to join as one unit due to being either smaller groups or sharing a large percentage of equipment. For example, a floor consisting of 10 research groups and 4 lab spaces shares a lot of equipment and has overlapping research activities, and may therefore register as fewer groups on LEAF, aggregating groups that work closely together. Or 4 research groups consisting of a small number of group members and sharing all equipment may combine their efforts and similarly join as one group. Combinations of multiple research groups can choose a group name reflecting their shared topic/interest, e.g., Ear institute.

Step 4: Administrator meeting

Once you are ready to get started with LEAF at your research department, organise an administrator meeting with the LEAF central team. Within the meeting you will set up your institute on the LEAF digital interface, ideally using the organogram already prepared.
Local LEAF administrators will be given a tour and practical explanation of the tool and can already sign up and register to gain access. Instruction on how to adjust calculators, review criteria or add local guidance will be given.

Step 5: User meeting

Once everything is in place and administrators are briefed, a user meeting is held for all research groups that are interested and/or have been invited to partake in your organisation's rollout of LEAF. Make sure to invite all those whom you have identified as potential LEAF users, but also open the invite to others in the departments that may be able or interested to partake.
The user meeting will again be headed by the LEAF central team, providing information about the rationale behind LEAF, its contents and manner of use. Typically, a meeting no longer than an hour is required.
We recommend giving a short introduction to lab sustainability at the start of the meeting as some participants may not be as aware of these concepts as you and your fellow sustainable science enthusiast colleagues.

During the meeting, users will be given a tour of the tool by the LEAF central team to understand what it entails for them and their research group, and they will be able to ask questions about its use and their involvement. It is also a good idea to introduce your local LEAF administrators and let users know how they can reach you for further information or questions. Consider following up with interested research groups after the meeting by sending the LEAF user guide to help them get set up on LEAF.

Step 6: Get greening up

Hooray, your research department should now be set up to use LEAF!

Maintain momentum with regular communication via your green team and internal communication sources. Consider organising discussion moments with LEAF administrators and/or users to hear about their experiences and optimise LEAF implementation within your organisation. You may also choose to develop local guides or to facilitate the implementation of certain criteria centrally for the whole institute, when applicable, with your green team or LEAF administrators. Ensure to openly acknowledge when a research group obtains an award certification level and consider small (sustainable) prizes or gifts to be awarded alongside the LEAF certification badge.

Contact your organisation's communication team for public recognition and acknowledgement of the first research groups that achieve an award. And, of course, let us know at Green Labs NL how it's going, so that we can also highlight your efforts through our channels.

Don't hesitate to contact us for further advice and resources.

Happy Sustainable Researching!