

Activity plan
Environment and Sustainable Development

Department of Oncology-Pathology
Karolinska Institutet

2025-2026

Part I. Research activities

Part II. Information and Education

Part III. Organization and management

General Responsible for Sustainability work: Chair of the Department

**Responsible for the plan and activities: Delegate for Sustainable development
(miljöombud)**

Part I. Research activities

Goal: to reduce the environmental impact of our research activities and minimize risks for health

Aims:

1. Reduce energy and water use
2. Reduce the climate impact of business travel
3. Increase lab safety
4. Reducing Chemicals and Chemical Waste
5. Reduce waste and increase waste sorting
6. Implement sustainability in Purchasing and Procurement

Table 1

Aim	Equipment/Problem	Activity/Intervention	Status
Reducing energy use	1) Ventilated cabinets/ sterile benches run at 1/2 strength 24/7. Waste of energy	1) Turn off for the night. Run 15 minutes before work begins, recommended by NinoLab. 2) Restrict usage of UV lights for ≤ 30 minutes: saves energy and keeps people safe from exposure to UV 3) Substitute light tubes in the BSC to LED lamps	Systematic work Put up notes Ask group leaders to remind Many groups turn off now Replaced in 11 BSC at BioClin
	2) Chemical cabinets are often left on after work	Inform to bring down sliding shield after work is done. Employees should be reminded. Check-up	Put up notes on each cabinet Ask group leaders/managers to inform and remind. Katja check-up once a month
	3) Snow in -80 and -20 freezers, old samples are stored, very high energy use in -80	-80: De-frosting and organizing, regularly scraping off snow -20: reminding to defrost, discard and organize Convert -80 freezers to -70	Systematic work in reminding Ask group leaders to remind Groups are better to follow this up Dialogue with KI central, My Green Lab, Freezer Challenge, pernilla.sorme@mygreenlab.org
	4) Lights and equipment are left on after work	Turn off lights, computers and appliances. Remind, put up signs. Localize equipment for timers to be installed	Timers are purchased. Install more. Put up signs. Ask group leaders to inform and remind.

	5) Measuring energy use. Crucial for energy saving	Get statistics on energy usage; Introduce competition between cores at BioClin	Oskar Kuoppala at COOR at provides statistics for J5:30, J6:30, J6:20 every quarter. Inform and follow-up
Reduce CO2 emissions from business travel	Taking flights to conferences Foreign opponents Collaborations/networks	Choosing train within Europe Using digital meetings. The guide for sustainable meetings: each conference has a digital option Use KI statistics to raise awareness	Publish the guide (traveling eco-smart) on the website Becomes a routine now Statistics from KI is published on our home page. However, quite useless so far
Increase Lab Safety	Increase awareness on what is good for health is good for environment	Katja works jointly with WEG, and safety representative, Paula M., also participates in environmental work	Systematically done jointly with WEG
Reduce Chemicals and chemical waste, reduce hazardous chemicals	Each group is purchasing chemicals; large volumes are often purchased	Reduce the purchase by sharing: check in KLARA and send a request for share, coordinate of purchases between groups that share labs and chemical cabinets. Produce charts of statistics of chemical purchases for each year, bring awareness	The opportunity is advertised Anna M helps to check in KLARA Inform, involve group leaders, initiate contacts between the groups. Inform all on the statistics
	Usage of hazardous chemicals (e.g. Trypan Blue)	Phasing out hazardous chemicals; Inventory; Inform on Green Chemistry; KI should include substitution list in KLARA Find/Create a guide on more environmentally friendly substitutions	Done according to KI inventory Substituted Triton-X100 by Tween20 at HistoCore – Anna To be done
Reduce waste	Yellow boxes (lab waste) are packed with paper, gloves mm; Instruments that are not used/not serviced in the groups.	Systematical work on monitoring and providing information. Making informative film about sorting for re-cycling Find info on recycling gloves Share equipment, include in instrument park and core facilities. Service once a year to prolong life.	Systematic work, Katja, WEG To be done: film, check up during safety inspection Systematic work. Works well, the common instrument part is increasing

	Lab materials that are not used with risk to expire	Exchange & give away week at Theme cancer	Arranged 2 times per year, works well. Extend to SciLife
Reduce plastic waste	<p>Continuous deliveries with single-use cooling bags and Styrofoam boxes sentenced to get burned</p> <p>Usage of one-time disposable plastic.</p>	<p>Engage KI, promote at Miljörådet, include in the new Action plan for KI</p> <p>Increase plastic recycling; Training in environmental thinking; Sorting plastics not in contact with biological material. Discuss: what is contamination? PBS bottles, media w/o antibiotics – discard in the sink and recycle bottles. This will also Reduce biological waste!</p>	<p>Difficult to solve.</p> <p>Inform and remind Ask group leaders to discuss</p>
Prevent “lost” lab coats	Lab coats not left for laundry accumulate in the cell labs/labs are counted as “lost”; large costs for society.	Inform; organize raids through the labs every month; reduce the costs for society	<p>Katja has returned many lab coats before summer.</p> <p>Raids every month, Involve group leaders</p>
Reduce paper usage and increase re-cycling	Printing out a lot and in color; paper is not sorted properly	<p>Setting up printers on double sided, black and white mode as default settings.</p> <p>Increase sorting/not mixing with cardboard</p>	<p>KI-ITA have done printer set up</p> <p>Inform/check regularly/involve AMG</p>
Involve procurement	There is no guide-lines/ requirements at procurement unit	<p>Influence KI centrally to include requirements for packaging recycling; For direct procurement: a quick guide on environmental perspective.</p> <p>Introduce AKT label in procurement of chemicals Act - About (mygreenlab.org) Coordinate with Heike Siegmund, chemical coordinator at KI</p>	<p>Ongoing discussions in Miljörådet. Monitor and ask for result!</p> <p>Ongoing discussion. Ask for result!</p>

Part II. Information and Education

Goal: to acquire "competence" sustainable development at all levels and in close relation to lab safety

Table 2

Aim	Activity/Intervention	Status
Inform about KIs and OnkPat's environment and sustainability work	Katja informs at the introduction of new employees; Bulletin board with news; Monthly newsletters; Website with Environment and Sustainability	Systematic work in coordination with Paula M., Anna M. and Admin letters
Measuring energy usage in cores at Bioclinicum	Get the data on energy usage every quarter, make charts and inform	Done every ½ year. However, unclear how to use the data to save energy
Ensure training on waste sorting and motivate Improve/Inform on food waste	Inform better on mixed paper and cardboard; clarify about brown paper Make a QR code film on sorting food waste; introduce an easier way to collect, contact responsible at NKS ewa.frank@regionstockholm.se	To be done in educating/ reminding people on site Katja, Paula, WEG, involve people to be done
Training the new mind set: recycle and reuse; prolong life time of equipment	Monthly newsletters to everyone on OnkPat with a theme of the month and information on events. Involve employees and their creative thinking	Every month. How? Difficult task
Inform about KI activities	Information on bulletin board, by e-mail, on screen in the lunch room at BC, Admin informs. Include SciLife	Systematic work, KI sustainability day, Students for Sustainable development

Part III. Organization and management

Objective: Enable systematic work at OnkPat with environment and sustainability issues.

Table 3.

Aim	Activity/Intervention	Status
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Dedicated person for work with sustainability and Planning of activities	Katja is working 20% as sustainability delegate and is a member of WEG. Activity Plan is formulated and upload to the homepage. Preparing for environmental Audits at KI every 3 years. Updating home page	Ongoing systematic work; introduction for new employees Approved by AC and Head of department Has been 202, 2024, next 2026 Updated regularly
Dissemination of information	"Administration informs" every month; monthly letters from sustainability delegate	Ongoing systematic work
Education at "Breakfast meetings"	Invited speakers on sustainability once a year	Peter Stenvinkel 18/10-23 on Planetary health; Liselotte Schäfer Elinder Karolinska Institutet (ki.se) 13/10-2024" <i>Realistic dietary shifts in the population for health and sustainability</i> " Planned 5/11-2025 A C Bunge.
Monitoring news from KI, other departments, at BC, other universities and countries	Participate in meetings and conferences; meeting with KI-representatives; KI sustainability day; seminars from "MyGreenLab", Stockholm TRIO	Announce meetings and Involve employees Participate in the seminars, work shops
Participation at KI sustainability day	Katja Paula and Anna participate at KI sustainability days; presenting posters every year	Katja, Paula, Anna participated at every KI sustainability day; Katja presents a poster
Collaboration with Region Stockholm and NKS	Stay in contact with Oskar Kuoppala for energy statistics; with Ewa Frank for waste issues and recycling	Ongoing work