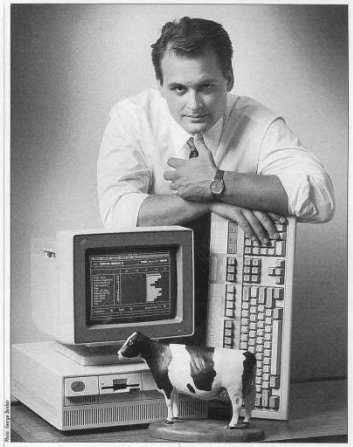
Invading the Bovine Boudoir

by Darlene Shura

Computers have invaded the bovine boudoir, helping Canadian dairy breeders produce superior livestock and maintain better breeding records. Canadian dairy cows are second to none in terms of higher milk production balanced with superior animal conformation. More than 65 countries around the world are using Canadian bloodlines and Canadian technology to improve their own livestock. It's big business, totalling more than $30 million in semen export annually.

The Canadian dairy industry is at the forefront in new applications that support the sale of livestock genetics at home and abroad. For example, a new software program is being developed by Semex Canada, the international marketing agency for Canada's six major cattle Artificial Insemination (AI) centres. It's an integrated Canadian Dairy Management Software Program called DRMS (Dairy Records Management System). DRMS will record all aspects of dairy husbandry, including animal identification, reproduction, production and health. It will also contain a Canadian corrective genetic mating program called "G-Mate", which will help dairy producers evaluate a number of bull and cow mating possibilities according to the economic goals of their operation.

"One of the hallmarks of Canada's AI industry is the commitment to genetic improvement" says Vern Osborne, Marketing Director, Farm Systems, Semex. "DRMS will enable breeders to keep better records and help us capture the data on a worldwide basis more effectively. For our Young Sire Proving Program, it means we can use data from around the world to test out the success of a new sire, and therefore keep the



Vern Osborne of Semex: Keeping genetics at a superior level.


Greenland
Canada
Sign


Alaska
Yukon
Northwest Territories
Nunavut
British Columbia
Alberta
Saskatchewan
Manitoba
Ontario
Quebec
Newfoundland and Labrador
P.E.I.
New Brunswick
Nova Scotia

LES PRODUCTEURS LAITIERS DU CANADA

Tous les jours, nos producteurs laitiers s'efforcent de nous offrir un lait canadien toujours meilleur. Allez à la rencontre des travailleurs qui rendent possible le savoureux lait 100 % canadien.

UN AVENIR DURABLE. ON Y TRAVAILLE DEPUIS LONGTEMPS.

ARTICLE | 30 JUIN 2022

Depuis des dizaines d'années, les producteurs laitiers d'ici se sont engagés à produire du lait tout en prenant soin de l'environnement pour les générations à venir. Aujourd'hui, ils s'engagent à atteindre la carboneutralité d'ici l'année 2050.

Nestlé to launch RTD beverage using cultivated whey in test-and-learn pilot

By Teodora Lyubomirova

15-Sep-2022 - Last updated on 15-Sep-2022 at 13:13 GMT

RELATED TAGS: cultivated dairy, cultivated protein, alternative protein, precision fermentation, animal-free dairy

The world's largest food and beverage company is concocting an animal-free dairy protein drink as it seeks to scope out the opportunities offered by precision fermentation technology.

Remilk: 'We are on a mission to transform the entire industry'

By Teodora Lyubomirova
26-Sep-2022 - Last updated on 28-Sep-2022 at 12:48 GMT

GettyImages/lisegagne

RELATED TAGS: cultured milk drink, Protein, Dairy alternatives, vegan, plant-based, Dairy

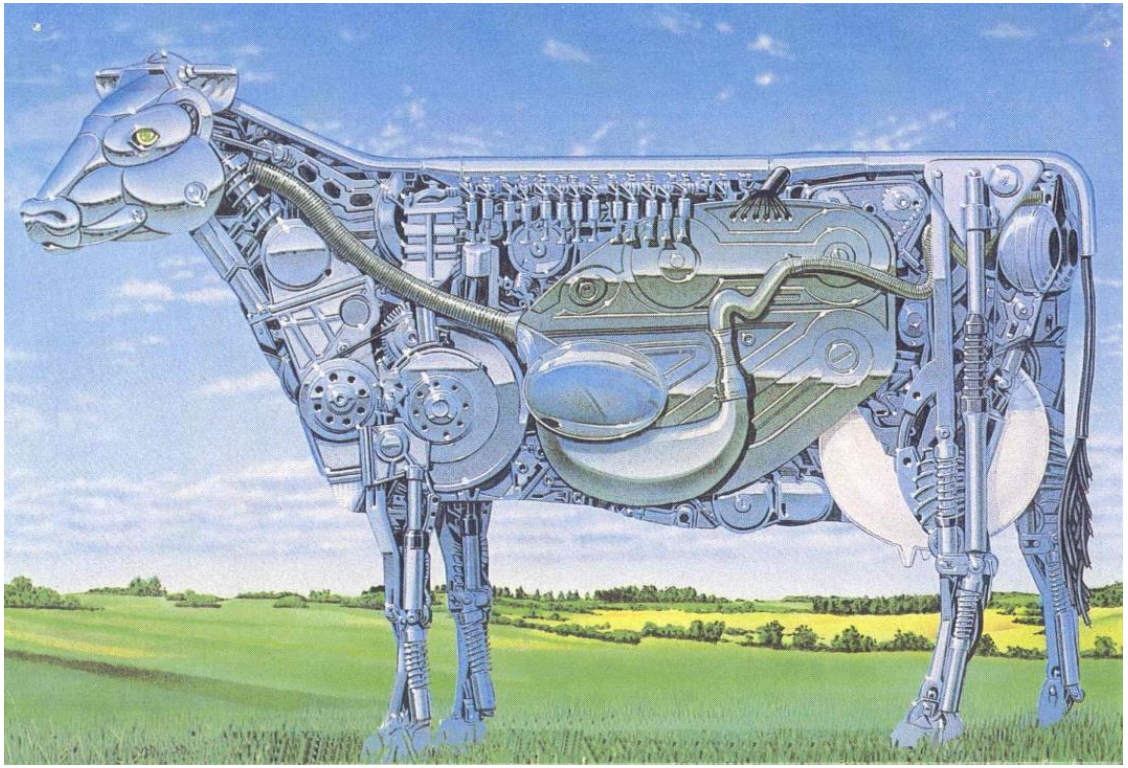
From the company's plans to unveil the largest ever precision-fermentation facility to its push into the US, we catch up with Remilk CEO Aviv Wolff to find out how things are panning out for the food tech specialist.


ABOUT US
HOW WE DO IT
OUR CHEESE
NEW CULTURE
IN THE NEWS
GET IN TOUCH
MORE
COW CHEESE
WITHOUT THE COW
NEW CULTURE

The flavour enabler

We've zeroed in on the differences between plant and animal-based foods to identify the fats and oils missing in the alternative protein space; the ingredients that make ice-cream so irresistible, and Wagyu steak so special. Our proprietary precision fermentation strains can manufacture these potent fat molecules, leaving animals entirely out of the process.

Foods made with our fats are more than an alternative, they're a straight-up improvement.



Une ferme résiliente qui produit du lait, des céréales, des fibres et des services écologiques

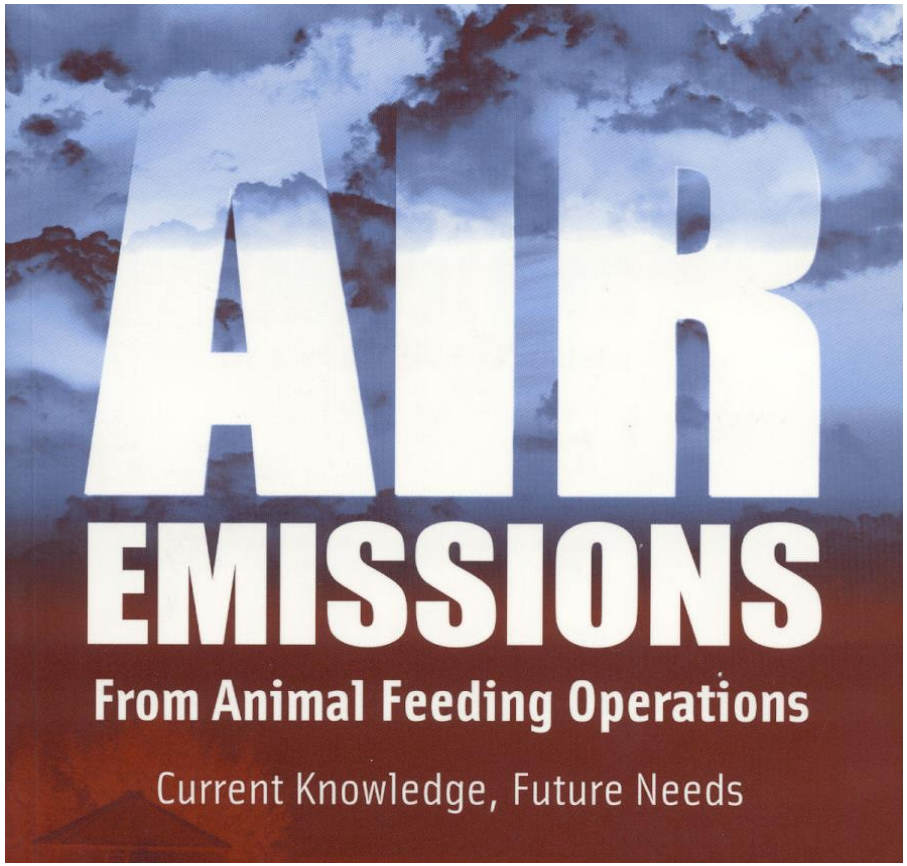
A resilient farm that produces milk, cereals, fibre and ecological services

Le Futur de l'Agriculture
(Agriculture's future)

- La viabilité sera basée sur les éléments suivants (Viability based on these themes):
  - Air
  - Eau (Water)
  - Sols/terres (Soil/Land)
  - Énergie (Energy)
  - Travail (Labour)

Émissions Atmosphériques
(Air Emissions)

“Le plus grand défi du 21ème siècle sera les changements environnementaux causés par les comportements humains“ (NRC, 2003)

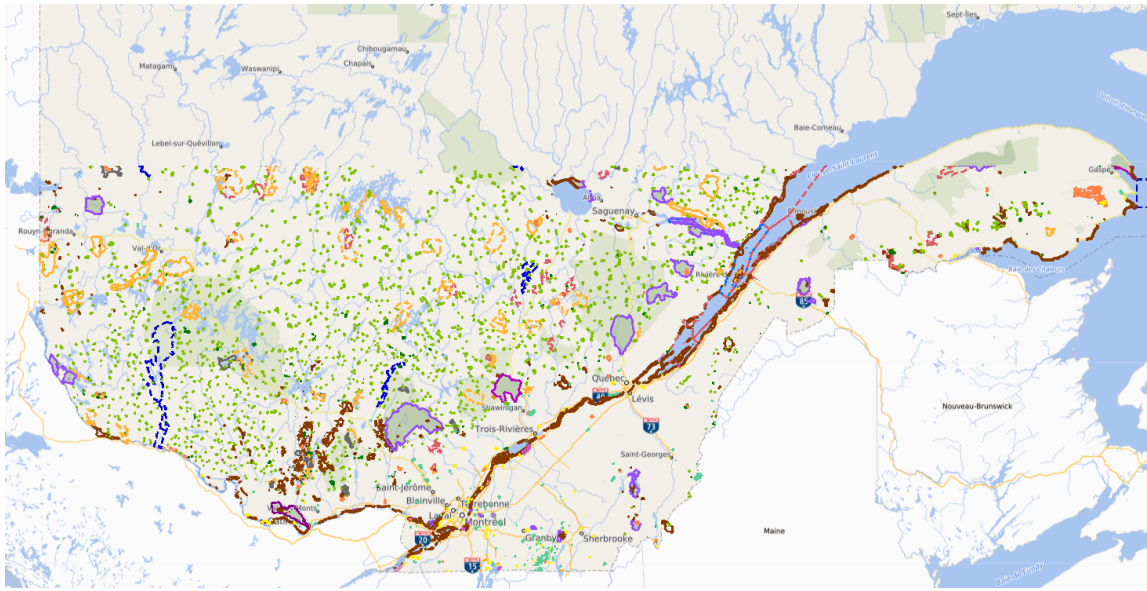


Eau (Water)

- Droits relatifs à l'eau (Water rights)
- Qualité de l'eau (Water quality)
- Stabilité de l'aquifère (Aquifer stability)
  - Autorités de conservation
- Irrigation des plantes fourragères? (Irrigating forages)

Sols et terres
(Soil/Land)

- Ressource limitée, ils n'en font plus
  (Not making anymore of it)
- Cohabitation harmonieuse entre les milieux
  (Cohabitation of people/agricultural practices)
- Où l'agriculture peut-elle prendre son essor?
  (Places to grow for agriculture ?)



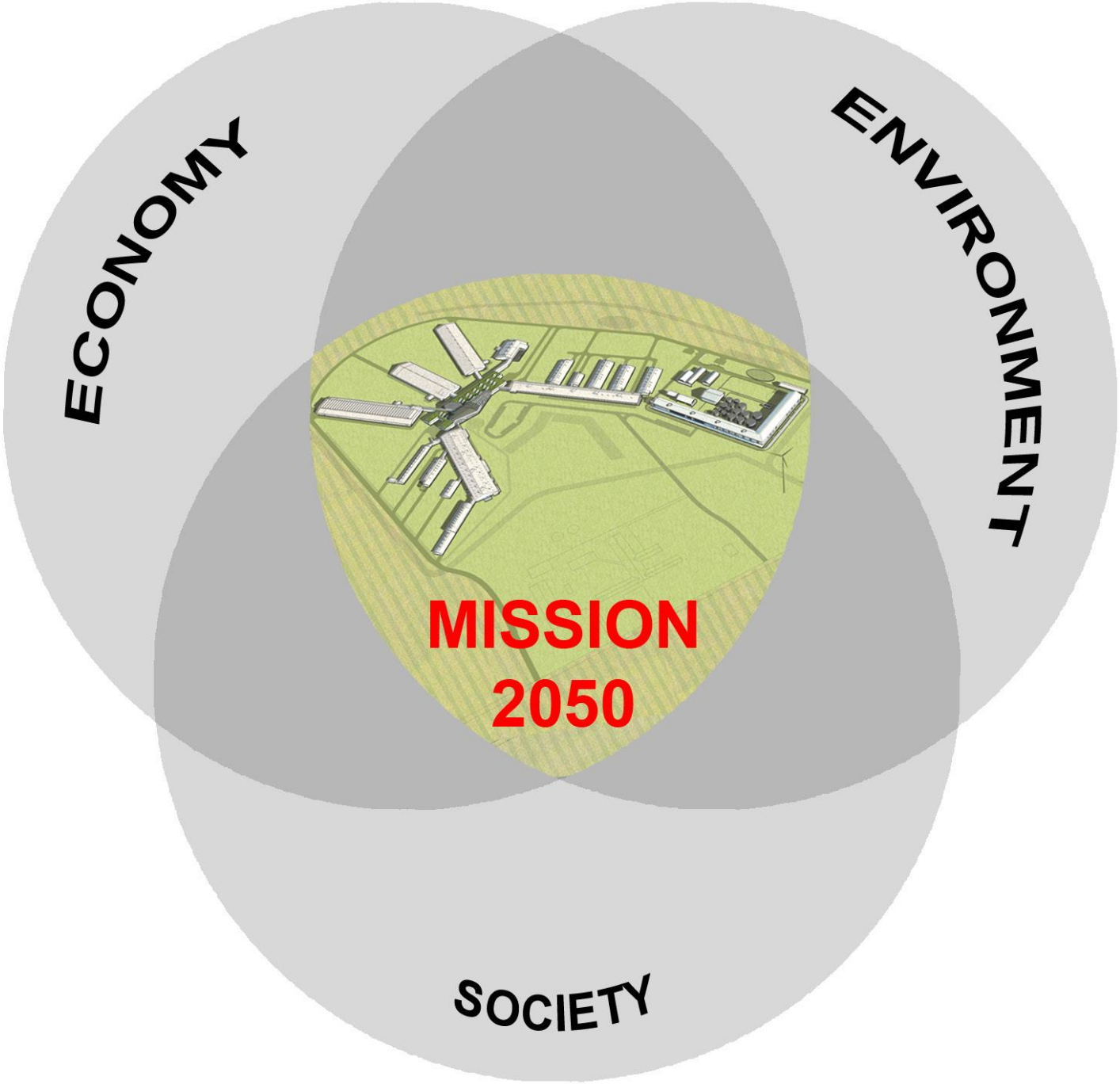
Énergie
(Energy)

- Coûts énergétiques et environnementaux véritables de la production Agricole
  (Embodied energy/environmental costs of food production)
- Cultures énergétiques
  (Energy crops)
- (résidus pour le combustible ou l'amendement des sols)
  (residue for fuel or soil amendment)
- Énergie solaire/AD/eolienne
  (Wind/AD/Solar)
- Captage/sockage du CO_2
  - (CO_2 capture/storage)
- Hydrogène

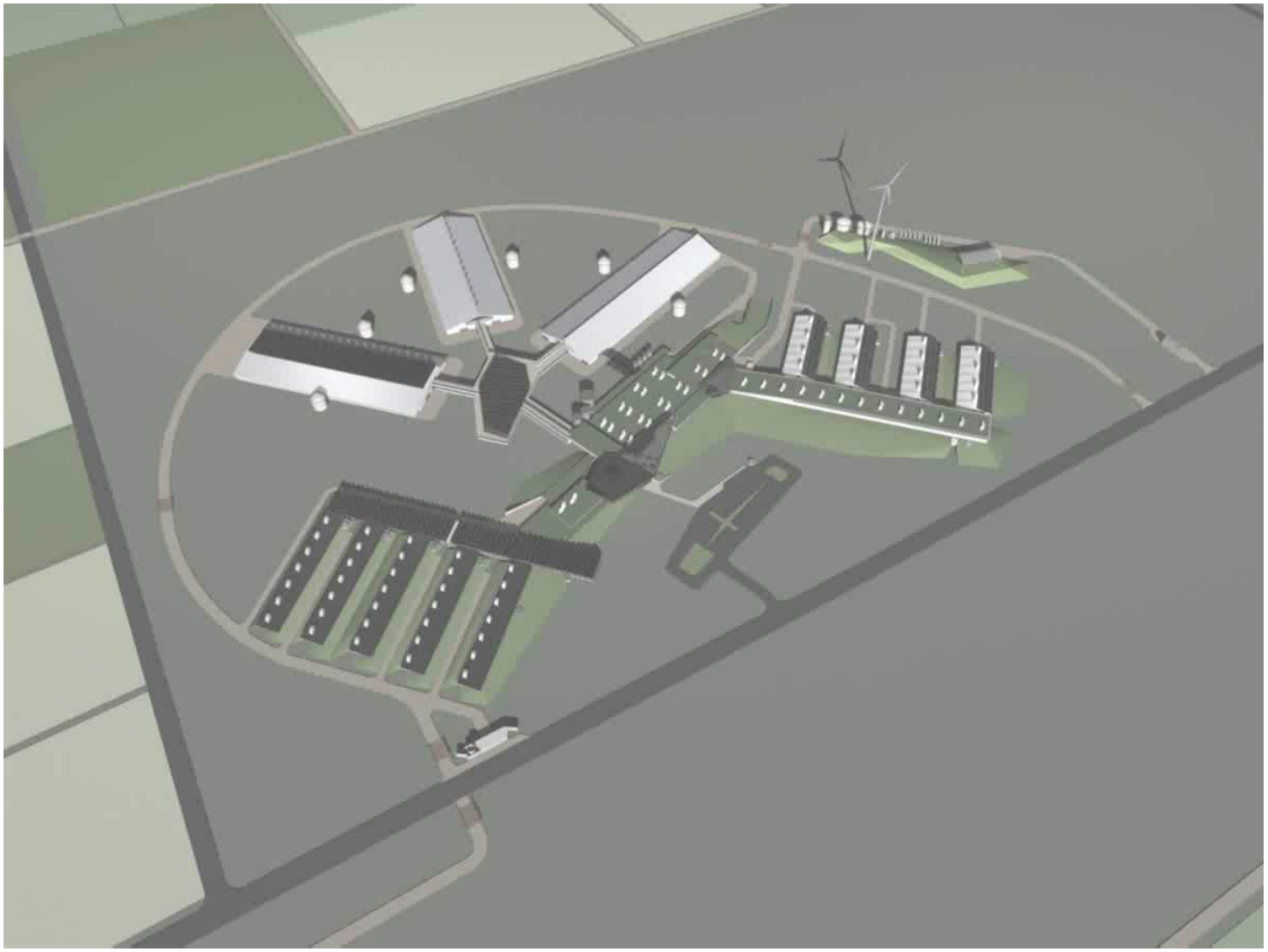
Travail/Enveloppe de bâtiment
(Labour/Building Envelope)

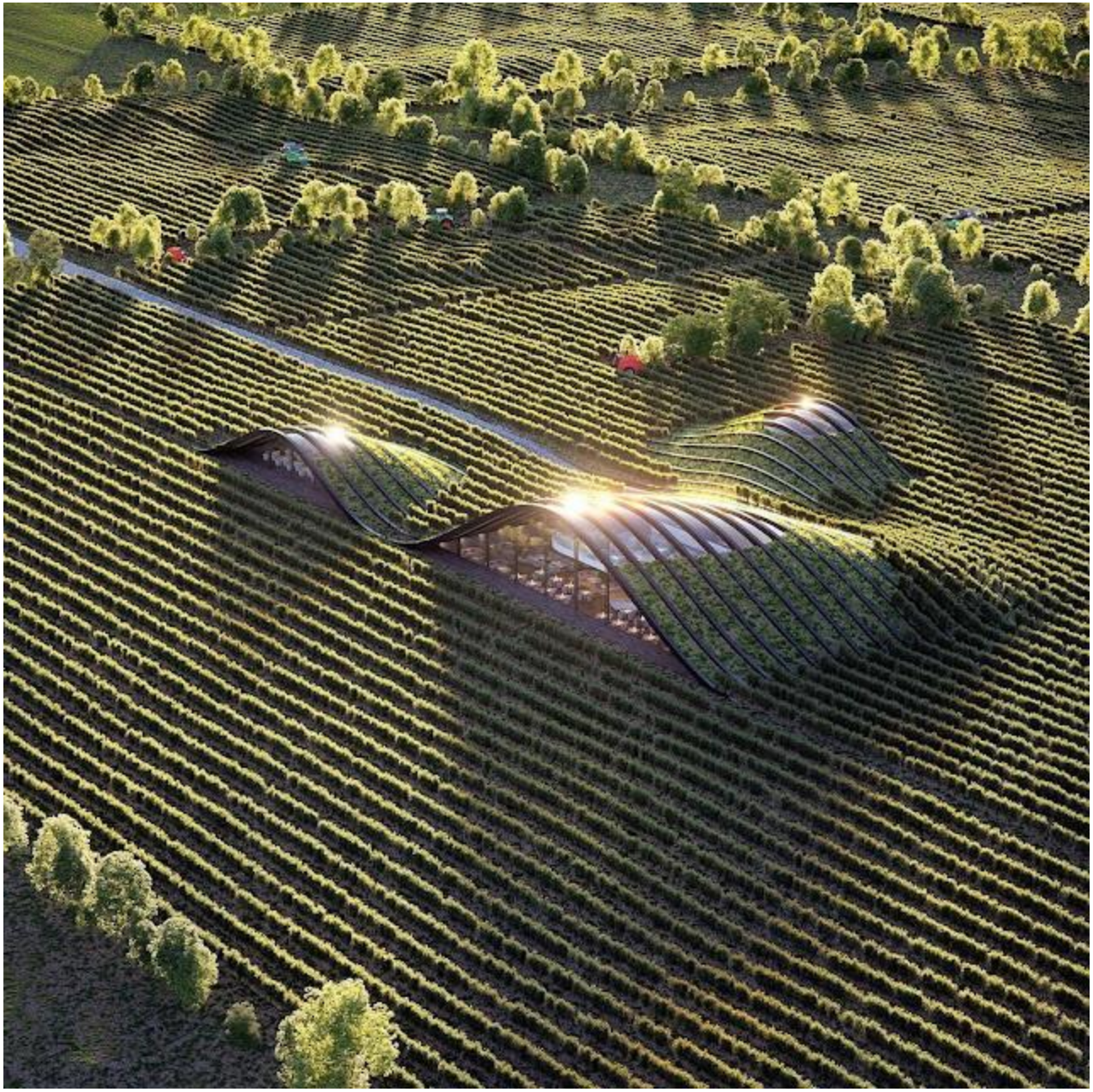
- Robotique
  (Robotics)
- Nanotechnologies
  - Fermentation
- Technologies de bâtiments démontables
  (Removable building technology)

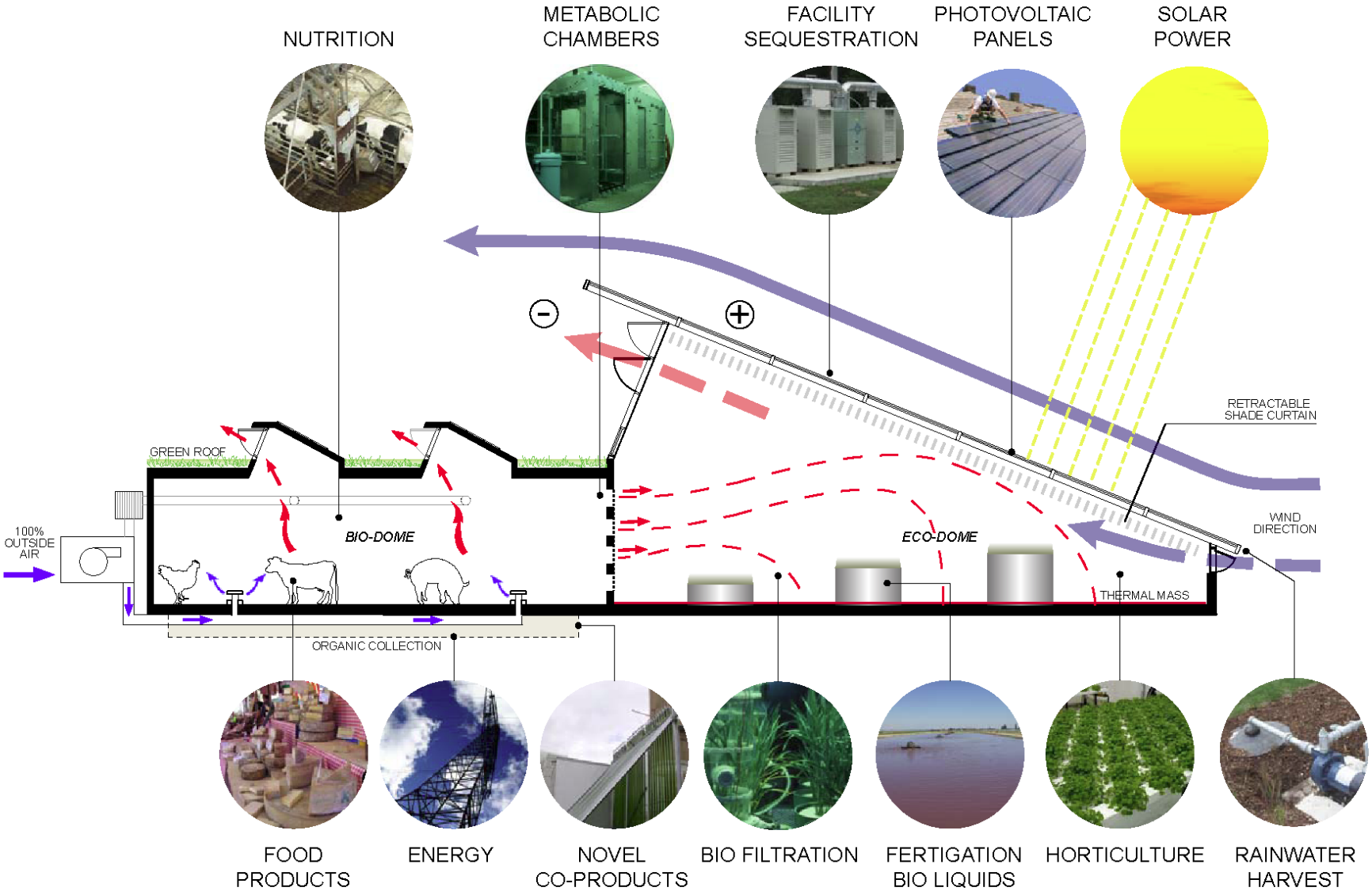
MISSION 2050


ECONOMY
ENVIRONMENT
SOCIETY
MISSION
2050

Mission 2050

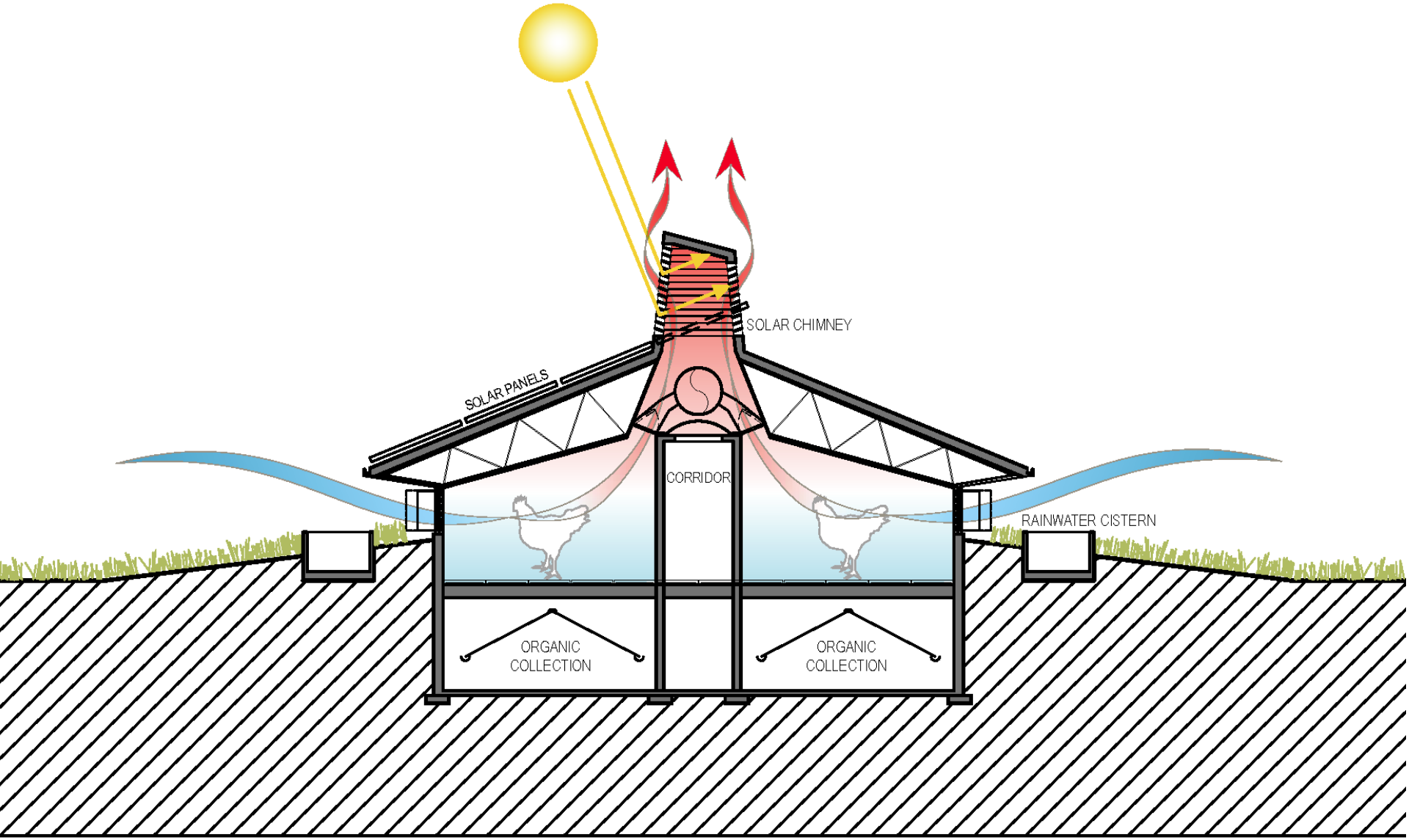






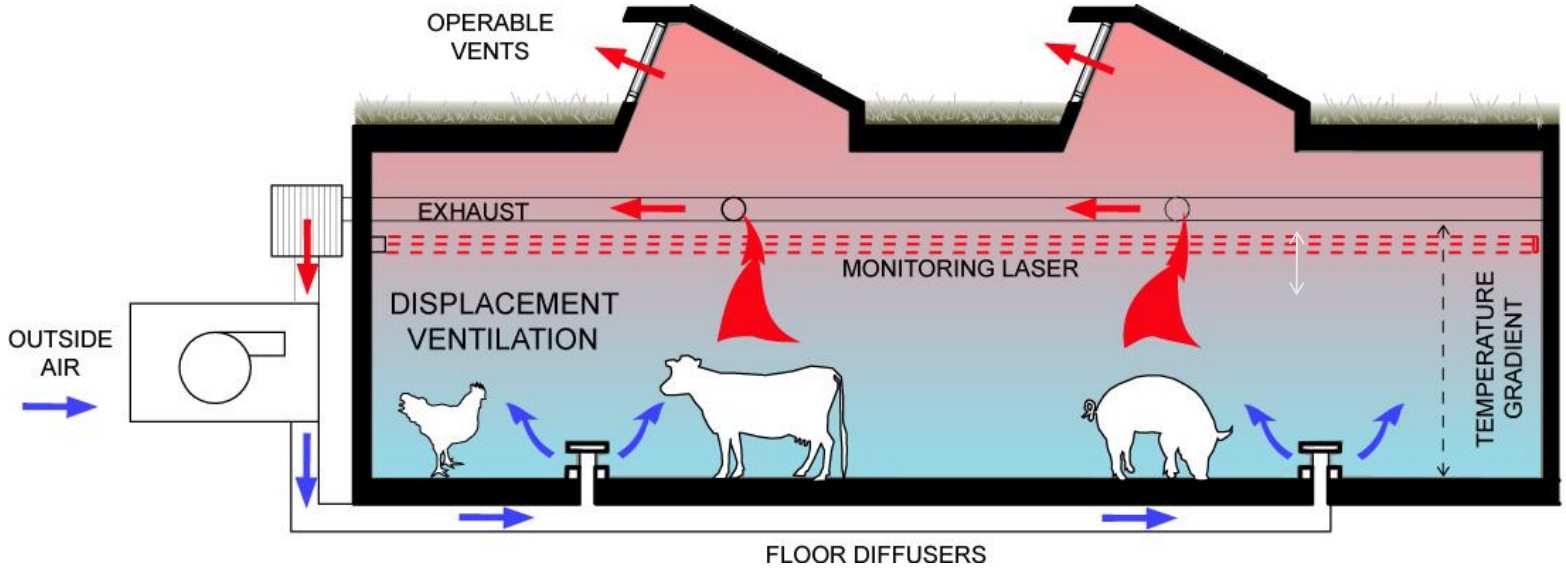
capture et récupération totales des ressources

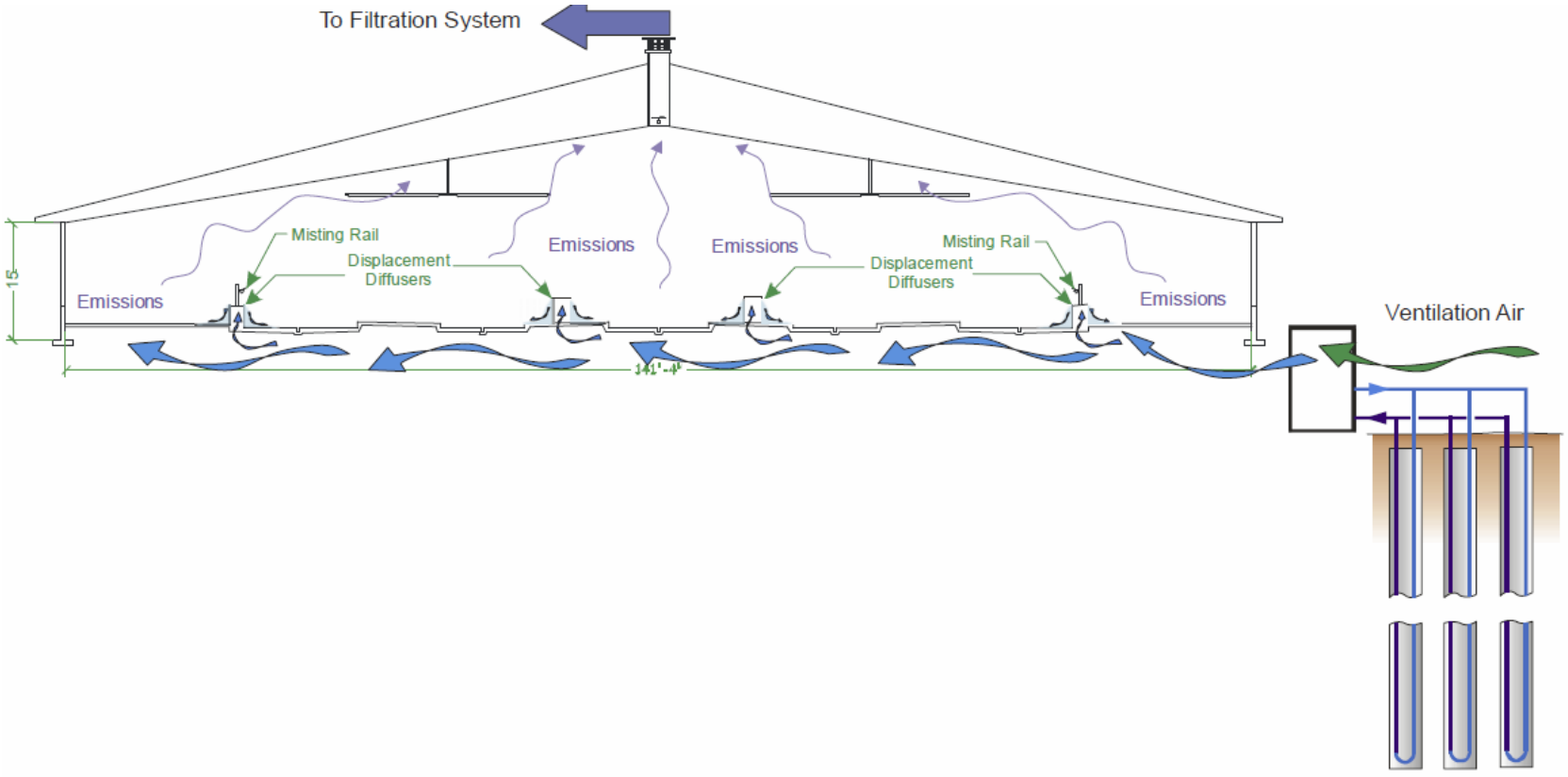
Total Resource Capture and Recovery

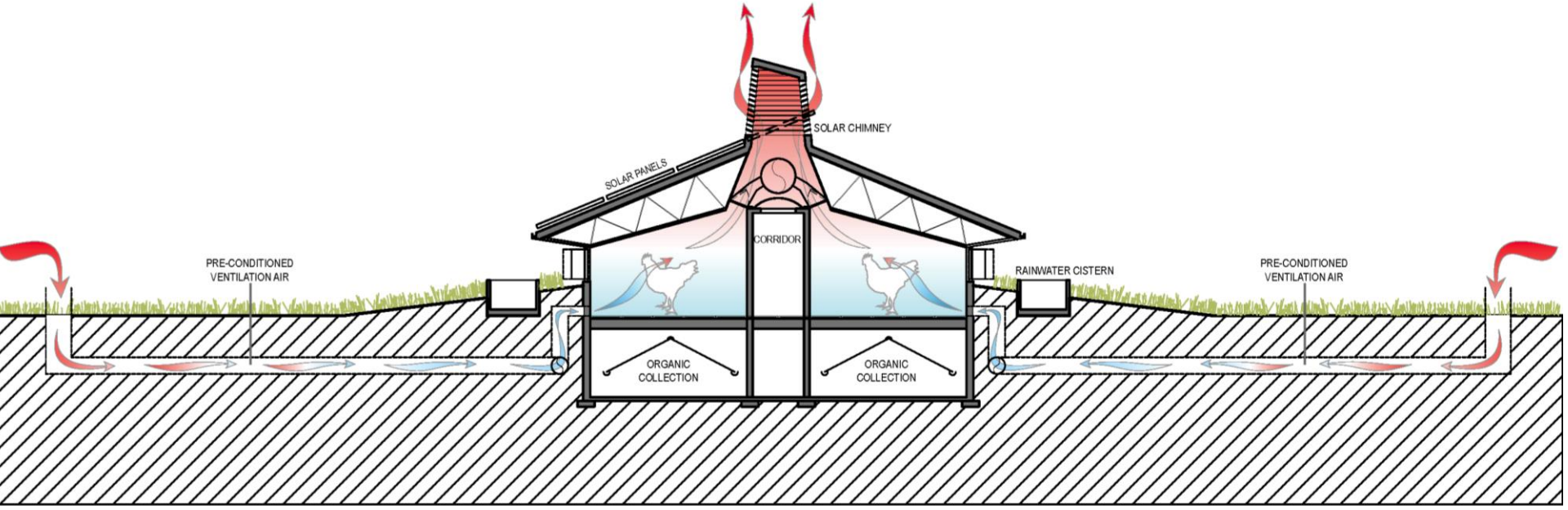


Ventilation Naturelle

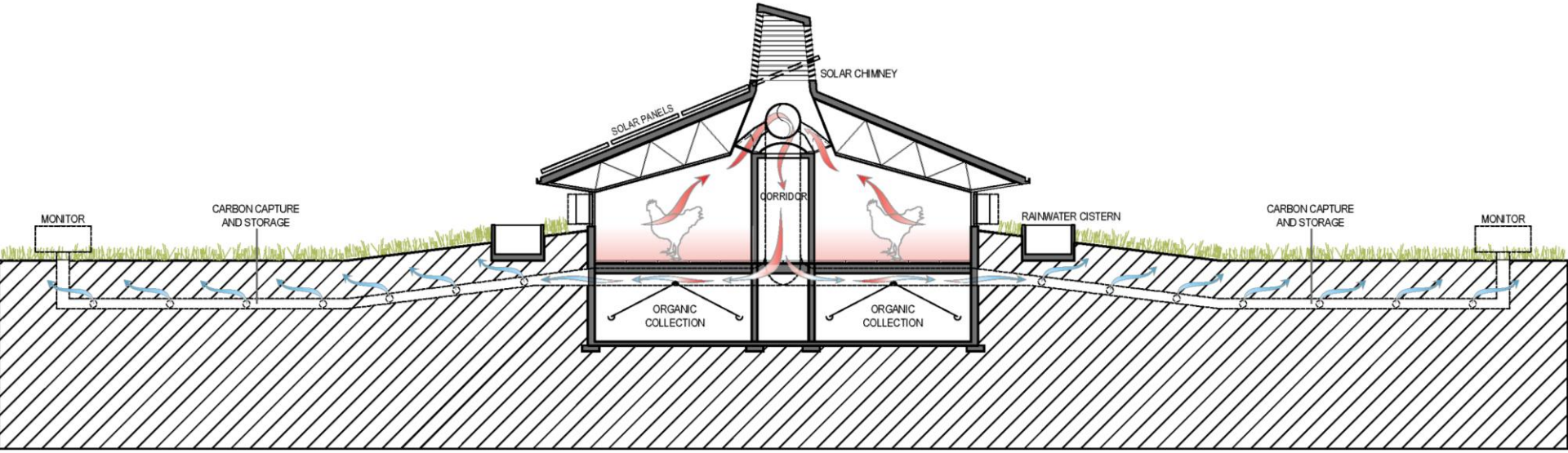
Natural Ventilation


OPERABLE VENTS
EXHAUST
MONITORING LASER
DISPLACEMENT VENTILATION
OUTSIDE AIR
TEMPERATURE GRADIENT
FLOOR DIFFUSERS


To Filtration System
Misting Rail
Displacement Diffusers
Emissions
Emissions
Emissions
Misting Rail
Displacement Diffusers
Emissions
15
141'-4"
Ventilation Air

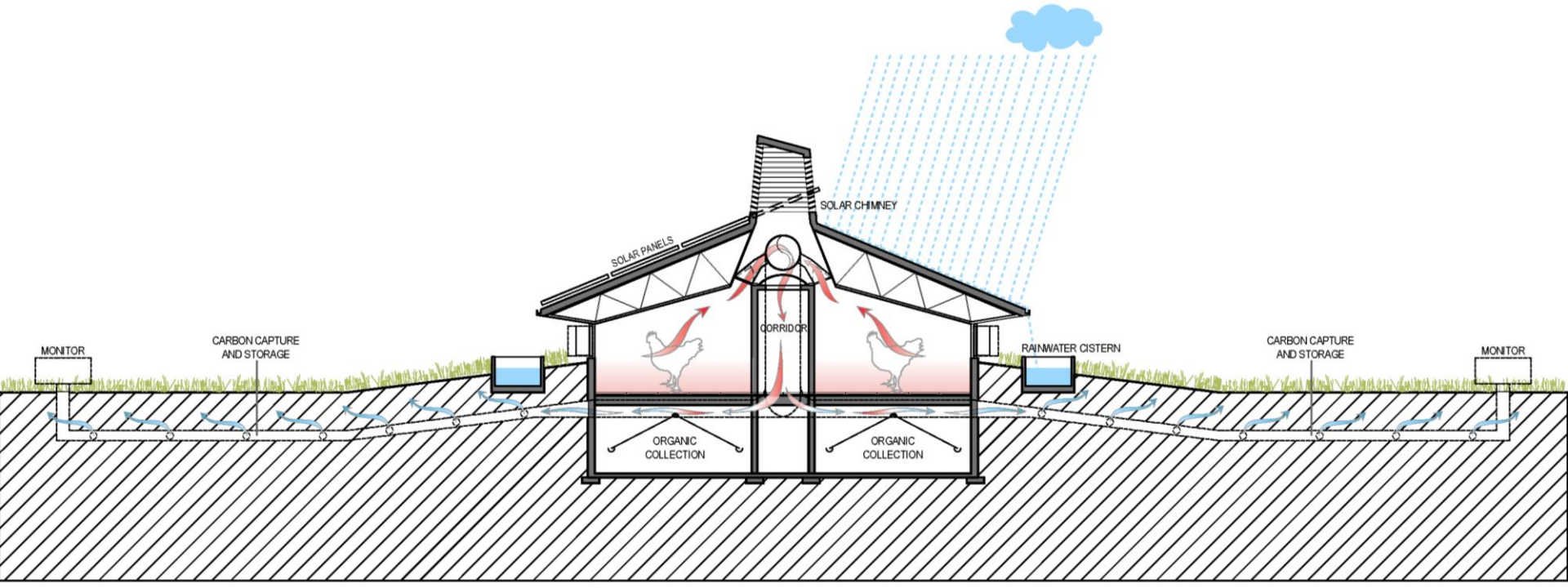


Earth Tube: Preconditioned Ventilation



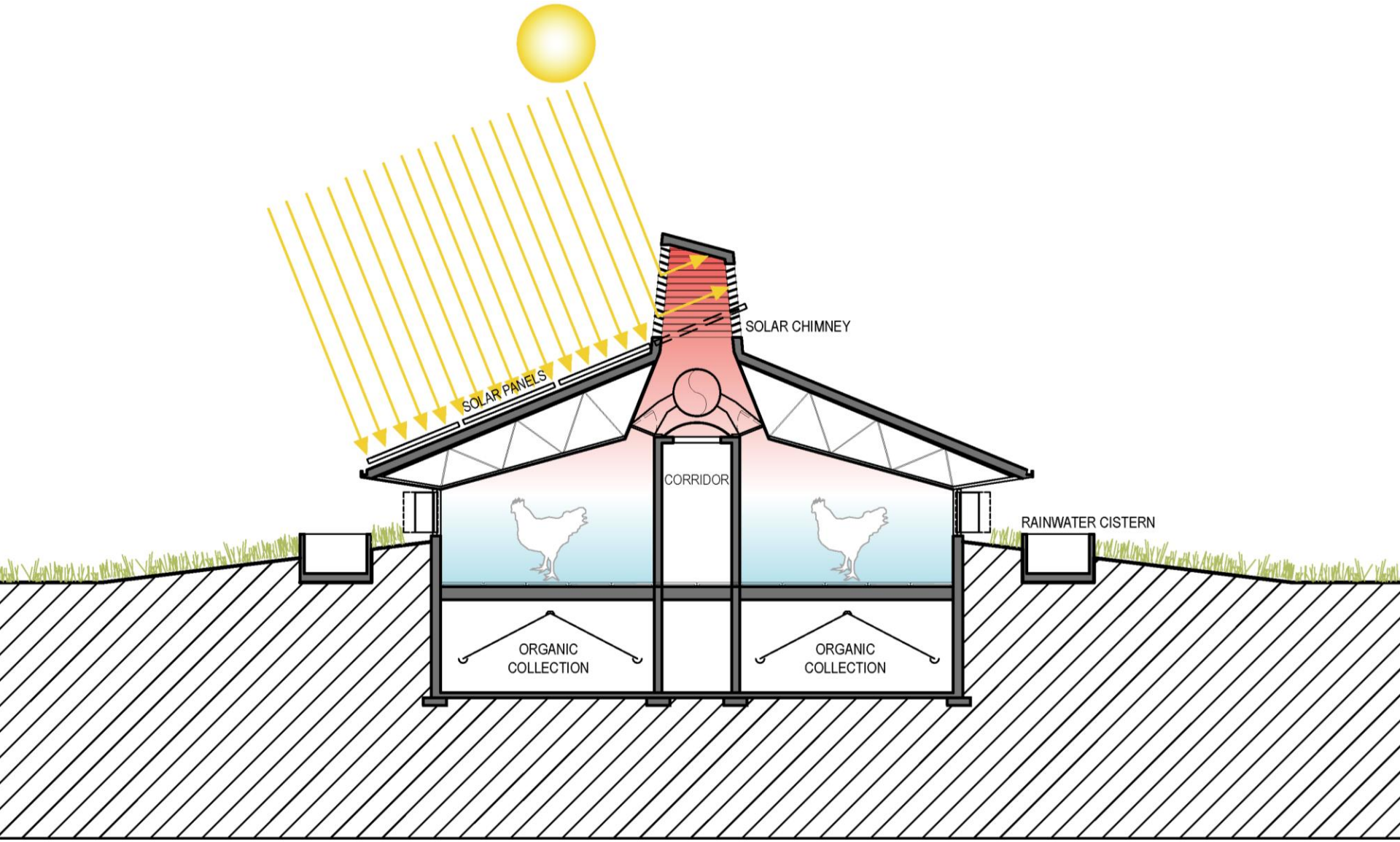
La capture et le stockage du carbone

Carbon Capture & Storage



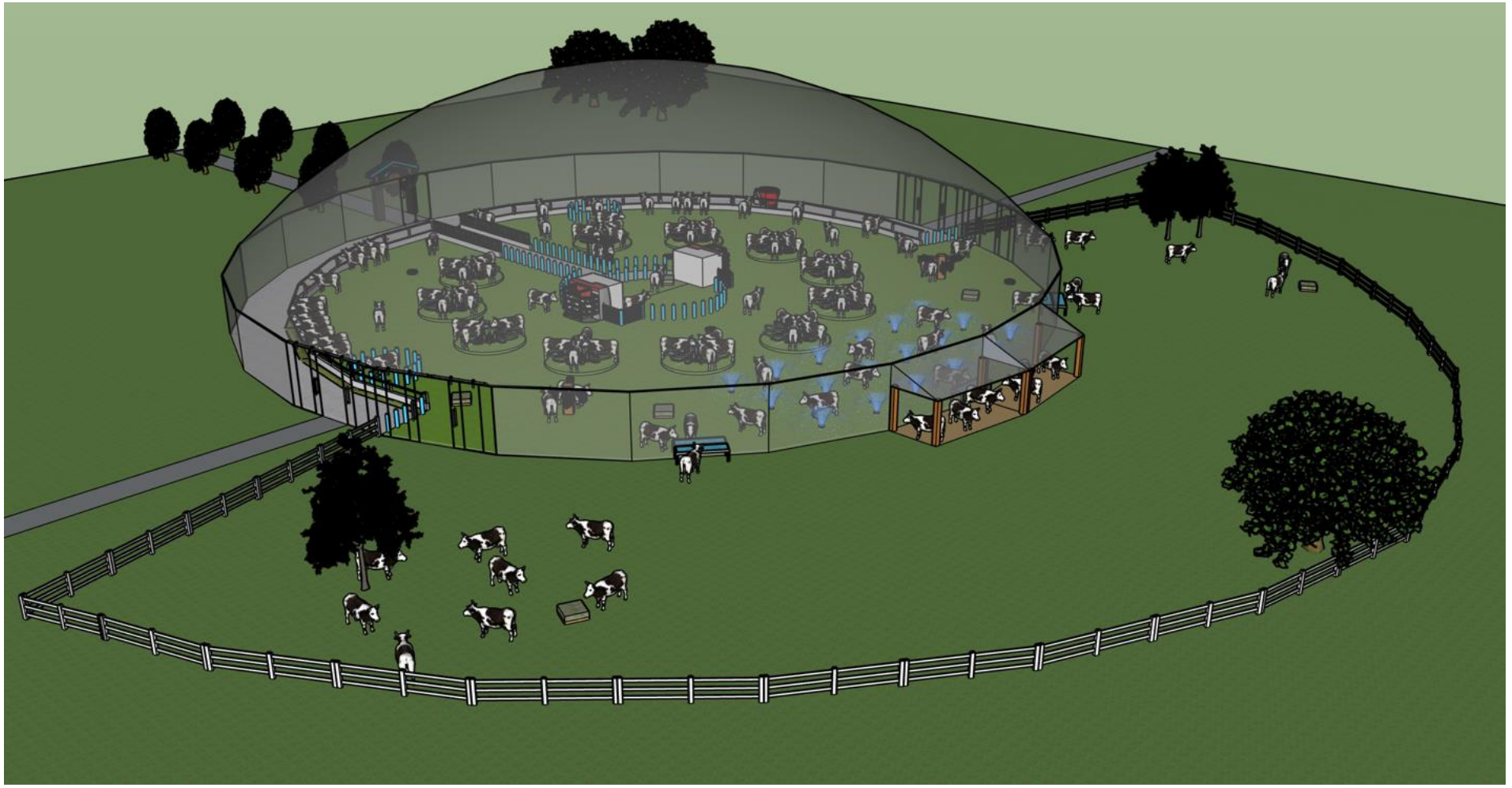
Récupération des eaux pluviales Rainwater Harvesting


BLUE EARTH
H_2
H_2
H_2
H_2
H_2
H_2
H_2

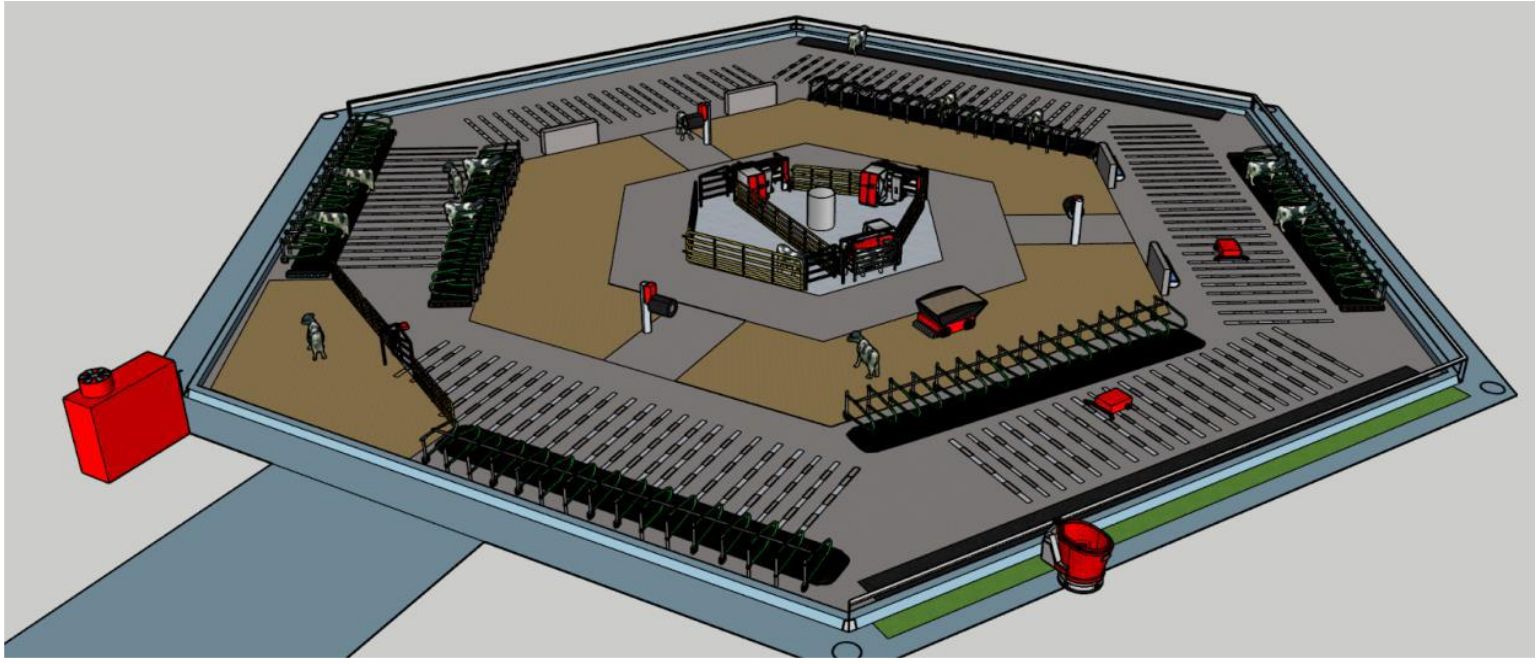


Énergie renouvelable

Renewable Energy



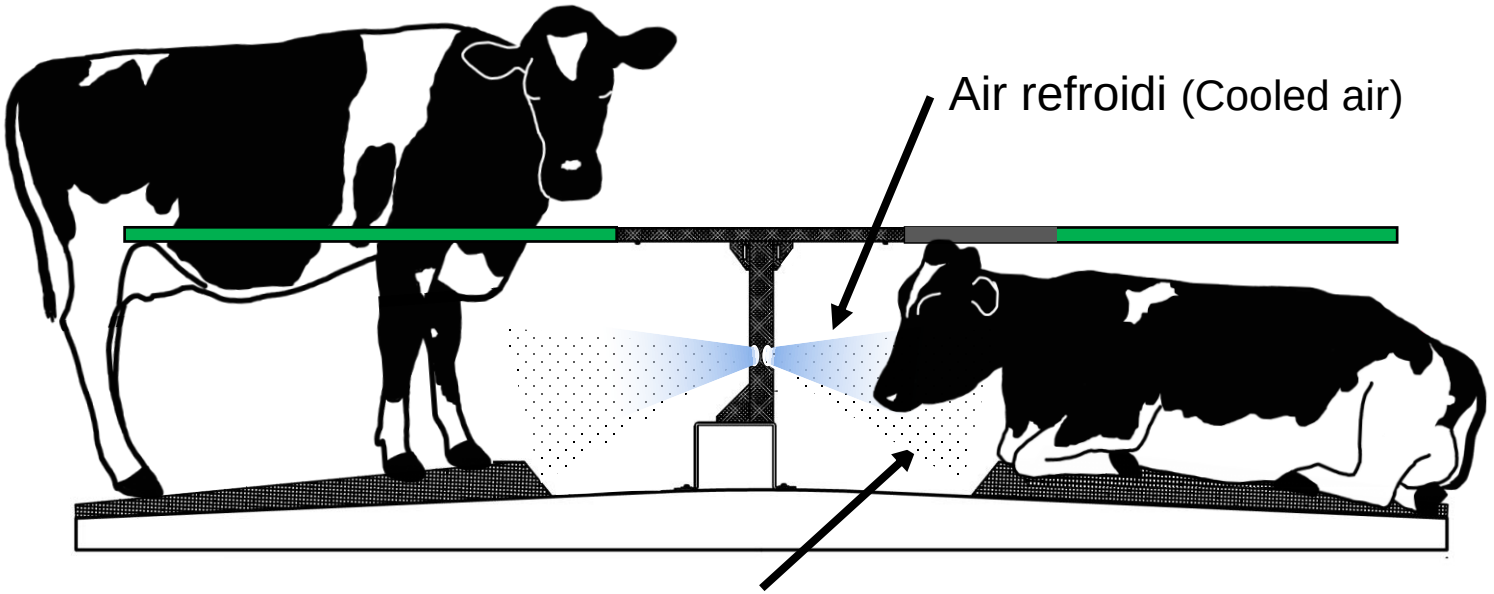

SketchUp

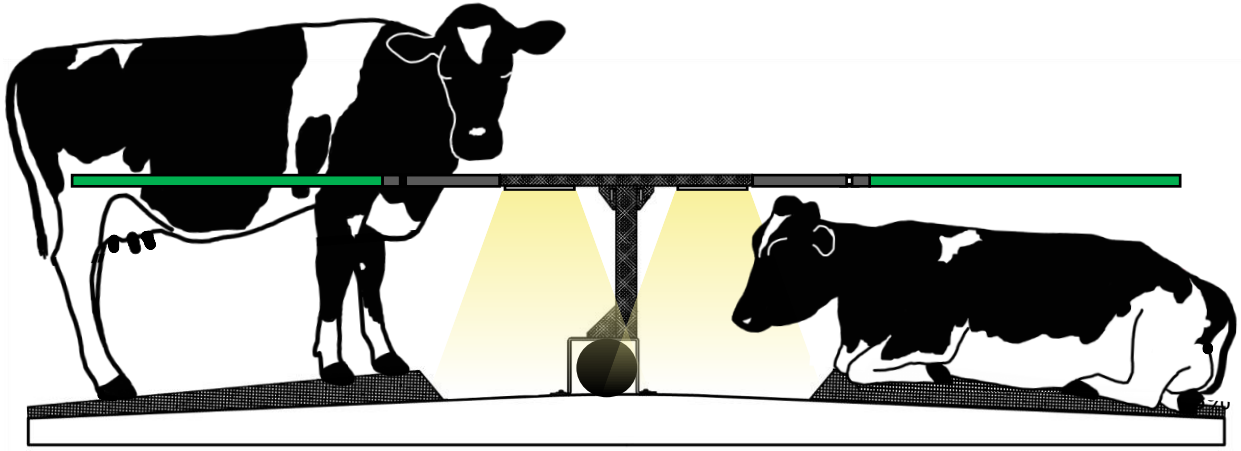


Mouvements de conception

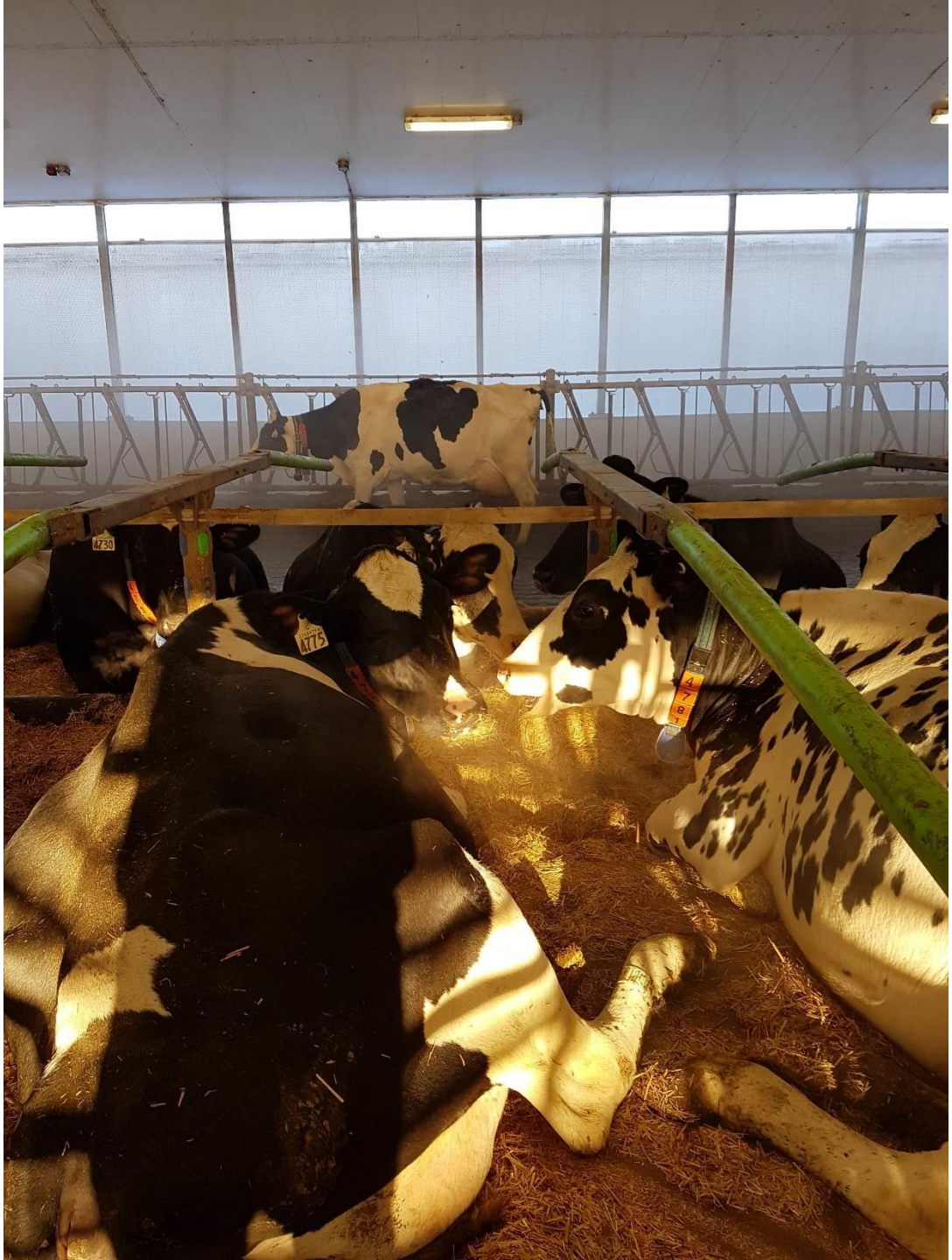
(Design Movements)

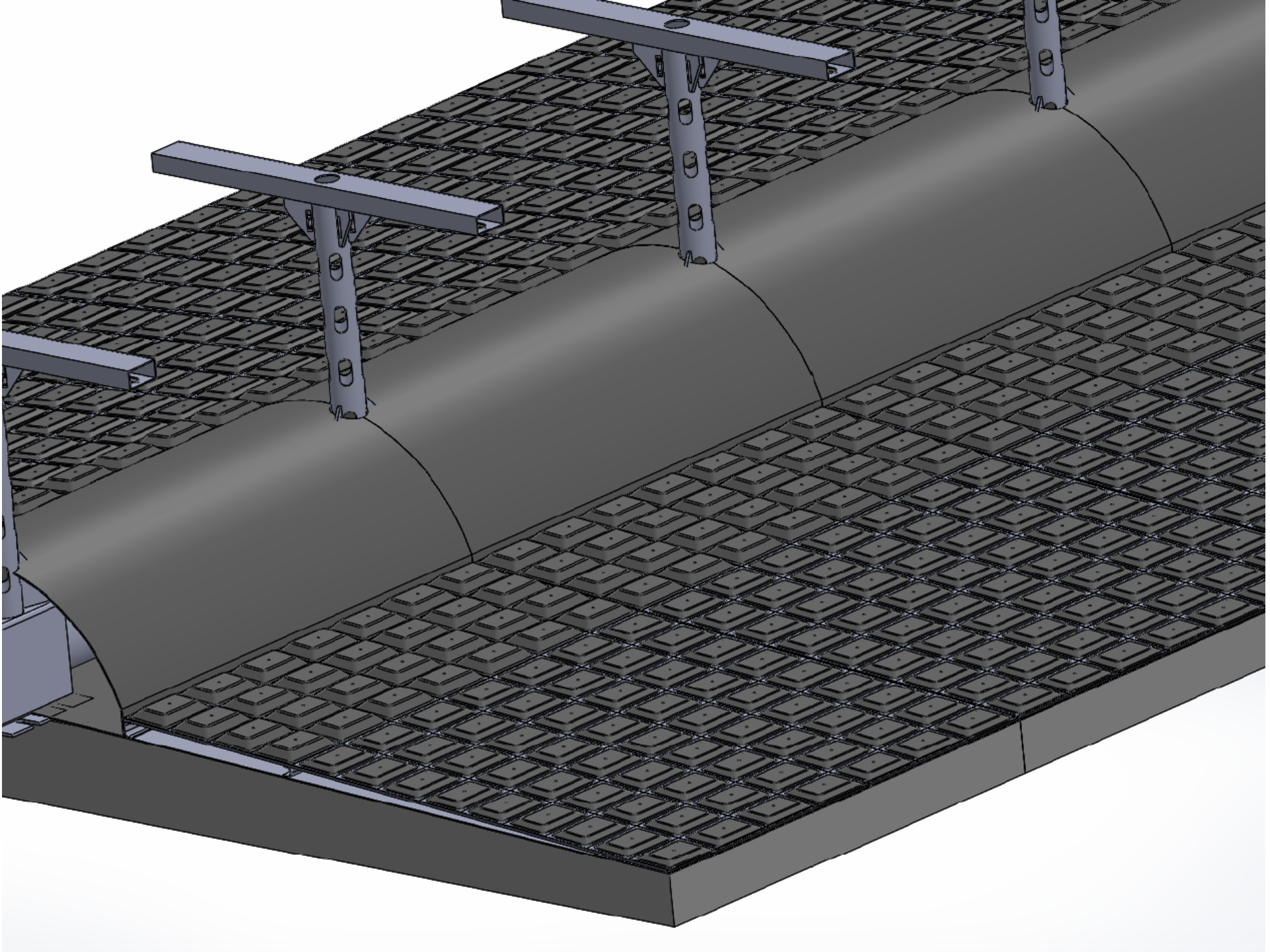
- Animale
  (Animal)
- Personnes
  (People)
- La nutrition
  (Nutrients)
- Fumier
  (Manure)

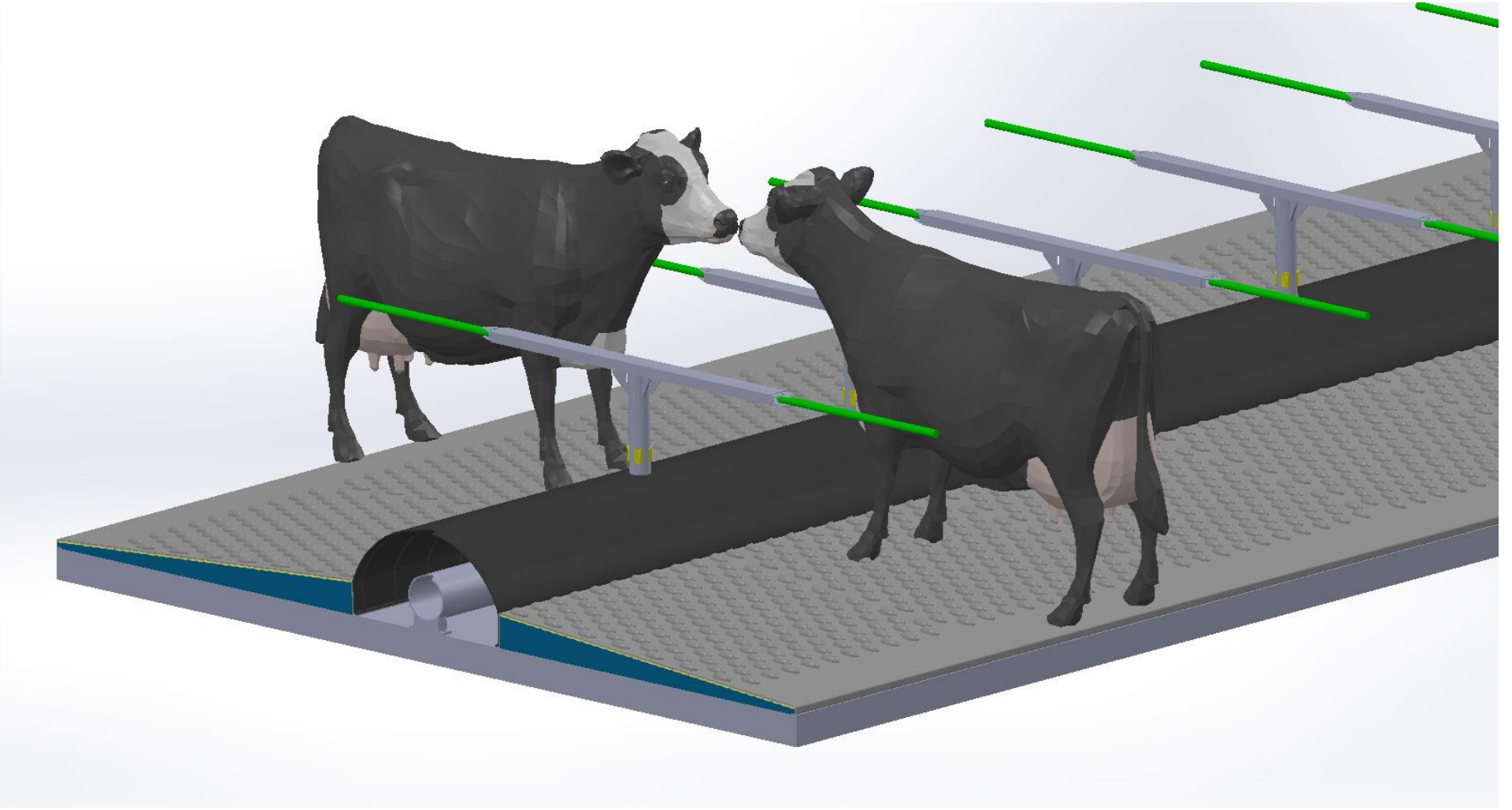




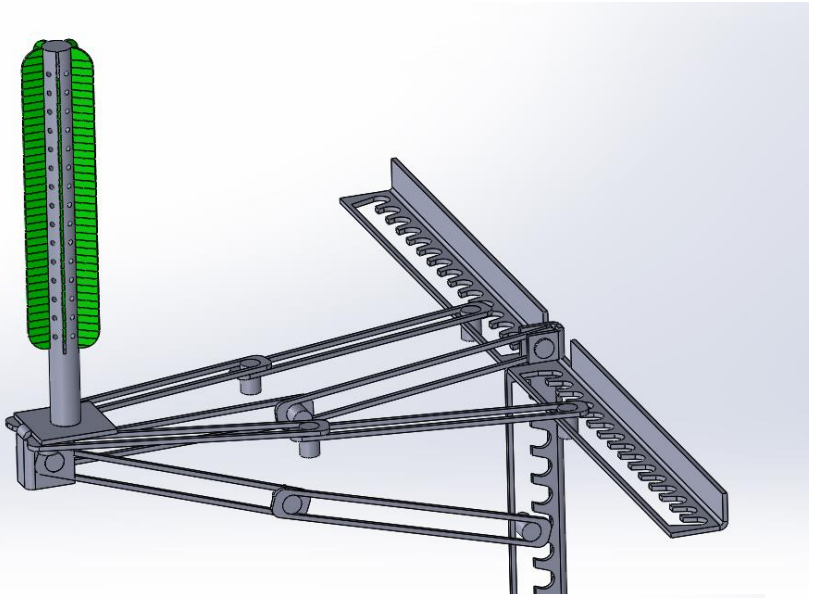
Lumiere LED

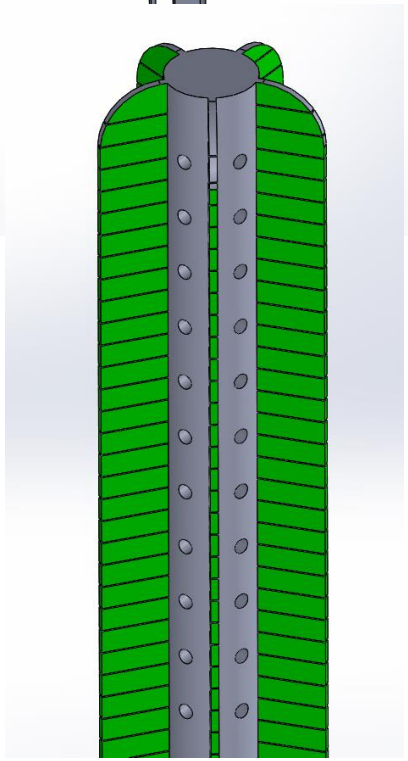




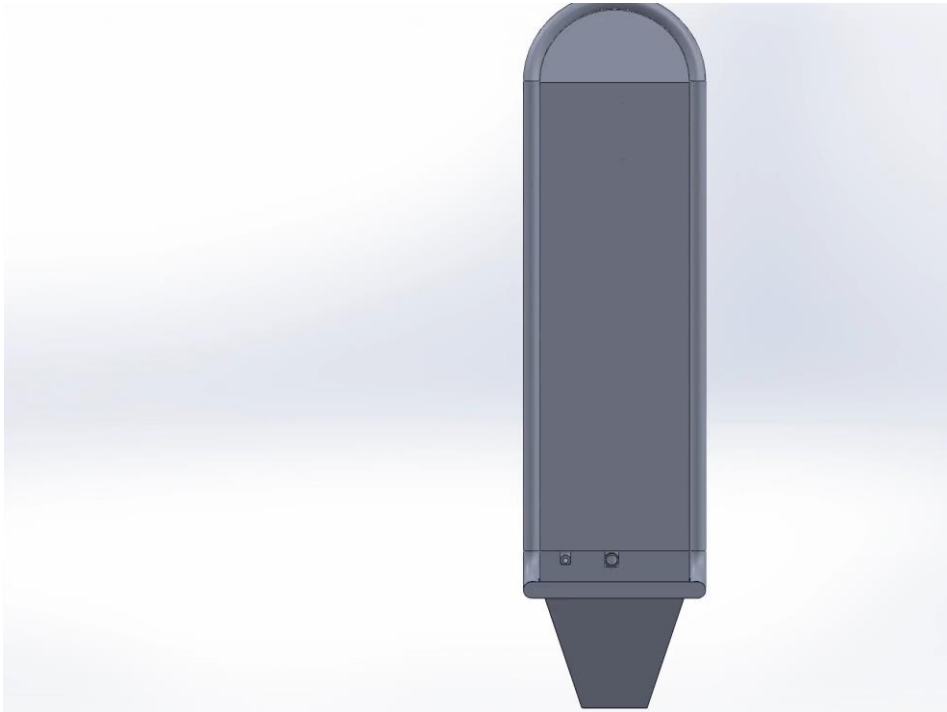



mm
1cm 2 3 4 5 6 7 8 9 10 11 12 13 14 15
0
NO 96800 CHINA
1 2 3 4 5 6
1/32"
1/16"



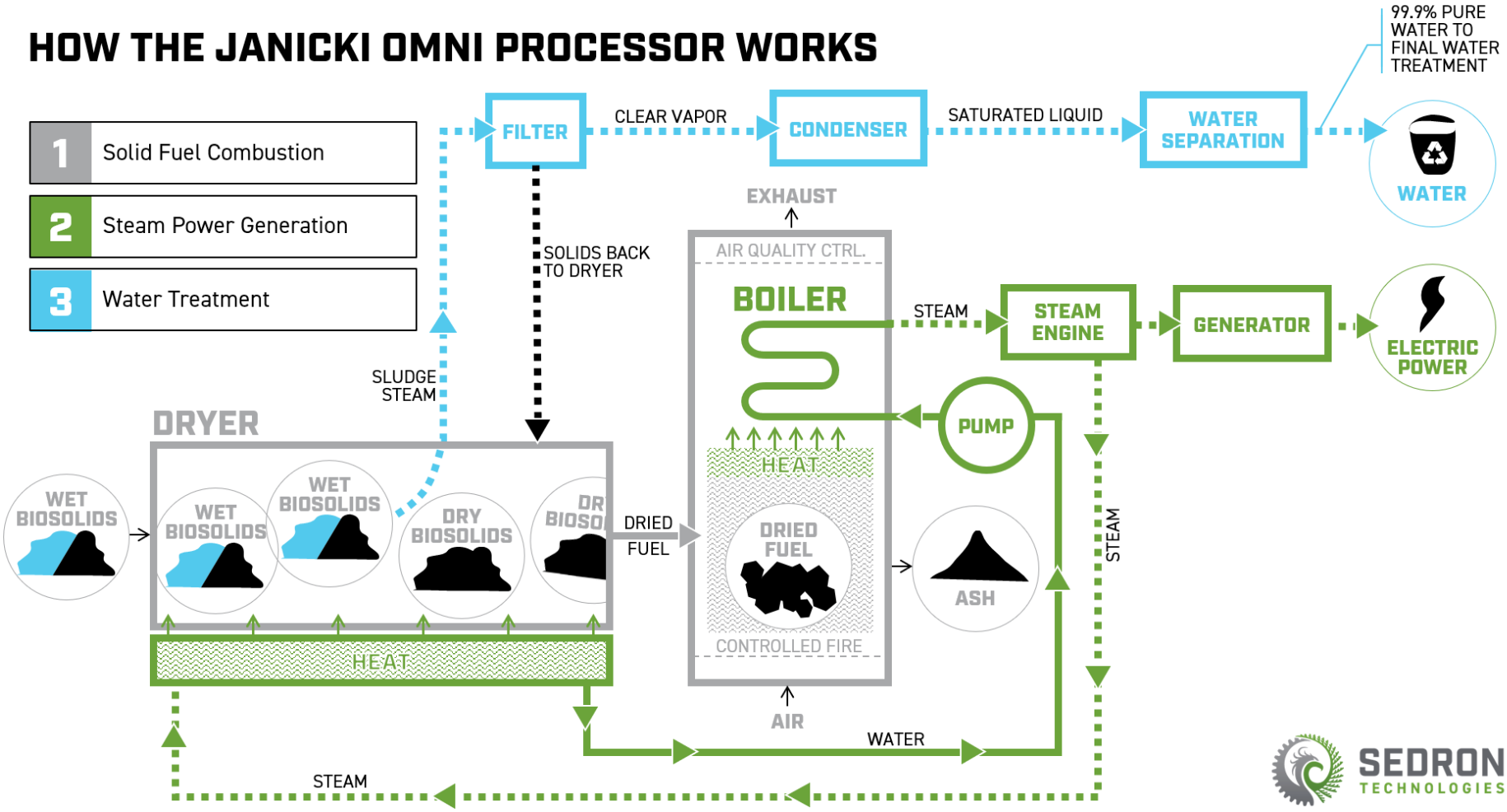



DeLaval



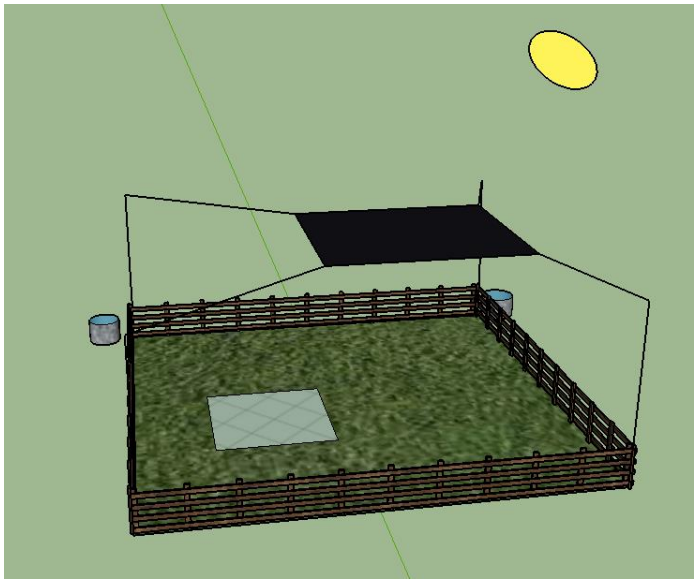

DeLaval

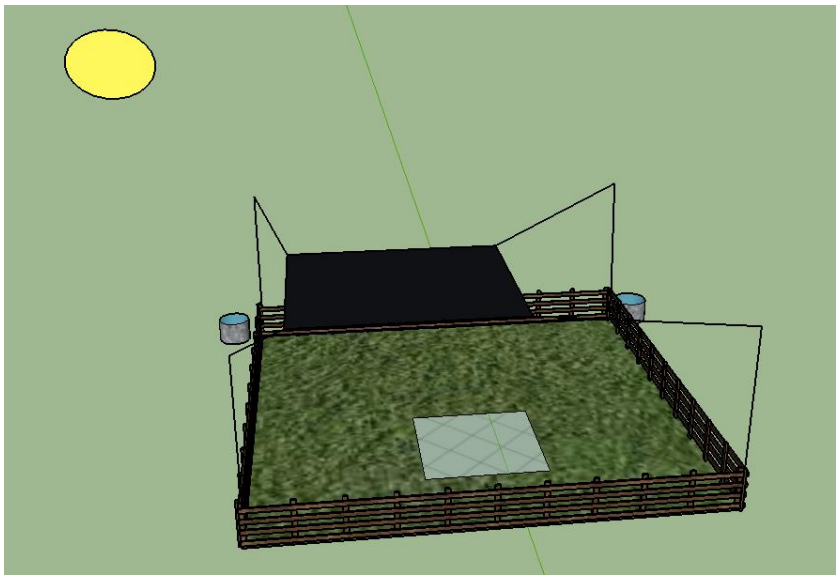
HOW THE JANICKI OMNI PROCESSOR WORKS

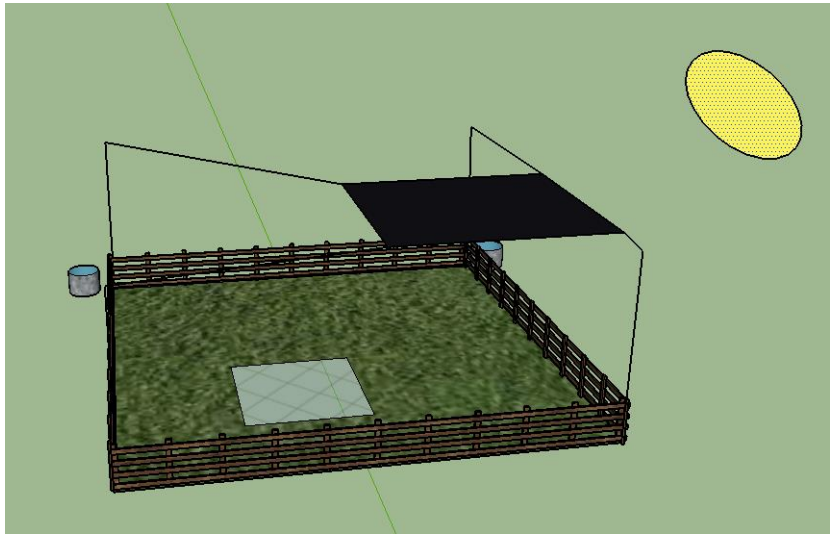


SEDRON TECHNOLOGIES

120/6 Paturage



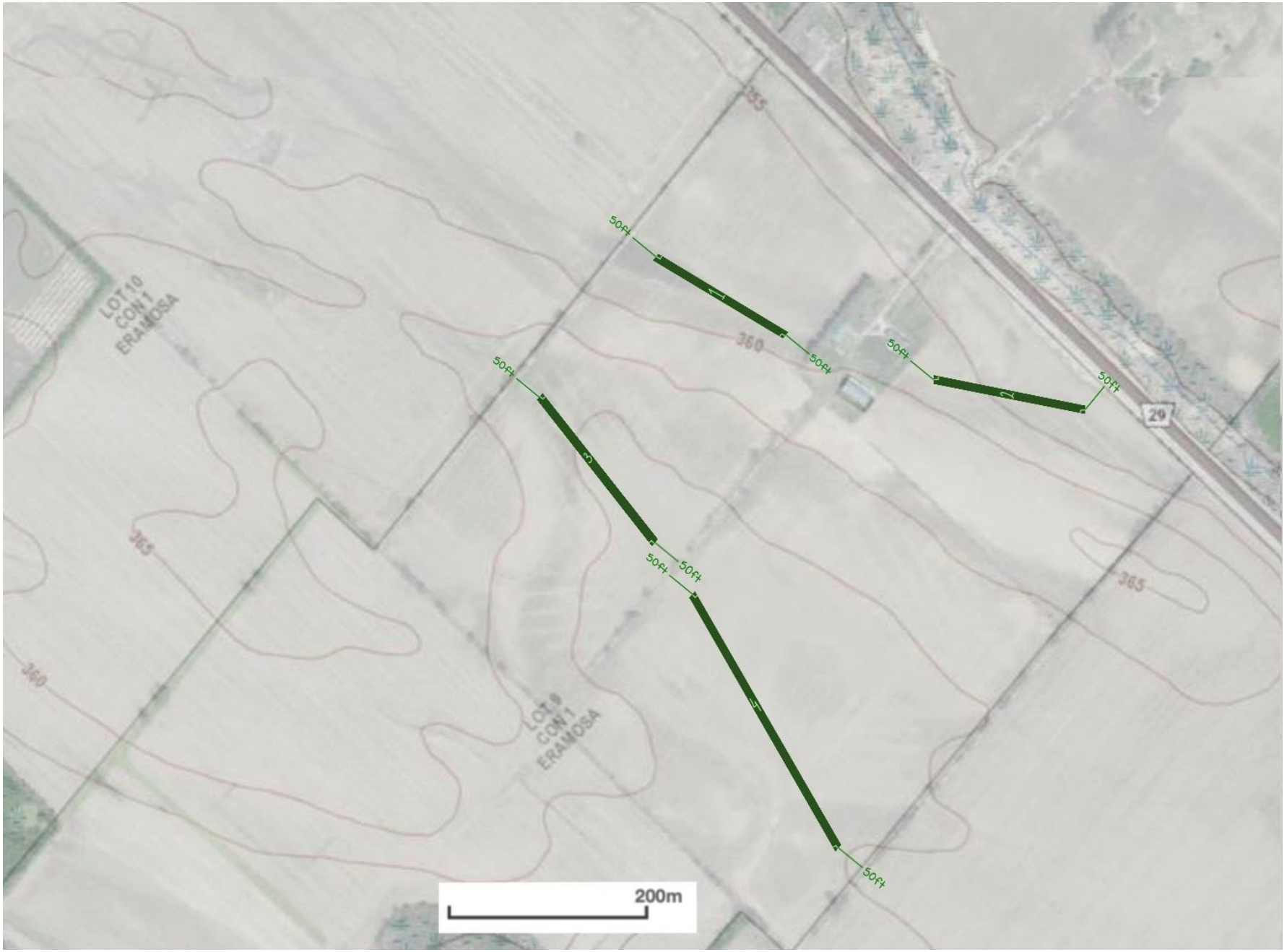




La ferme (The farm)


XAVER


0.21 km
0.61 km
0.12 km
Area: 0.15 km²
Perimeter: 1.75 km
0.11 km
Area: 0.06 km²
Perimeter: 1.04 km
0.09 km
0.15 km
0.40 km
0.18 km
0.22 km
0.23 km
Area: 0.14 km²
Perimeter: 1.51 km
0.32 km
0.40 km


50ft
1
50ft
50ft
2
50ft
50ft
3
50ft
50ft
4
50ft
LOT 10
CON 1
ERAMOSA
LOT 9
CON 1
ERAMOSA
355
360
365
385
29
200m

Merci