Ricoh SDGs Challenge "Decarbonization Idea Contest" Application Form

Describe your idea. There is no limitation to the number of words.

Name of Idea (Required)
Canteen's bio-waste used for methanization "Expansion of RIF good practices to all RFG's premises: valuation of organic wastes to produce renewable energy and natural fertilizer"
Describe how your idea contributes for "decarbonization". (Required)

BACKGROUND

RICOH INDUSTRIE FRANCE (RIF) actively contributes to the local waste management policy combining economy and ecology.

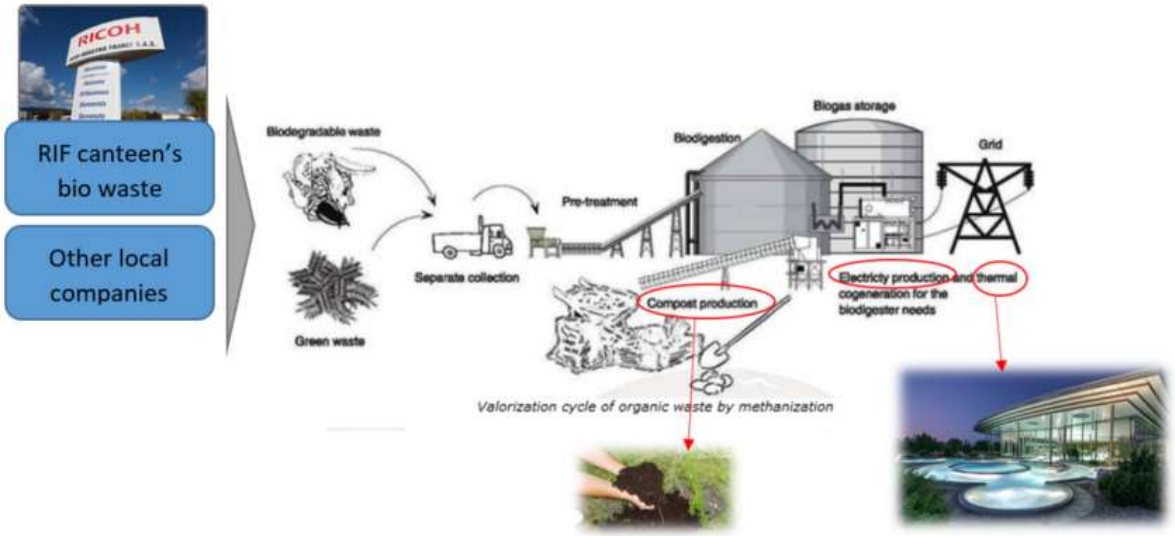
We decrease the volume of our waste by sorting the biowaste: as a weekly basis 12 tons of our wastes are not anymore burnt[1] but used for methanization.

- before sorting = 32 tons/week of domestic waste
- after sorting biowaste (implementation of new process) = only 20 tons/week of domestic waste

We are now valuing 12 tons per week of our organic waste and manure thanks to a local partner producer of renewable energy (electric and thermal) called AGRIVALOR[2].

The heat generated through the methanization process performed by AGRIVALOR supplies a balneotherapy site located near RIF (the balneotherapy center is located in a city called "Ribeauvillé"[3]).

In addition, the AGRIVALOR company produces green fertilizers for local farmers[4] replacing chemical ones.



[1] https://www.agglo-colmar.fr/operation-collecte-biodechets
[2] https://www.youtube.com/watch?v=j-vEQgwGfrM
[3] https://www.hotelsbarriere.com/en/ribeauville/resort-barriere/activities/the-balneotherapy-centre.html
[4] https://www.ademe.fr/unite-methanisation-agrivalor-reseau-chaleur-alimenter-centre-balneoludisme-a-ribeauville-68

Ricoh SDGs Challenge “Decarbonization Idea Contest” Application Form

IDEA’S CONTRIBUTION:

By following the good practice implemented at RIF, a systematic sorting and collection of all canteen’s biowaste combine with the finding of a local partner for methanization would enable to the Ricoh Family Group to:

- Contribute to renewable electricity production
- Avoid the creation in many regions of additional incineration plants (at regional level)
- Contribute to local jobs creation
- Generate heat that can supply other companies

Describe as far as possible the costs and resources needed to realize your idea. (Optional)

There is no direct costs for the Ricoh Group out of the waste sorting operation that can be made by each employee as it is done at RIF.

For example, today each RIF member must segregate its bio waste from the regular waste at the canteen:

Most challenging part of this project is to create connection with local companies to ensure transformation of biowaste in a green manner.

Ricoh SDGs Challenge "Decarbonization Idea Contest" Application Form

Describe the expected effects from the viewpoint of "decarbonization". (Optional)

Our partner AGRIVALOR states that this kind of methanization process established with RIF and other local companies enables[5] :

- To treat around 30 000 tons of biowaste/year
- To produce 10 800 MWh heat for the therapeutic bathing plant (for example)
- To produce 5 million m^3 of biogas
- To produce 12 000 MWh of electricity

A total of 5.240 tons of CO^2 saving means the same amount than:

- 43.6 million kilometers of driving with a regular French car (Renault CLIO) [6]
- 6.390 persons travelling by air from Paris to Tokyo (distance 9.715 kilometers)[7]
- 3,2 million m^2 forest annual CO^2 absorption[8]

	eq KG/an de l'idée	Unit of measurement		Performance		Datasources (links to website)
Car	5 240 000	0,12	Kgs $C0^2$ / kilometer	43 666 667	*kms with French car (CLIO)*	http://carlabelling.ademe.fr/recherche/index?searchString=&brand=renault&category=berline&range=berline+compacte&model=megane&transmission=M&energy=&maxconso=&carbu%5B%5D=es&RechercherL=Rechercher
Plane	5 240 000	820	kgs $C0^2$ per passenger and per flight from Paris to Tokyo	6 390	*number of person traveling by plane from Paris to Tokyo*	https://www.world-airport-codes.com/distance/?a1=cdg&a2=nrt&code=IATA
Tree	5 240 000	1,64	Kgs $C0^2$ absorped /year per m^2 of forest	3 202 222	*m^2 of forest (1 soccer field=7 000 m^2; 1 basket field = 420 m^2)*	https://www.ademe.fr/sites/default/files/assets/documents/diagnostique_carbone_foret.pdf p83 (douglas, 55 years cycle, stock + sequestration)

[5] https://www.ademe.fr/sites/default/files/assets/documents/eas-010462-emr_167_agrivalor.pdf

[6] Source: http://carlabelling.ademe.fr/recherche/index?searchString=&brand=renault&category=berline&range=berline+compacte&model=megane&transmission=M&energy=&maxconso=&carbu%5B%5D=es&RechercherL=Rechercher

[7] Source : https://www.world-airport-codes.com/distance/?a1=cdg&a2=nrt&code=IATA

[8] Source : https://www.ademe.fr/sites/default/files/assets/documents/diagnostique_carbone_foret.pdf (pages 83-85)

Ricoh SDGs Challenge “Decarbonization Idea Contest” Application Form

Describe the appealing point(s) of your idea. Can be from any point of view, such as utilizing the Ricoh's strengths, new perspectives, or the feasibility of the idea. (Optional)
From my point of view, this idea is appealing because this RIF good practice could be applied everywhere within the RFG. It will not create business, but it will contribute to the RFG sustainable vision in full alignment with the SDG targets.
If your idea contributes to solving social issues other than "SDG7 Clean energy for everyone", and "SDG 13 Specific action for climate change", describe how. (Optional)
This idea could then also contribute to the SDG number 11 “Sustainable cities and communities”. 

Name of Representative	Isabelle HOLL
Department/Company	Corporate Social Responsibility section/Ricoh Industrie France
Email Address	Isabelle.holl@ricoh-industrie.fr
Phone Number	+33 3 89 20 48 92
Individual or Group	☒Individual ☐ Group * For groups, fill in the member list below.
Name of Team	NA

Do you wish to join the project to realize your idea? Yes/No Please indicate why (Required)
Yes: as Corporate Social Responsibility team member and working for a company like Ricoh Industrie France focused on Circular Economy solutions, I would be pleased to contribute to such horizontal deployment within the RFG.