



Mottainai 5.0

nature2need.com

*a disruptive circular economy connecting
circularity, digitization and industry*



► nature2need today identity card



digital platform global	R&D & materials pilot global	region Europe regional	region East Asia regional	
investment opportunity: actively seeking for investment (series B) well blended with public grants	investment opportunity: actively seeking for investment (series C) well blended with public grants	investment opportunity: actively seeking for regional investment (series C) blended with public grants	Nature2need Co., Ltd. Jiangshan, Zhejiang, PR China	Specalite GmbH Heidelberg, Germany, EU /to be restructured/
connecting customers & organic waste stream producers; services and customized materials online	IP; materials and solutions R&D; materials pilot; training solution development; small & flexible batch production	customization; manufacturing; distribution	customization; manufacturing; distribution	distribution support
funds needed ~0.5 MEUR	private investment ~1 MEUR to date; funds needed ~3 MEUR	funds needed ~4 MEUR	local investment ~2 MEUR to date	local investment 35 kEUR to date

Creating high-performance compounds, naturally **biodegradable/compostable based on proprietary & innovative formulations**.
Valorizing & recycling agricultural & fishery residues and food processing waste streams (^{2nd/3rd} gen biomass) instead of depleting in landfill.

Connecting start-ups, innovative businesses and corporates to **services, Engineering support and customized materials**.

Developing and implementing **highly innovative product solutions** jointly with nature2need customers & partners.

Striving to disrupt the current polymer industry through **completely new digital offerings**.

CEO & Founder: Dr.-Ing. Karsten Brast

Founded: 2017 | Industry: GreenTech

nature2need.com | nature2need.group (beta version)

► background

- **Plastics** contribute to a significant pollution of our planet.
- **Natural resources** are limited but increasingly exploited; most end up as valuable biomass in landfill.
- **Linear “take-make-dispose” models** are not sustainable with an ever fast growing population.

► pain & problems

- **Circularity & sustainability** is a growing concern for start-ups, innovative businesses and corporates.
- **Experience** around sustainable materials is very limited.
- **Traditional material suppliers** leave them behind with limited service and without tailored, sustainable material solutions.
- **Communities and producers** (farmers, fisheries, food producers) seek to valorize their biomass waste streams & residues.



GLOBAL
PROBLEMS

- Connecting start-ups, innovative businesses and corporates to
 - **services** which enable the move into customized, sustainable materials
 - **Engineering and Innovation support**
 - **standard & customized material compounds**, tailored to legislation and individual requirements, **built on direct use of biomass** waste streams
- Connecting farmers, fisheries and food producers to
 - **regional and local projects** to valorize their biomass waste streams
- Connecting local communities to
 - **local, standardized biopolymer and biomaterial sites**
- Connecting through



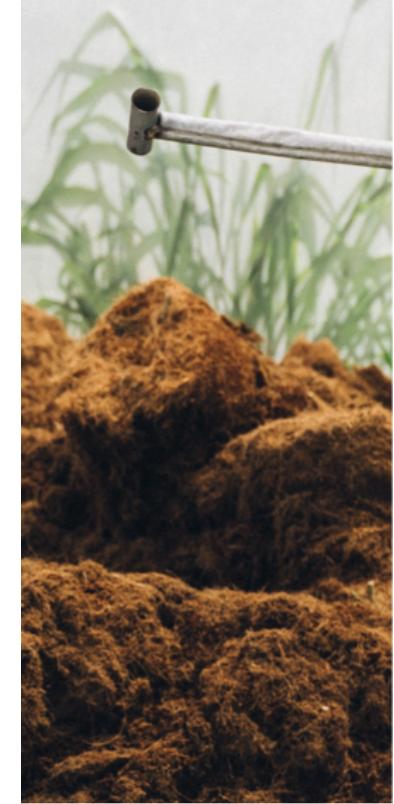
digital platforms



regional
Engineering



local Mottainai
sites



OUR
SOLUTIONS



Innovation & Engineering services

- definition of material requirements
- choice of **biomass**
- choice of **material compound**
- part & mold **design** support
- **prototyping** support
- injection **mold** sourcing
- **small batch** production
- **biomass** sourcing & matching



biopolymer & biomaterial compounds

- **durable bio-compounds**
 - + blended with 2nd/3rd generation biomass, minerals or clay
- **biopolymer compounds**
 - + biobased/biodegradable, high performance
- **biomaterial compounds**
 - + built on direct 2nd/3rd generation biomass, biodegradable
 - standardized or customized
 - small, industrial or **flexible** volume
 - **online configuration & order**
 - **global availability**



standardized Mottainai sites locally

- **Franchise** by local partners / communities
- **turn-key manufacturing** sites
 - + collecting local biomass waste streams
 - + building innovative nature2need compounds
- **standardized operation principles & formulations**
- **technical support**
- **nature2need** branded



OUR
PRODUCTS

► MOTTAINAL explained example spent coffee grounds

6 million tons of spent coffee grounds are sent to landfill yearly.



While coffee grounds decompose, they release methane with a global warming potential more than 80x higher than CO₂.



At the same time, billions of coffee-to-go cups end in landfill yearly.

collecting spent coffee grounds
and local preparation
(drying, sorting, classifying)



processing into biomaterial compounds – ready-to-use material feedstock.



local moulding of nature2need biomaterial compounds into parts, products or packaging.



Consumers return their end-of-life products to be re-processed at nature2need sites with new material (optional).

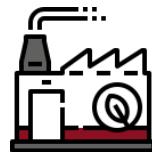
nature2need
entity
global



nature2need global

branding, legal, steering, global marketing
digital platform
R&D & materials pilot, solution development

nature2need
JV entity
regional



nature2need regional

Engineering, material customization
regional marketing, sales, account management
sourcing, industrial compound manufacturing
franchising regional Mottainai sites

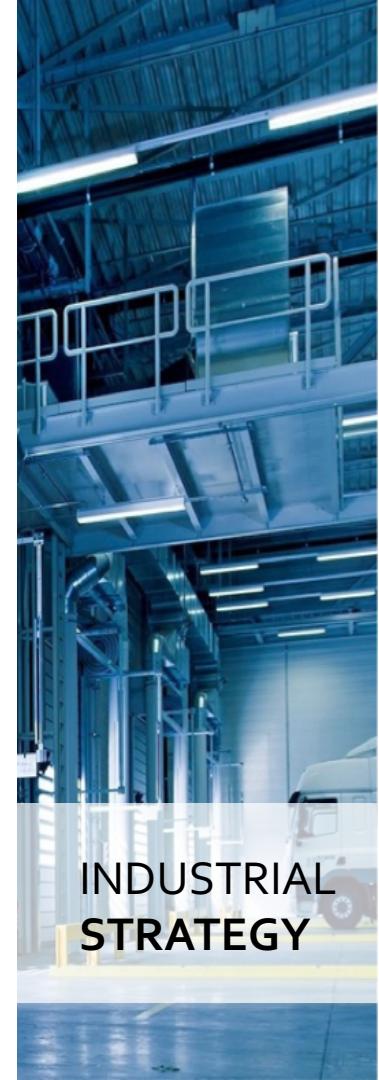
nature2need
Franchisee
local



nature2need local Mottainai 5.0

valorization of local biomass waste streams
flexible compound manufacturing, swap models

Remarks: local Franchisees are new set-ups or are using existing
compounding capacities



**INDUSTRIAL
STRATEGY**

digital platform
global



connecting customers & biomass waste producers, offering services and customized materials online, making circularity digital

start-ups, innovative businesses, corporates (customers)	farmers, fisheries, food producers, communities (biomass waste supplier)	nature2need entities and Franchisees (partners)	other platform functionalities (for all parties)
add & edit profile details	add & edit profile details	add & edit entity & employee contact details	comparison of multiple material options / biomass options
use search & filtering options to find right material grade/group	wizard listing for organic waste supply	connect customers / leads to respective nature2need entity	push-notification on booking / order status
get material details & documents for related standard grade	set-pricing, availabilities and status	receive material & service requests	use integrated messenger
get regionally available biomass waste streams listings	upload certificates/test reports	communicate material & service availabilities, lead times	submit reviews
configure customized material compound	accept / decline organic waste/biomass orders	list and maintain stock levels	add / delete payment methods and see transactions
add standard or customized grade to wish list	book support calls with nature2need		view upcoming / past booking / service details
book free introduction call & Engineering support call (charged)			extensive material & solution library & blogs
book / order services & materials			extensive FAQ

compounds
regional



**compounds built on a direct use of 2nd/3rd generation biomass,
flexible, innovative, environmentally sustainable, circular**

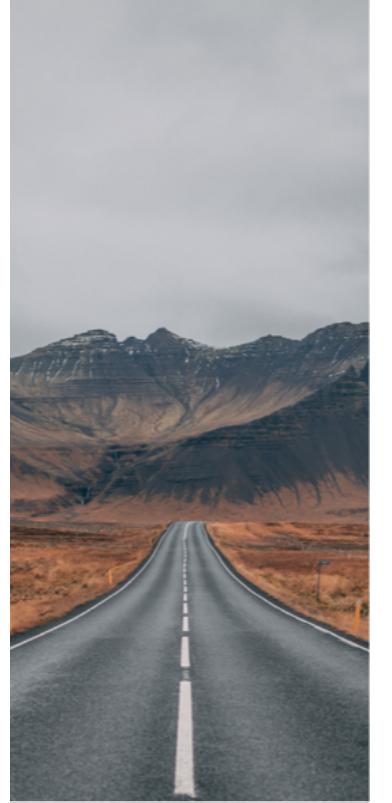
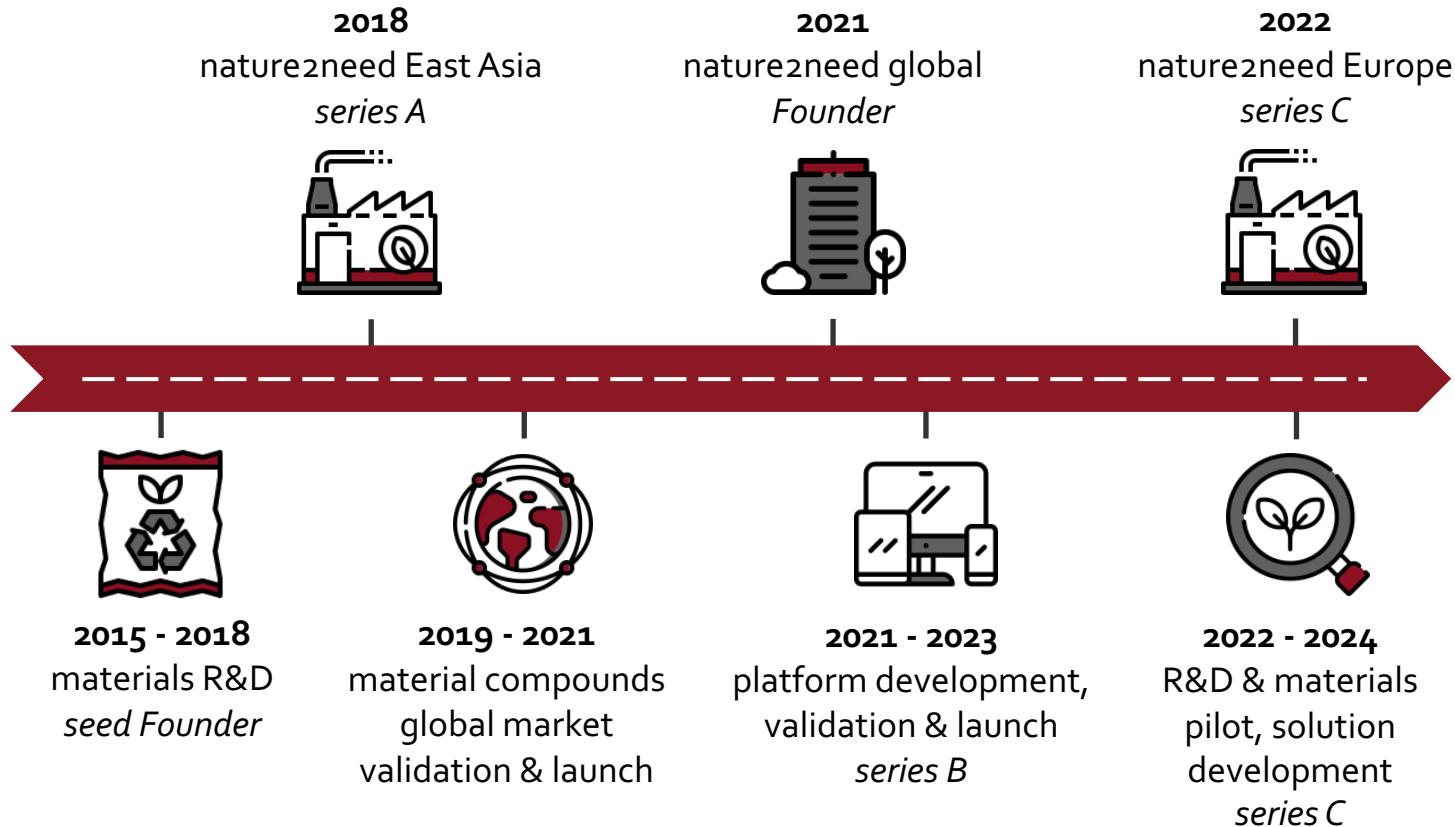
	durable bio-compounds	biopolymer compounds	biomaterial compounds
characteristics	partly fossil-based / partly bio-based, durable	partly fossil-based / partly bio-based, biodegradable / compostable	bio-based, biodegradable / compostable
base polymer system	polyolefin	biopolymer	biopolymer
clay / mineral blend	clay and/or mineral blend for some grades	clay and/or mineral blend for some grades	clay and/or mineral blend for some grades
grades	ppC (natural clay blend) Spectadur (natural fiber blend)	Bioblend (natural clay/mineral blend) Spectabio (natural fiber blend) Natureblend (biopolymer blend)	Organoblend (natural biomass blend)
part manufacturing process (@customer)	injection molding, extrusion molding	injection molding, extrusion molding, blow molding (u.d.)	injection molding, extrusion molding, blow molding (u.d.)
stage			
	commercialized, launched in industrial volumes	commercialized, launched in industrial volumes	1 st grades commercialized, more under development

Mottainai sites
local



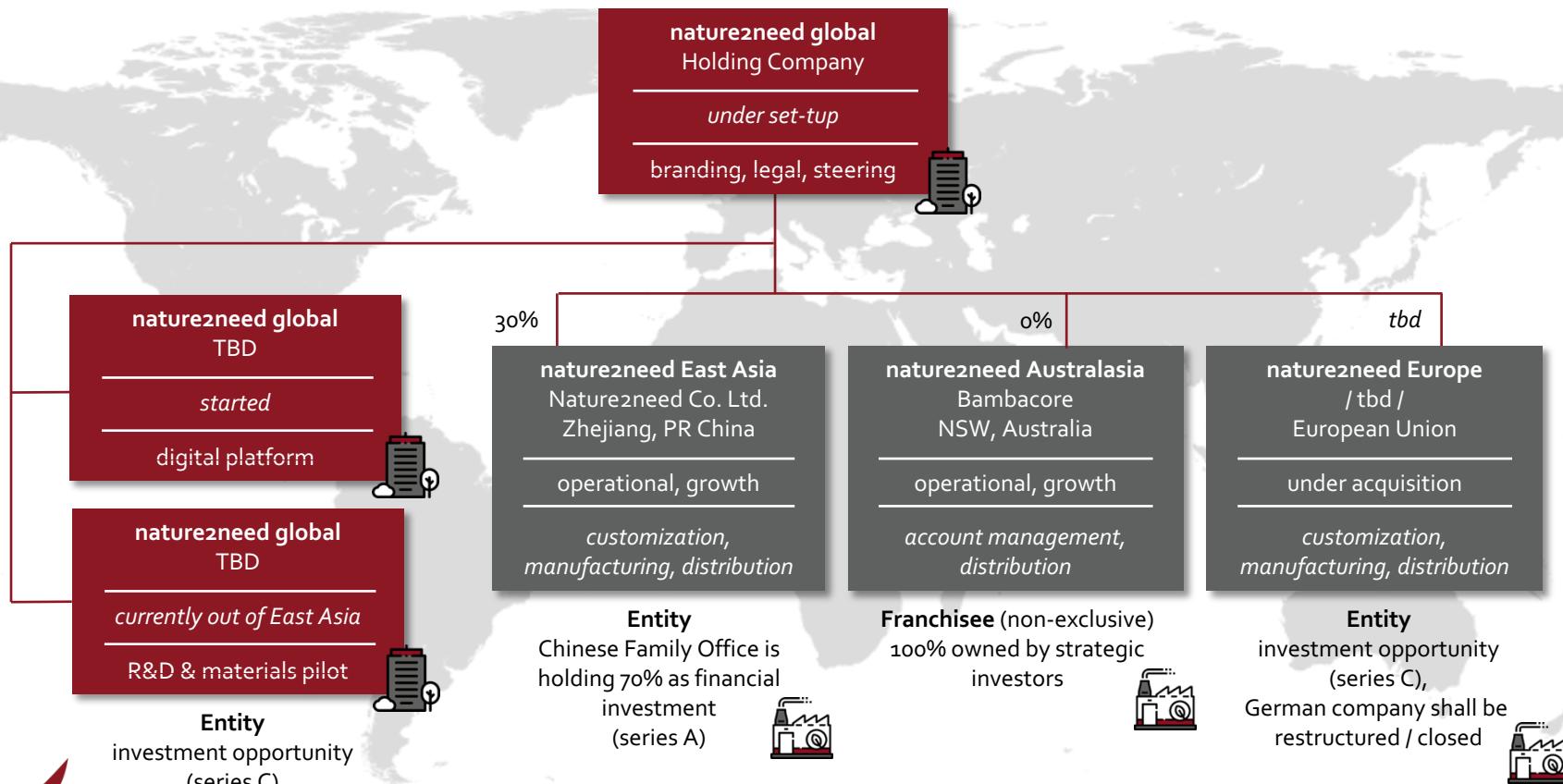
circular economy sites valorizing local 2nd/3rd generation biomass with highly innovative, standardized manufacturing principles & material formulations

	local Mottainai sites	nature2need regional supports Mottainai sites with	nature2need global steers Mottainai sites with
business model	Franchisee	contracted support services	Franchisor, legal
R&D / customization	no	Engineering and customization	R&D
branding	nature2need	nature2need regional marketing	book of branding, global marketing
sourcing	local 2 nd /3 rd generation biomass, local substances	sourcing support for regional / global substances	book of standards for substances and sources
manufacturing	local content, in-house need, community need	process support	site set-up, turn-key solutions, operations standards, training
site	integrated into partners production facilities, existing compounding capacities, new standardized turn-key solutions		
ownership / share	shareholding by local partner, communities	no shareholding	no shareholding
reporting	monthly		
audit		every 3 months	every 6 months

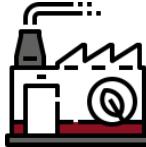


OUR
ROADMAP

► nature2need envisaged organizational structure



**start-ups
innovative businesses
corporates**



**farmers
fisheries
food producers**



communities



► start-ups, innovative businesses, corporates brands working with our materials (selection)



binu binu

KLIPSTA™



Beiersdorf



Hisense
gorenje
Life Simplified

PARSA
— BEAUTY —

SVEČA
Kerzen für alle Anlässe



ATLANTIC
GRUPA

ellipse



qdp
We create.
We produce.

INDITEX



NESPRESSO

tcc
a world more loyal

Huskee.

WWP

L'ORÉAL

nature²need®



nature2need
entity
global



1% royalties for branding & global marketing from all sites
2.5% Sales commission for generated leads
2.5% Franchising fees from all Franchisees
R&D and Engineering services, solutions

nature2need
JV entity
regional



regional Engineering services

biopolymer & biomaterial manufacturing & Sales

6% Franchising fees from regional Franchisees

nature2need
Franchisee
local



valorization of local biomass waste streams

biopolymer & biomaterial manufacturing & Sales



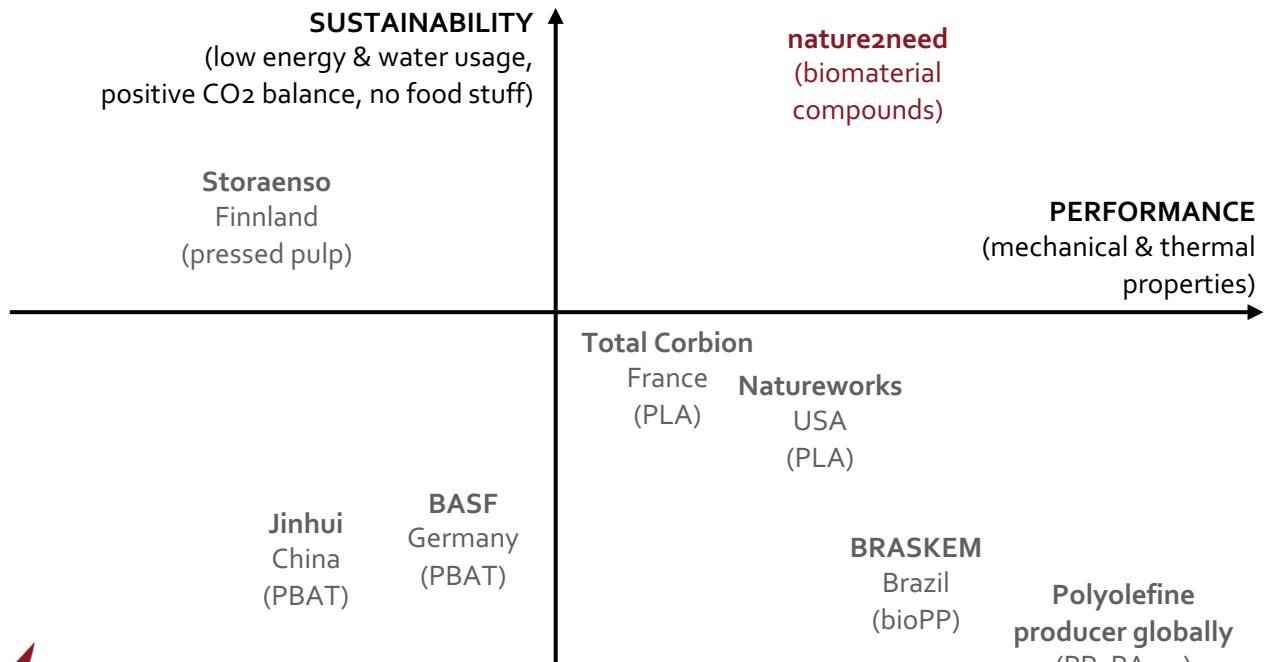
**OUR
INCOME**

► global market

Our market is the **global polymer market**.

Opportunities are all and everywhere and seem to be **truly endless**.

► nature2need positioning of nature2need versus competition (examples)





first to market
with flexible biomaterial
compounds in industrial scale



market relevant
cost levels
for all nature2need compounds



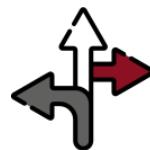
high direct
biomass content
in situ



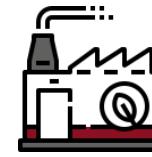
excellent
processability
compared to virgin biopolymers



improved durability
for biopolymer and biomaterial
compounds



high customization levels
to meet customer requirements



mass production
capabilities



fast turnaround times
for standardized & customized
materials



highly innovative



globally established
supply chains
for critical substances



striving to cater local needs
globally
serving 40+ countries & 10+ industries



memorable
design & branding

digital platform global



Objective	connecting customers & biomass waste producers, offering services and customized materials online, making circularity digital								
Positioned	global, integrated into nature2need holding company or realized through separate entity								
Funding	<table><tr><td>HR</td><td>210.000 USD</td></tr><tr><td>Operations</td><td>75.000 USD</td></tr><tr><td>External</td><td>200.000 USD</td></tr><tr><td>TOTAL</td><td>485.000 USD (estimate, exact amount depending on the location), shall be backed up with at least 60% of direct public funding</td></tr></table>	HR	210.000 USD	Operations	75.000 USD	External	200.000 USD	TOTAL	485.000 USD (estimate, exact amount depending on the location) , shall be backed up with at least 60% of direct public funding
HR	210.000 USD								
Operations	75.000 USD								
External	200.000 USD								
TOTAL	485.000 USD (estimate, exact amount depending on the location) , shall be backed up with at least 60% of direct public funding								
Time	18 months for programming, testing, roll-out, implementation								
Model	10% Sales commission on each transaction that goes directly and solely through the platform 2.5% Sales commission on revenues generated with leads acquired through the platform								
Status	> 500 global leads & customers in nature2need ERP/data-base back-end currently being defined, platform design and content defined different platforms under trial (odoo, shopify, wordpress)								

FUNDING DIGITAL



R&D & materials pilot, solution development global



Objective centralizing IP & know-how, central nature2need materials and solutions R&D, materials pilot, validation and training center, solution development, small & flexible batch production

Positioned global, integrated into nature2need holding company, realized through separate entity or integrated into a regional entity

Funding

HR	1.195.000 USD
Operations	600.000 USD
Equipment	755.000 USD
External & Legal	395.000 USD
TOTAL	2.945.000 USD (estimate, exact amount depending on the location) , shall be backed up with at least 40% of direct public funding

Time 36 months for entity set-up, location, equipment sourcing, launch

Model Engineering & R&D Services
tooling & small batch production
R&D commission for material developments supported by R&D & pilot
joint launch of solutions with external partners based on individual agreements

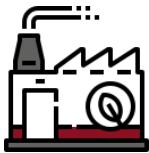
Status R&D and solutions development currently through East Asia region
several part-level solutions developed



**FUNDING
R&D & PILOT**

regional entity

regional



Objective materials and process Engineering, material customization, regional marketing, business development and sales, account management, regional sourcing, industrial volume compound manufacturing, Franchisor

Positioned regional

Funding

HR	1.095.000 USD
Operations	850.000 USD
Equipment	1.450.000 USD
External & Legal	325.000 USD
TOTAL	3.720.000 USD (estimate, exact amount depending on the location) , shall be backed up with at least 20% of direct public funding

Time 36 months for entity set-up, location, equipment sourcing, launch

Model regional Engineering services
durable bio-polymer, biopolymer and biomaterial manufacturing & sales
6% Franchising fees from regional Franchisees

Status 1st regional entity in East Asia, China operational and growing
2nd regional entity in Australasia for account management operational and growing
3rd regional entity in Europe under acquisition



**FUNDING
ENTITY**



Dr. Karsten Brast

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Director

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Mayda Diaz

Global Account Management

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**CORE
TEAM**

► Dr. Karsten Brast Founder & CEO

Dr. Karsten Brast, an international experienced Automotive and Materials executive, obtained his **Dr.-Ing. in Advanced Materials/Composites (RWTH Aachen)/Institute of Plastics Processing (IKV)**, Germany.

After holding senior **Vice-President positions with Siemens Automotive & Faurecia**, he set-up and grew a Central R&D Center for the stock listed, globally operating Automotive Ningbo Huaxing (NBHX) Group in Zhejiang, China. He delivered strategic **projects for Daimler-BYD, BMW, BAIC** and others. As member of the top management of the Group, Karsten led **strategic, international M&As in the USA, Europe, UK and Israel**.

Karsten decided to leave the Corporate world in 2017 to **seed invest** into the development of advanced, sustainable materials – nature2need. After years of **materials R&D** funded with personal funds, Karsten eventually **acquired series A investment for a first biomaterial compounding & manufacturing site** in Zhejiang, China.

In China, Karsten has been awarded with the **Chinese Government's Friendship Award** (highest award for foreign experts who have made outstanding contributions to the China's economic and social progress) and the **Thousand Talents Plan Award** (recognizes leading international experts in scientific research, innovation, and entrepreneurship).

Nationality German National, Permanent Resident Permit China (Green Card)

Languages German (mother tongue), English (fluent), French (medium), Chinese (basics)

LinkedIn <https://www.linkedin.com/in/dr-karsten-brast/>

<https://www.linkedin.com/company/nature2need/>





2019 China High-Tech Competition, Zhejiang, China
(hosted by Jack Ma & Premier Li Keqiang)
2nd place for nature2need



2020 TREELINGZ Forest Friends
made with nature2need biomaterial compounds



price has been awarded to
our customer and partner tcc, UK



**OUR
AWARDS**



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www.nature2need.group (beta-version)