Table S1. Business Model Canvas of each organization

		Upcycler		Component-Specific Supplier
		Maximum Paris [29] (1)	**BC Materials [30] (2)**	**General Metal Re-Edition (3)**
Value Proposition	**Customer Segments**	Private market Industry	Building owners/project developers *Architects* *Contractors* *Students* *Organizations*	Building owner/project developer
	Customer Relationships	At purchase via website *Post-purchase for repair*	At purchase via website *Production* *Workshops* *Project Meetings* *End-of-life takeback program (tentatively)*	At purchase via website *During procurement (client asking for help sourcing)* *Design/construction (provide advice to clients)*
	Value Propositions	Improve sustainable credentials Design	Improve sustainable credentials Design *Improve indoor environmental quality* *Improve competencies*	Improve sustainable credentials Product expertise Lower price Reputation Large inventory
Value creation & delivery	**Key Activities**	Acquisition Product design of new products Production Sales	Acquisition Product design of new products Production Sales *Consulting* *Facilitate testing* *Knowledge sharing*	Acquisition Cleaning Refurbish old products Provide new products to satisfy demand Logistics Sales *Pre-demolition diagnostic* *Steel deconstruction*
	Key Resources	Manufacturing space/workshop Design Process Designers Artisans Waste Products	Manufacturing space/workshop Design Process/formulas Designers Artisans Waste Products	Large stock Warehouse Marketplace website Machines Knowledge of craftspeople National reputation
	Channels	Website Social media *Boutiques*	Website Social media *Design magazines* *Workshops w/ building professionals*	Website Social media *Marketplace*
	Key Partnerships	Industry providing waste *Boutiques*	Industry providing waste *BC architects & studies* *Vande Moortel and Claesen Betonbedrijf (production)* *Brickz (commercialization)*	Sourcing partners Testing labs *General Metal Edition*
Value capture	**Cost Structure**	Production costs Procuring waste materials Employee expenses Cost of space	Production costs Procuring waste materials Employee expenses Cost of warehouse *Lease of production space*	Refurbishment costs Procurement costs Employee expenses Logistics costs *Deconstruction costs*
	Revenue Streams	Sale of products	Sale of products	Sale of products

		Component-Specific Supplier		Reuse Platform
		Cleveland Steel & Tubes [31] (4)	**London Reclaimed Brick Merchants [32] (5)**	**Insert [33] (6)**
Value Proposition	**Customer Segments**	Building owner/project dev. *Defense* *Mining & quarrying* *Oil and gas exploration* *Marine* *Rail* *Piling* *Utilities* *Civil engineering*	Building owner/project developer	Building owner/project developer *Organizations*
	Customer Relationships	At purchase via website	At purchase via website *Design/construction (provide advice to clients)*	Procurement *Bldg. operation/demolition* *Design/construction*
	Value Propositions	Improve sustainable credentials Product expertise Lower price Reputation Large inventory *Reduced lead times*	Improve sustainable credentials Product expertise Reputation Large inventory *Match historic fabric*	Improve sustainable credentials Make searching for reused products easier *Regulatory compliance* *Generate income from material resale* *Improve competencies*
Value creation & delivery	**Key Activities**	Acquisition Cleaning Refurbish old products Provide new products to satisfy demand Logistics Sales	Acquisition Cleaning Refurbish old products Provide new products to satisfy demand Logistics Sales *Deconstruction* *Quality testing*	Coordinate demand and supply Provide visibility to reuse actors *Circular consulting* *Material inventorization* *Logistics planning* *Provide green labels for trees* *Circular materials search*
	Key Resources	Large stock Warehouse Marketplace website Machines Knowledge of craftspeople National reputation	Large stock Warehouse Marketplace website Machines Knowledge of craftspeople National reputation	Public marketplace *Insert Connect* *Smart Demolition Tool* *Opportunity Map* *Material Data* *Employees*
	Channels	Website Social media	Website Social media	Online marketplace *Website* *Social media* *Project meetings*
	Key Partnerships	Sourcing partners Testing labs *Shipping partners* *Bianco Group (stock)*	Sourcing partners	Salvaged products providers *Social work company* *Knowledge partners*
Value capture	**Cost Structure**	Refurbishment costs Procurement costs Employee expenses Logistics costs	Refurbishment costs Procurement costs Employee expenses Logistics costs *Deconstruction costs* *Production costs*	Employee expenses
	Revenue Streams	Sale of products	Sale of products	Subscription fees *Consulting fees*

		Reuse Platform		
		Cirkla (7)	**Sirkulaer Ressurssentral (8)**	**OPALIS [34] (9)**
Value Proposition	**Customer Segments**	Building owner/project developer *Organizations*	Building owner/project developer *Organizations* *Ombygg*	Building owner/project developer
	Customer Relationships	Procurement *Knowledge exchange*	Procurement *Knowledge exchange*	Procurement *Design*
	Value Propositions	Improve sustainable credentials Make searching for reused products easier Provide visibility to reuse actors *Improve competencies*	Improve sustainable credentials Make searching for reused products easier *Improve competencies*	Improve sustainable credentials Make searching for reused products easier
Value creation & delivery	**Key Activities**	Coordinate demand and supply Provide visibility to reuse actors *Connect reuse actors* *Demonstrate reuse best practices*	Coordinate demand and supply Provide visibility to reuse actors *Demonstrate reuse best practices*	Coordinate demand and supply Provide visibility to reuse actors *Provide project examples* *Provide documentation*
	Key Resources	Central Alarm *Employees*	Digital recycling portal (in progress) *Employees* *Warehouse space*	Map-based online platform
	Channels	Central Alarm *Website* *Social media* *Workshops/webinars*	Digital recycling portal (in progress) *Webinars*	Online platform
	Key Partnerships	Salvaged products providers *Knowledge partners*	Salvaged products providers *Knowledge partners* *Pådriv Oslo* *Businesses supporting creation*	Salvaged products providers Rotor, Bellastock and Les Aventuriers du Sixieme Continent
Value capture	**Cost Structure**	Employee expenses *Project costs*	Employee expenses *Project costs*	*Project costs*
	Revenue Streams	Subscription fees *Outside investors (tentatively)*	Subscription fees *Donations from businesses* *Rental income from Ombygg*	*Interreg funding*

		Material Reseller		
		Concular [35] (10)	**Omtre (11)**	**Rotor DC [36] (12)[i]**
Value Proposition	**Customer Segments**	Building owner/project developer *Manufacturers* *Architects* *Commercial tenants*	Building owner/project dev. *Companies* *Forest owners* *Research community* *Architects* *Contractors*	Building owner/project developer *Organizations*
	Customer Relationships	Procurement *Pre-demolition* *Deconstruction* *Design*	Procurement *Knowledge exchange*	Procurement *Pre-demolition*
	Value Propositions	Improve sustainable credentials Provide quality assurance Make salvaged component integration simple *Save disposal costs* *Regulatory compliance*	Improve sustainable credentials Provide quality assurance Make salvaged component integration simple *Enable sustainable innovation*	Improve sustainable credentials Provide quality assurance Make salvaged component integration simple
Value creation & delivery	**Key Activities**	Acquisition Process materials Logistics Sales *Pre-demolition audit* *Support deconstruction tendering and worksite* *Organize refurbishment* *Warranty sale* *Provide temporary storage* *Circular consulting*	Acquisition Process materials Logistics Sales *Visual grading of lumber* *Research and development* *Deconstruction assistance*	Acquisition Process materials Logistics Sales *Deconstruction* *Refurbishment*
	Key Resources	Online marketplace software Warehouse Employees *Digital standard for existing materials*	Storefront/space Employees	Storefront Warehouse Employees *Online shop* *Refurbishment process*
	Channels	Website Online marketplace Social media *Project meetings*	Website Storefront Social media *Meetings/workshops*	Website Storefront Social media
	Key Partnerships	Sourcing partners *Network of reuse actors*	Sourcing partners *Innovation Norway* *Research partners* *Equipment providers* *Ragn Sells* *Viken Skog*	Sourcing partners *Designers (create custom pieces)* *Rotor*
Value capture	**Cost Structure**	Procurement costs Employee expenses Equipment and warehouses	Procurement costs Employee expenses Equipment and warehouses	Procurement costs Employee expenses Equipment and warehouses *Refurbishment costs*
	Revenue Streams	Sale of products *Sale of software* *Consulting fees* *Rental of material storage space*	Sale of products *Research funding* *Investors (by invitation only)*	Sale of products *Furniture rental* *Product refurbishment* *Consulting fees*

		Material Reseller		Consulting Office
		Ombygg (13)	**Genbyg [37] (14)**	**Jan Kattein Architects (15)**
Value Proposition	**Customer Segments**	Building owner/project developer *Small contractors*	Building owner/project developer *Small handymen* *Contractors*	Building owner/project developer
	Customer Relationships	Procurement *Storage coordination*	Procurement *Design/construction (provide advice to clients)*	Design Pre-demolition Demolition Procurement Construction
	Value Propositions	Improve sustainable credentials Provide quality assurance Make salvaged component integration simple *Avoid waste processing fees* *Make money from consignment of reused materials*	Improve sustainable credentials Provide quality assurance Make salvaged component integration simple	Improve sustainable credentials Improve competencies *Community involvement* *Lower material costs* *Design*
Value creation & delivery	**Key Activities**	Acquisition Process materials Logistics Sales *Provide temporary storage* *Refurbish materials* *Deconstruction*	Acquisition Process materials Logistics Sales *Deconstruction* *Rent materials*	Technical consulting on reuse Coordinate demand and supply Logistics planning *Architecture services*
	Key Resources	Online shop Warehouse Employees	Storefront Warehouse Employees *Workshop* *Online shop* *Transport infrastructure (driver)* *In-house carpenter*	Employees
	Channels	Website Online shop Social media	Website Storefront Social media	Website Project meetings Social media
	Key Partnerships	Sourcing partners Testing labs *FutureBuilt*	Sourcing partners *Architects (upcycle products)*	Contractors Materials partners *Design team consultants*
Value capture	**Cost Structure**	Employee expenses Equipment and warehouses *Material processing costs*	Procurement costs Employee expenses Equipment and warehouses *Shipping costs*	Employee expenses
	Revenue Streams	Sale of products *Deconstruction fees* *Rental of material storage space*	Sale of products	Consulting fees

		Consulting Office		
		Superuse Studios [38-39] (16)	**Si Architectes (17)**	**Bobi Réemploi [40] (18)**
Value Proposition	**Customer Segments**	Building owner/project developer *Architecture firms* *Organizations*	Building owner/project developer	Building owner/project developer *Architects* *Organizations*
	Customer Relationships	Design Pre-demolition Demolition Procurement Construction	Design Pre-demolition Demolition Procurement Construction	Design Pre-demolition Demolition Procurement Construction
	Value Propositions	Improve sustainable credentials Improve competencies *Design*	Improve sustainable credentials Improve competencies	Improve sustainable credentials Improve competencies *Regulatory compliance* *No additional cost/little additional work* *Quality assurance*
Value creation & delivery	**Key Activities**	Technical consulting on reuse Coordinate demand and supply Logistics planning *Circular flow consulting* *Facilitate warranty* *Architecture services*	Technical consulting on reuse Coordinate demand and supply Logistics planning *Pre-demolition documentation* *Refurbishment* *Architecture services*	Technical consulting on reuse Coordinate demand and supply Logistics planning *Pre-demolition audit* *Dismantling support* *Qualify reused materials* *Reuse consulting*
	Key Resources	Employees *Harvest map platform*[ii]	Employees	Employees *Online catalog*
	Channels	Website Social media Project meetings	Website Social media Project meetings	Website Social media Project meetings *Online catalog* *Showroom*
	Key Partnerships	Contractors Materials partners *Design team consultants* *Van Gansewinkel (waste collector)* *Harvest scouts* *Blade Made*	Contractors Materials partners *Design team consultants*	Contractors Materials partners *Digital platforms* *Insurance companies* *Testing laboratories* *Dismantling companies*
Value capture	**Cost Structure**	Employee expenses	Employee expenses	Employee expenses
	Revenue Streams	Consulting fees *Research funding* *Software licensing fees* *Sale of materials*	Consulting fees	Consulting fees

		Consulting Office		
		Remix (19)	**Lendager Group [41] (20)**	**Bellastock [42] (21)**
Value Proposition	**Customer Segments**	Building owner/project developer *Building consultants*	Building owner/project developer *Organizations*	Building owner/project developer *Organizations* *Architects* *Students*
	Customer Relationships	Design Procurement Construction	Design Pre-demolition Demolition Procurement Construction *Knowledge exchange*	Design Pre-demolition Demolition Procurement Construction *Knowledge exchange*
	Value Propositions	Improve sustainable credentials Improve competencies	Improve sustainable credentials Improve competencies	Improve sustainable credentials Improve competencies *Regulatory compliance* *Retain cultural heritage*
Value creation & delivery	**Key Activities**	Technical consulting on reuse Coordinate demand and supply Logistics planning *Knowledge sharing*	Technical consulting on reuse Coordinate demand and supply Logistics planning *Architecture services* *Circular business consulting* *Materials experimentation*	Technical consulting on reuse Coordinate demand and supply Logistics planning *Organize annual festival* *Pre-demolition audits* *Urbanism projects* *Research*
	Key Resources	Employees	Employees *Prototyping space*	Employees *OPALIS* *Experimental work sites*
	Channels	Website Social media Project meetings	Website Social media Project meetings	Website Social media Project meetings *Workshops/master classes* *Festival* *Reference book w/ govt.*
	Key Partnerships	Contractors Materials partners *Encore Hereux*	Contractors Materials partners *Design team consultants*	Contractors Materials partners *Insurance companies* *Union of reuse actors*
Value capture	**Cost Structure**	Employee expenses	Employee expenses *Materials prototyping costs*	Employee expenses *Festival costs*
	Revenue Streams	Consulting fees	Consulting fees	Consulting fees *Festival ticket sales*

		Consulting Office		Deconstruction Company
		Material Index [43] (22)	**Zirkular [44] (23)**	**New Horizon [45-47] (24)**
Value Proposition	**Customer Segments**	Building owner/project developer *Contractors*	Building owner/project developer *Architects* *Organizations* *Contractors* *Students*	Building owner/project developer
	Customer Relationships	Design Pre-demolition Demolition Procurement Construction	Design Pre-demolition Demolition Procurement Construction	Pre-demolition Demolition Procurement
	Value Propositions	Improve sustainable credentials Improve competencies *Generate income from material resale*	Improve sustainable credentials Improve competencies	Improve sustainable credentials Dismantling expertise
Value creation & delivery	**Key Activities**	Technical consulting on reuse Coordinate demand and supply Logistics planning *Pre-demolition audit*	Technical consulting on reuse Coordinate demand and supply Logistics planning *Pre-demolition audit* *Coordinate competitions* *Knowledge exchange*	Pre-demolition audits Building dismantling Coordinate demand and supply Sale of reused products *Production of reused products* *Research*
	Key Resources	Employees *Partner platform*	Employees *Matching tool* *Resources passports* *Publications on demolitions* *Swiss steel documents*	Knowledge of deconstruction Networks (Harvest map platform) Machines *Material scouts*
	Channels	Website Social media Project meetings	Website Social media Project meetings *Teaching* *Research projects*	Website Social media Project meetings Online platform
	Key Partnerships	Designers Materials partners *Logistics partners* *Venture capital firms*	Contractors Materials partners *Cirkla* *ETH Zurich (knowledge)* *Baubüro in situ* *Partner consulting companies* *Venture capital firm*	Network of organizations taking material *Donor buildings* *Circular design collective* *Local producers and distributors* *Jajo*
Value capture	**Cost Structure**	Employee expenses	Employee expenses	Employee expenses Demolition expenses *Warehousing costs*
	Revenue Streams	Consulting fees *Portion of salvaged materials sales*	Consulting fees *Software licensing (tentatively)*	Demolition fees Sale of products

		Deconstruction Company
		Lagemaat [48] (25)
Value Proposition	**Customer Segments**	Building owner/project developer *Contractors* *Governments* *Housing Associations*
	Customer Relationships	Pre-demolition Demolition Procurement
	Value Propositions	Improve sustainable credentials Dismantling expertise *Safety and compliance* *One-stop shop* *Accessibility for emergencies*
Value creation & delivery	**Key Activities**	Pre-demolition paperwork Building dismantling Coordinate demand and supply Sale of reused products *Hazardous substance remediation* *Infrastructure and earthwork* *Structural repair* *Container rental* *Emergency services*
	Key Resources	Knowledge of deconstruction Networks (Insert platform) Machines *Waste collection point* *Containers*
	Channels	Website Social media Project meetings Online platform
	Key Partnerships	Network of organizations taking material *Insert consortium* *Hazardous material inspection labs*
Value	**Cost Structure**	Employee expenses Demolition expenses
	Revenue Streams	Demolition fees Sale of products

[i] Rotor DC is distinct from Rotor vzw-asbl, a design practice whose work includes the creation of the OPALIS platform. Rotor vzw-asbl was interviewed but was not included as a case to avoid confusion with Rotor DC.
[ii] Superuse sold its Harvest Map platform to New Horizon in 2019.