Location 1
(Apple Farm HQ)

Asset:
H2O Purchase

Cost: P1 * sum(x)
Size: P2 * max(x)

Component:
H2O Purchase

State variable: Amount of H2O, x
- temporal: true
- bounds: [0, ...]

Period: 1 (day)

Resource nodes

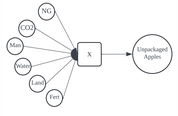
Name	Resource Type	Location	Public	Ineq
H2O	H2O	1	1	1

Edges

Name	Resource Node	Type	fn	T/ΔT	Dir
H2O	H2O	temp	x	0	out

Asset:
Apple Growing

Cost: P1 * max(x) + P2 * sum(x)
Size: P3 * max(x)



Component:
Apple Farm

State variable: Number of raw apples produced, x
- temporal: true
- bounds: [0, 100]

Period: 1 (month)

Resource nodes

Name	Resource Type	Location	Public	Ineq
NG	NG	1	1	1
CO2 Budget	CO2	System	1	1
Water	Water	1	1	1
Manpower	Manpower	1	1	1
Fertiliser	Fertiliser	1	1	1
Land	Land	1	1	1

Edges

Name	Type	fn	T/ΔT	Dir
NG	temp	P1 * x	0	in
CO2	temp	P2 * x	0	in
Water	temp	P3 * x	0	in
Manpower	temp	P4 * x	0	in
Fertiliser	temp	P5 * x	0	in
Land	specific	P6 * max(x)	0	in
Unpacakged Apples	temp	P7 * x	5	out

Asset:
Apple Packaging

Cost: P1 * max(x) + P2 * sum(x)
Size: P3 * max(x)

Component:
Apple Packaging Factory

State variable: Number of packaged apples produced, x
- temporal: true
- bounds: [0, 100]

Period: 1 (day)

Resource nodes

Name	Resource Type	Location	Public	Ineq
Raw Apples	Raw Apples	1	1	1
EL	Electricity	1	1	1
Manpower	Manpower	1	1	1
Box	Box	1	1	1

Edges

Name	Type	fn	T/ΔT	Dir
Raw Apples	temp	P1 * x	0	in
EL	temp	P2 * x	0	in
Manpower	temp	P3 * x	0	in
Box	temp	P4 * x	0	in
Packaged Apples	temp	P5 * x	1	out

Asset:
Apple Storage

Cost: P1 * max(x) + P2 * sum(x)
Size: P3 * max(x)

Component:
Apple Warehouse

State variable: Number of packaged apples, x
- temporal: true
- bounds: [0, ...]

Period: 1 (day)

Resource nodes

Name	Resource Type	Location	Public	Ineq
Packaged Apples	Packaged Apples	1	1	1

Edges

Name	Resource Node	Type	fn	T/ΔT	Dir
Packaged Apples In	Packaged Apples	temp	x	0	in
Packaged Apples Out	Packaged Apples	temp	x	1	out

Asset:
Apple Transport

Cost: P1 * max(x) + P2 * sum(x)
Size: P3 * max(x)

Component:
Apple Truck

State variable: Number of packaged apples, x
- temporal: true
- bounds: [0, ...]

Period: 3 (day)

Resource nodes

Name	Resource Type	Location	Public	Ineq
EL	Electricity	1	1	1
CO2 Budget	CO2	System	1	1
Packaged Apples HQ	Packaged Apples	1	1	1
Packaged Apples Store	Packaged Apples	2	1	1

Edges

Name	Type	fn	T/ΔT	Dir
EL	temp	P1 * x	0	in
CO2 Budget	temp	P2 * x	0	in
Packaged Apples HQ	temp	x	0	in
Packaged Apples Store	temp	x	03	out

Loaction 2
Apple Store

Asset:
Apple Storage

Cost: P1 * max(x) + P2 * sum(x)
Size: P3 * max(x)

Component:
Apple Store Inventory

State variable: Number of packaged apples, x
- temporal: true
- bounds: [0, ...]

Period: 1 (day)

Resource nodes

Name	Resource Type	Location	Public	Ineq
Packaged Apples	Packaged Apples	2	1	1

Edges

Name	Resource Node	Type	fn	T/ΔT	Dir
Packaged Apples In	Packaged Apples	temp	x	0	in
Packaged Apples Out	Packaged Apples	temp	x	1	out

Asset:
Apple Sales

Cost: - P1 * sum(x)
Size: P2 * max(x)

Component:
Apple Store

State variable: Amount of apples sold, x
- temporal: true
- bounds: [0, ...]

Period: 1 (day)

Resource nodes

Name	Resource Type	Location	Public	Ineq
Sold Apples	Sold Apples	2	1	1

Edges

Name	Resource Node	Type	fn	T/ΔT	Dir
Packaged Apples	Packaged Apples	temp	x	0	int
Sold Apples	Sold Apples	temp	P1 * x	1	out