BISEPS | *biseps.eu*

Business clusters **I**ntegrated **S**ustainable **E**nergy **P**ackage**S**

Re-energise Manor Royal

Ingrid Bennett
West Sussex County Council

Sandy Abrahams – Lux Nova Partners
Leo Bedford – Fond Croft
Alexia Gonin - Ramboll

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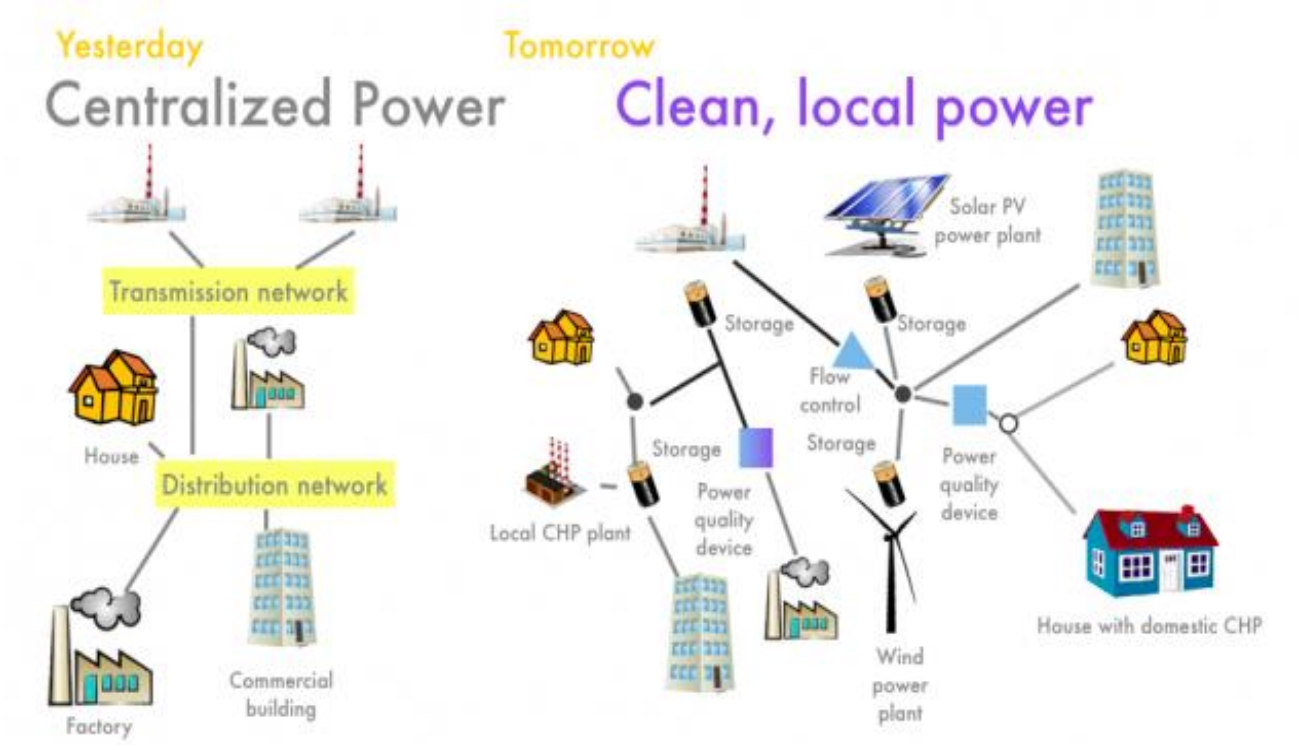
1. BISEPS Project: Workshop Agenda

9:30	**Registration, tea and coffee**
10:00	**Welcome and introductions**
10:05	**BISEPS Project Overview** Ingrid Bennett, West Sussex County Council
10:10	**Technical Overview** Alexia Gonin, Ramboll – outputs of the four clusters detailed feasibility studies and district heat network, recommended low carbon energy generation technologies
10:20	**Financial Options** Leo Bedford, Fondcroft – various options for funding low carbon renewable energy projects
10:40	**Trading of Power Options** Sandy Abrahams, Lux Nova – different possibilities for inter-company trading of low carbon energy
11:00	**Questions and Answers**
11:15	**Coffee break**
11:30	**Intro to breakout sessions** Sandy Abrahams, Lux Nova – interactively explore the range of financial and trading options
11:40	**Breakout sessions** – group facilitated discussions
12:40	**Summary** – Lucy Padfield, Ramboll
12:50 - 13:30	**Networking lunch and close**

1. BISEPS Project: UK context & Project introduction



1. BISEPS Project: UK context & Project introduction

- Aims and Outputs
  - Develop a tool for high level assessment of projects for sustainable energy in business clusters
  - Increase the use of sustainable energy within business clusters

- Location
  - Is being implemented in four EU countries
  - Manor Royal identied as perfect living lab

2. Technical overview: the clusters

Cluster Overview

Cluster #1
6 units (7 businesses)
mainly manufacturing, offices

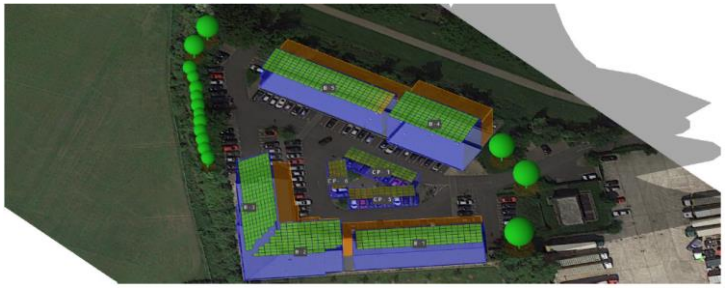
Cluster #2
7 businesses (6 examined)
mainly manufacturing, offices and warehouse

Cluster #3
17 businesses (13 examined)
mainly manufacturing, offices

Cluster #5
2 buildings (many SME businesses)
mainly offices

2. Technical overview: technologies & methodology

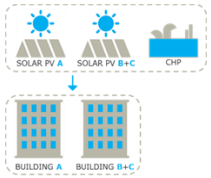
SUPPLY OPTION
Solar PV (Rooftop, Carpark)
BESS (Battery Energy Storage System
CHP (Combined Heat & Power)
GSHP (Ground Source Heat Pump)

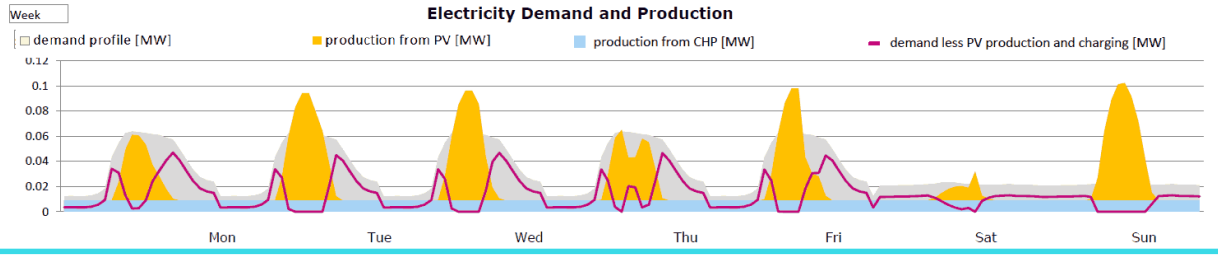


METHODOLOGY
Solar potential
Modelling of the energy demand
Modelling of the type of supply option
GSHP (Ground Source Heat Pump)

- Rooftop PV installations on buildings using full PV potential
- CHP with heat storage supplying to total electricity and heat demand
- Total electricity production will feed in behind the existing/new meter
- Total electricity production can supply total electricity demand
- Excess electricity production will be fed into the grid

BV 5.6 – Solar PV + CHP





2. Technical overview: Results – Cluster #1 and 2

CLUSTER #1 Business Variants (BV)	FINANCIAL FIGURES			SUSTAINABILITY		
	CAPEX	IRR	Amortisation	Generation	Self Supply	CO_2 Savings
	[GBP]	[%]	[a]	[MWh/a]	[%]	[%]
BV 1.1 - Solar PV, Rooftop	2,377,700	18.5%	5.2	2,238.1	8.8%	13.9%
BV 1.2 - Solar PV + CHP	3,232,200	43.7%	2.2	6,538.1	25.6%	32.3%

CLUSTER #2 Business Variants (BV)	FINANCIAL FIGURES			SUSTAINABILITY		
	CAPEX	IRR	Amortisation	Generation	Self Supply	CO_2 Savings
	[GBP]	[%]	[a]	[MWh/a]	[%]	[%]
BV 2.1 - Solar PV, Rooftop	4,170,600	17.3%	5.5	3,926.2	27.7%	43.8%
BV 2.2 - Solar PV + BESS	4,973,800	-7.3%	25.1	3,140.0	52.6%	64.9%
BV 2.3 - Solar PV + CHP	4,668,500	23.9%	4.0	5,604.2	42.3%	60.6%

Model Assumptions

2. Technical overview: Results – Cluster #3 and 5

CLUSTER #3 Business Variants (BV)	FINANCIAL FIGURES			SUSTAINABILITY		
	CAPEX	IRR	Amortisation	Generation	Self Supply	CO_2 Savings
	[GBP]	[%]	[a]	[MWh/a]	[%]	[%]
BV 3.1 - Solar PV, Rooftop	1,938,600	17.8%	5.3	1,835.7	21.9%	39.4%
BV 3.2 - Solar PV + BESS	3,076,000	-14.6%	25.1	1,632.3	45.4%	63.3%
BV 3.3 - Solar PV + CHP	1,824,500	21.2%	4.6	2,285.4	45.1%	58.4%

CLUSTER #5 Business Variants (BV)	FINANCIAL FIGURES			SUSTAINABILITY		
	CAPEX	IRR	Amortisation	Generation	Self Supply	CO_2 Savings
	[GBP]	[%]	[a]	[kWh/a]	[%]	[%]
BV 5.1 - Solar PV, Block A	75,600	17.7%	5.4	77,400	36.3%	47.7%
BV 5.2 - Solar PV, Blocks B+C	92,700	16.2%	5.6	92,400	45.8%	60.5%
BV 5.3 - Solar PV, ABC+Carpark	264,900	9.9%	8.9	207,600	44.3%	82.9%
BV 5.4 - Solar PV (ABC) + BESS	190,800	8.9%	9.9	169,800	55.1%	79.4%
BV 5.5 - CHP, Blocks ABC	39,200	5.0%	15.0	47,100	17.5%	16.9%
BV 5.6 - Solar PV (ABC) + CHP	207,500	14.5%	6.5	169,800	56.2%	86.5%
BV 5.7 - Solar PV (ABC) + GSHP	298,500	28.3%	3.2	169,800	42.6%	95.0%

2. Technical overview: Results – Conclusions (1)

- Roof-top Solar PV
  - ➔ applicable for all clusters
  - ➔ the most feasible technology and fastest way of saving CO_2
  - ➔ good IRR
  - ➔ payback time below 6 years

- Solar PV Carpark applications
  - ➔ (not modelled for clusters)
  - ➔ high investment costs
  - ➔ reasonable IRR

- Roof-top Solar PV and CHP
  - ➔ applicable to cluster #1 , #2 and #3
  - ➔ most efficient technical solution
  - ➔ higher complexity in planning and investment

2. Technical overview: Results – Conclusions (2)

- Ground Source Heat Pumps
  - ➔ Applicable to Cluster #5
  - ➔ better sustainable and financial solution (e.g. due to Ofgem RHI schemes).

- BESS + Solar PV (rooftop) (+Fuel Cell) (+EVs)
  - ➔ Benefits in ability to match demand with the generation
  - ➔ Requires private wire infrastructure
  - ➔ Solution will become more attractive once Capex drops & EV's can be incorporated

- **Heat Network Masterplanning study** undertaken on different clusters ➔ potential attractive solution as well

3. Context: the 3 models for funding and trading analysis

- 3 models of increasing complexity:
  - technologically
  - commercially/ financially
  - legally

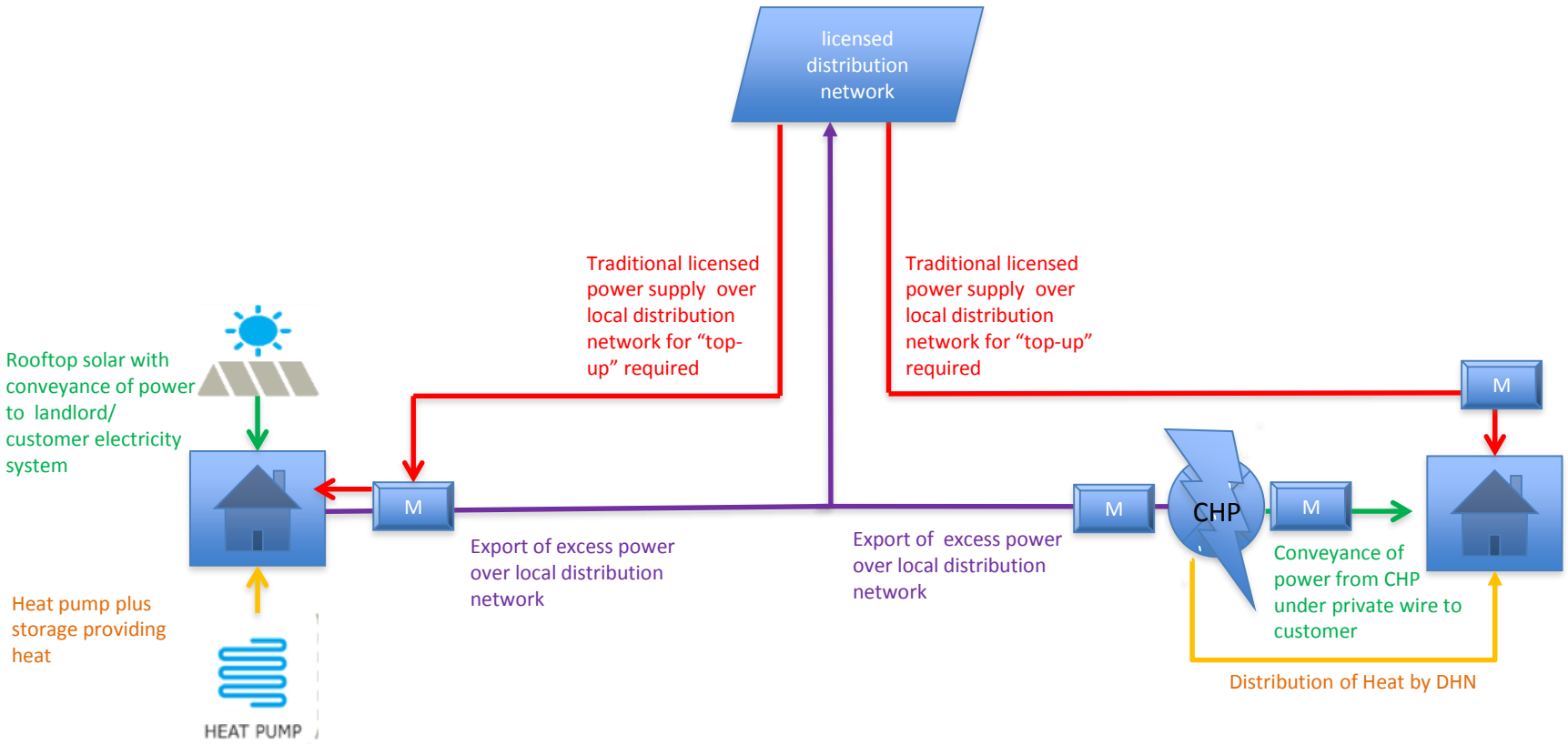
- Use of previous Cluster analysis as starting point

- **Model 1**: Clusters 1 and 5, building specific technologies and consumption, no intertrading

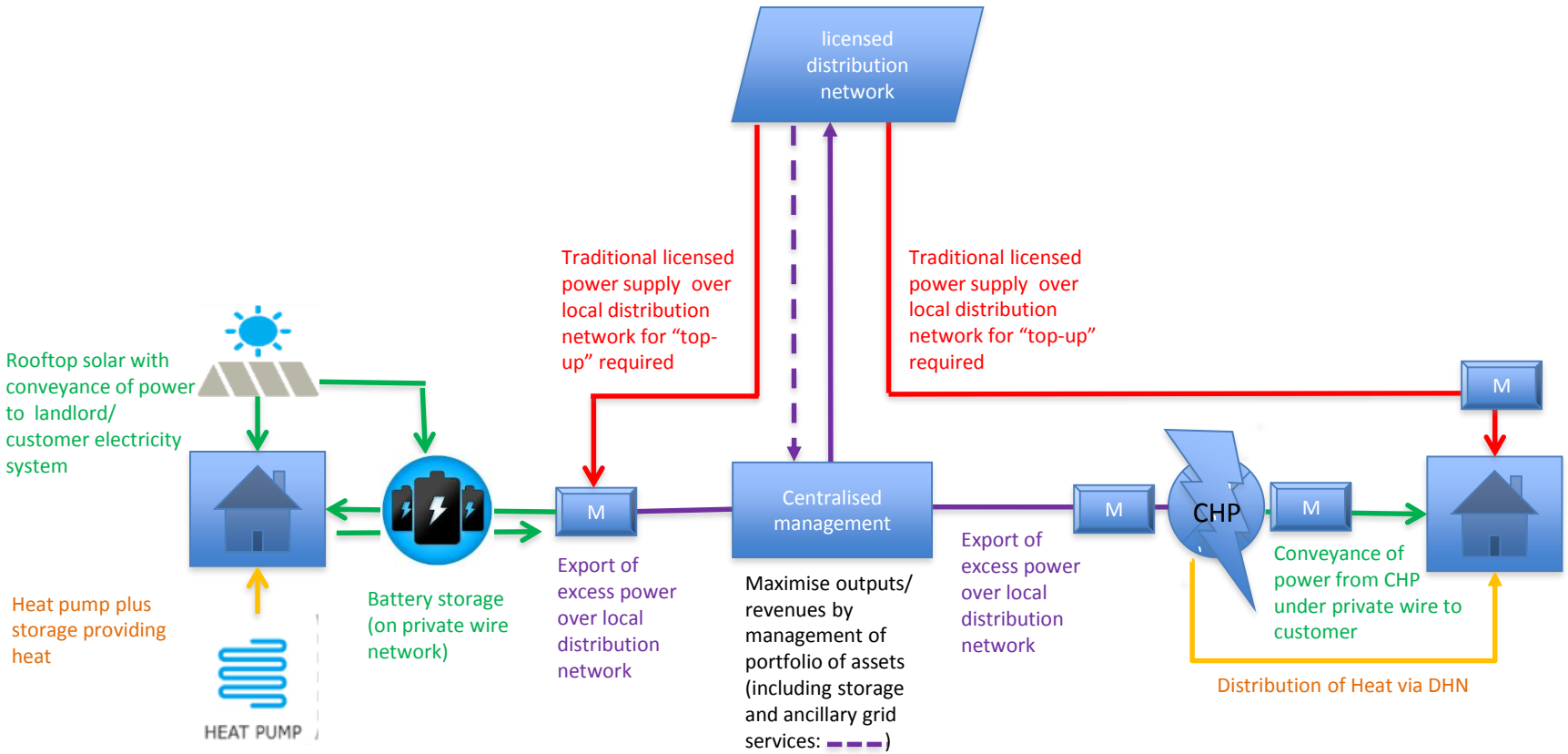
- **Model 2**: Cluster 1 and 5, multi-building, “intelligent” technologies and intertrading

- **Model 3:** Site wide energy business across all Clusters with site wide business engagement and intertrading

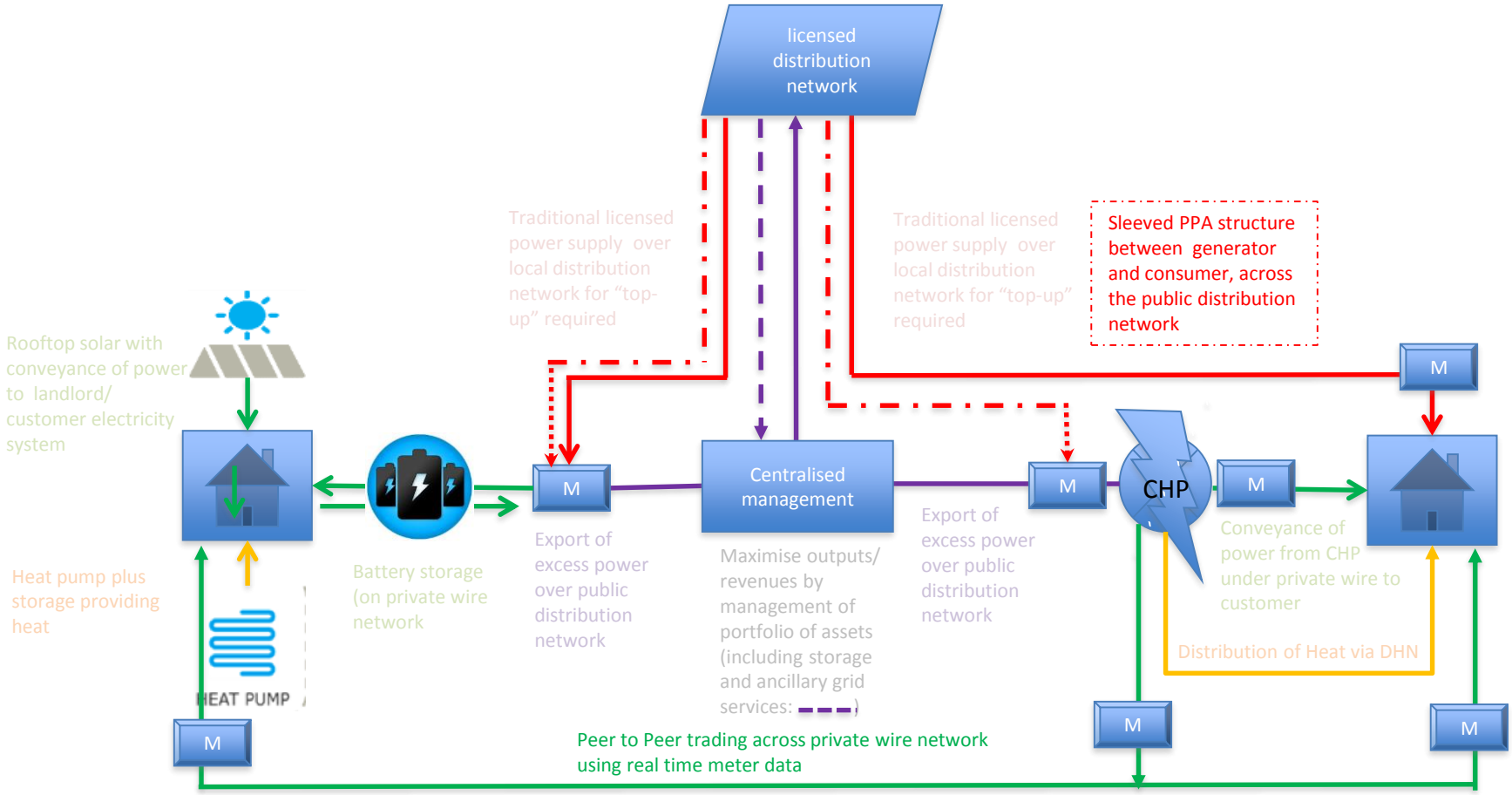
3. Context: Model 1



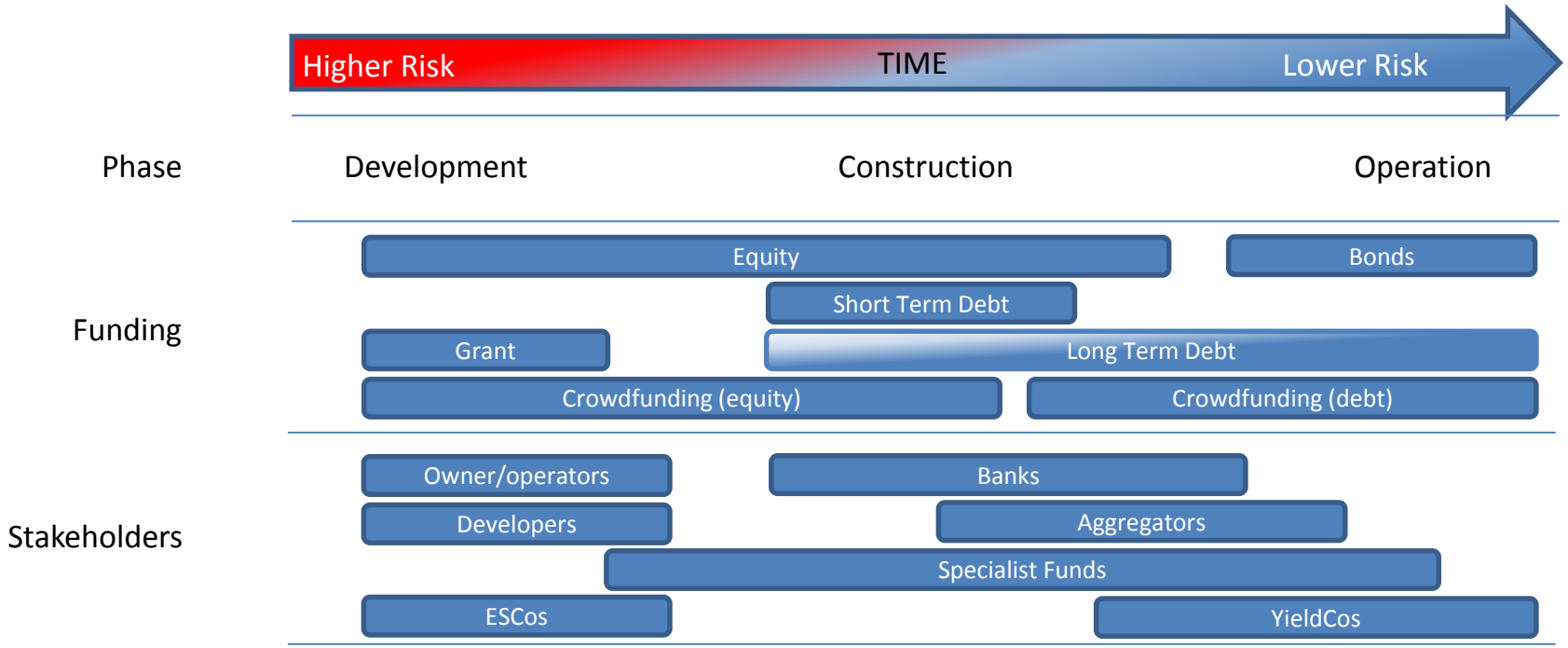
3. Context: Model 2



3. Context: Model 3



4. Funding Options



4. Funding options application to the 3 Models

Real Estate Model

Model	Funding
Model 1: Single Building No inter-trading No integrated power management No collaboration	• Self-funded by individual businesses • Generic corporate loans/mortgages due to relatively low value of investment • Specialist public funds can provide both technical and financial support if available when required, especially if qualifying as SME.

Model 2:
Cluster of buildings
Multi- technology
Some centralised management of power
Some collaboration
	• Individual projects funded by:
	  • individual businesses; or
	  • Portfolio funded with debt and equity - including potential for aggregation of technologies eg solar + batteries
	• Balance sheet funding or generic corporate loans/mortgages credit enhanced by scale, portfolio effects and contracted revenues
	• Specialist funding opportunities through ESCo / developer, including crowdfunding

Model 3: Estate-wide Multi- technology Some centralised management of power Collaboration Inter-trading	• Self-funded • Joint Venture structures with mix of equity and debt • Longer term project finance structures for energy companies • Crowdfunding opportunities if viewed as community interest through environmental and/or community benefits component

4. Financing Structures applicable to the 3 models

Real Estate Model

Model	Structuring
Model 1: Single Building No inter-trading No integrated power management No collaboration	• Capital Project by business • Simple SPV structure where technology business is “ringfenced” • If multiple investors, potential for a Joint Venture • Landlord may outsource provision to (ESCo) provider “Energy Performance Contracting”
Model 2: Cluster of buildings Multi- technology Some centralised management of power Some collaboration	• Simple SPV structure where there is individual ownership of generation assets • If multiple investors, potential for a Joint Venture to aggregate scale, mitigate risk and thus increase attractiveness to funders • If multiple generation assets owned by different entities, more complex governance structures apply • Alternatively, may outsource provision to (ESCo) provider
Model 3: Estate-wide Multi- technology Some centralised management of power Collaboration Inter-trading	• More complex governance structures required, to accommodate different stakeholders, generation assets and consumers. • Opportunities to differentiate between generation and distribution (infrastructure) assets in separate legal/governance structures. • Energy Service Company (ESCo) and Multi Utility Service Company (MUSCo) models may be appropriate

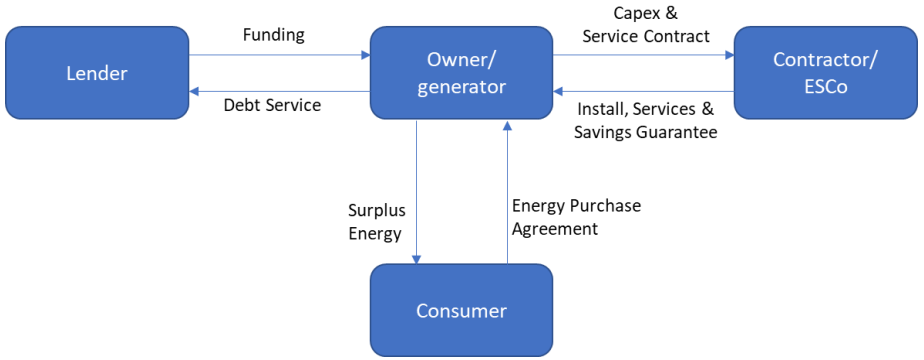
4. Financing Structures – Model 1 examples

Owner risk

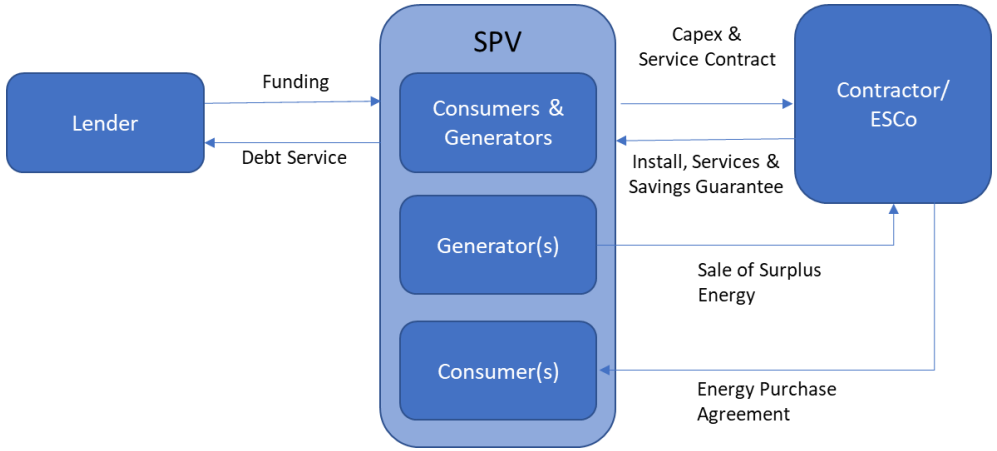
Shared risk

4. Financing Structures – Model 2 examples

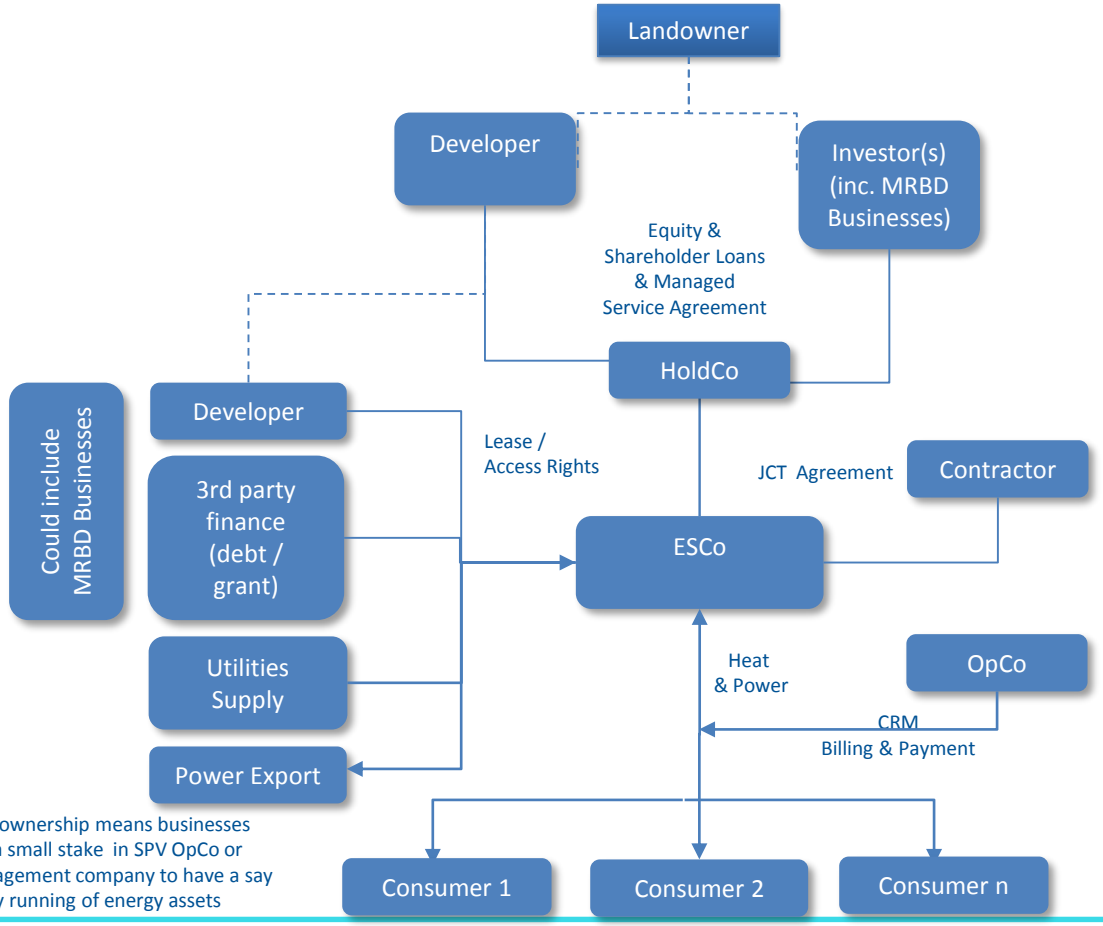
Bilateral Agreements



Joint Venture Agreements

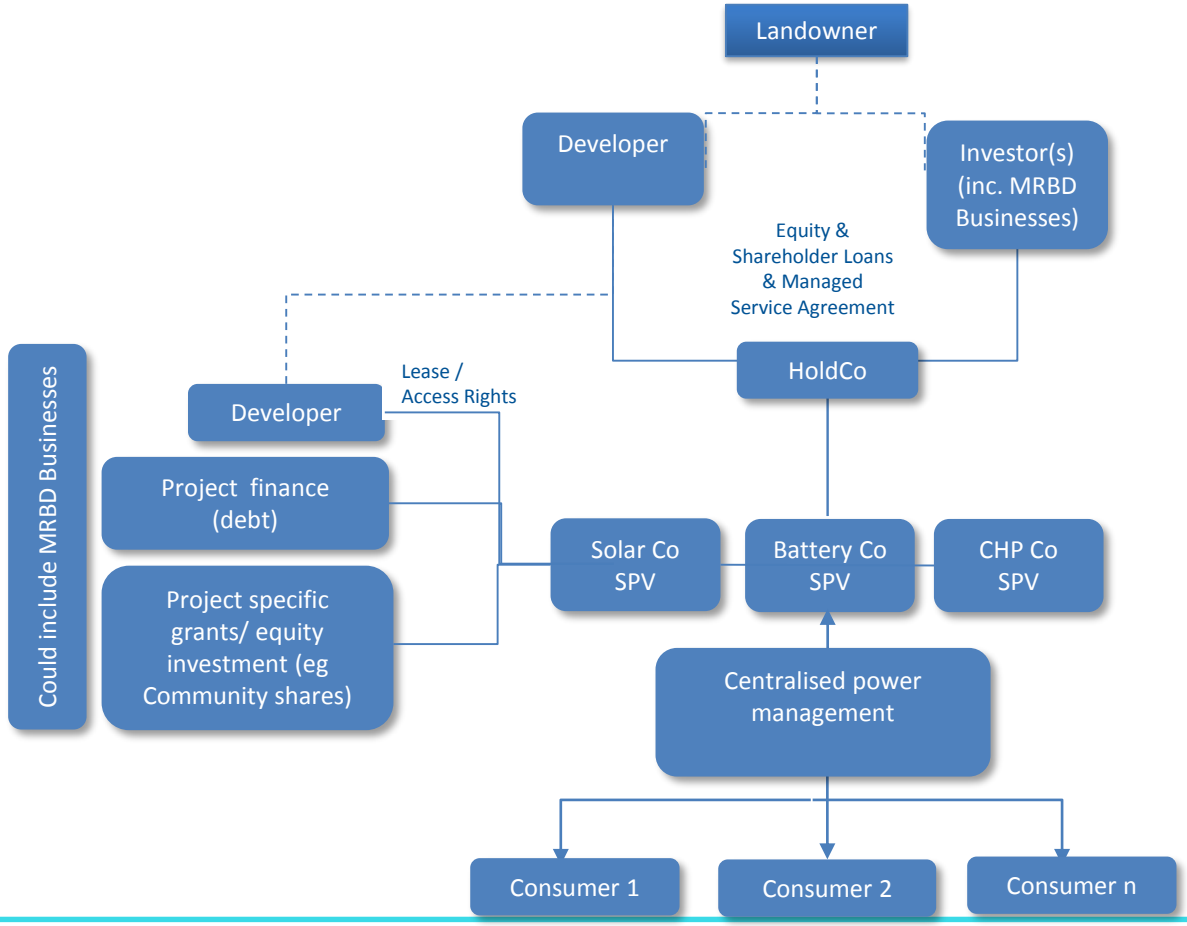


4. Financing Structures – Model 3: CHP example



- JV in the form of a Limited Partnership
- For a CHP plus DH network ESCo may be single entity or, for clearly defined asset classes, split between:
  - GenCo – owner and operator of 15 yr Energy Centre selling heat & power
  - PipeCo – owner of pipe 60 yr pipe assets paid for availbility = connection charges & use of network
- Assets sit in HoldCo
- Operations undertaken by OpCo
- PPA / Offtaker Agreements held by HoldCo or assigned to HoldCo if held by OpCo
- For a CHP: Consumer Billing consists of:
  - Connection Fee
  - Standing Charge / Service Charge
  - per Kwh heat charge (inflation linked)
  - Power/Cooling (if applicable)
- Income also from
  - Power export
  - Use of network if PipeCo model applies
- Consumers may also be suppliers via:
  - Power export from PV or CHP
  - Heat export from CHP, Boilers, GSHP
- Community ownership means businesses could have a small stake in SPV OpCo or form a management company to have a say in day to day running of energy assets

4. Financing Structures – Model 3: Multiple tech example



- JV in the form of a Limited Partnership
- A site wide investment company could hold multiple SPVs with different asset classes

4. Financing: key structuring considerations (1)

- Interaction with existing commercial mortgages
  - obstacles to the investment of third party capital
  - lender has primary secured interest in real property, including all energy systems in a building
  - mortgage covenants restrict the facility owner from giving another lender a security interest in real property without permission
  - options include:
    - refinance
    - energy services contracts that avoid security over physical asset

4. Financing: key structuring considerations (2)

- Balance Sheet Treatment
  - balance sheet treatment of underlying contract
  - qualifying as an above-the-line operating expense rather than a below-the-line debt
  - many “service contracts” are in fact leases, must appear on the balance sheet as fixed assets (IFRIC 4)
  - care must be taken with risk reward structure of true service contracts

4. Financing: key structuring considerations (3)

- Interaction with leases
  - understand how savings flow through the underlying asset/ who benefits from on-site power
  - e.g. energy savings from a retrofit in a building with fully netted lease will flow to the tenants
    - ➔ little incentive for a landlord to invest
  - conversely, landlord incentive in a serviced lease where landlord can recover costs/ charge for power through the service charge
    - ➔ can retain all energy savings from an energy efficiency project
    - ➔ can charge tenant for electricity
  - optimum is balance of legal and marketing, given tenant perception of fairness of service charges may affect lease renewal

5. Trading of Power: Electricity

- "**Routes to market**" for electricity can be based on two primary categories:
  - **Direct**: power is sold directly to customers or used on the same site as it is generated. The power never enters the public network.
    - **Self Supply**
    - **Private Wire**
  - **Indirect**: power is sold onto the public network. This means that the units are allocated to an electricity supplier.
    - **Standard PPA**
    - **Corporate PPA**
      - Sleeved/ Peer to Peer
      - Synthetic PPA
    - **Partnership arrangements with licensed suppliers**
      - Full Licence
      - White Label
      - Licence Lite

5. Trading of Power: Heat

- Trading routes for direct heating (and cooling) are limited.
- By its very nature, heat delivered by DHN has physical constraints on distribution.
- Common arrangements for heat delivery are:
  - **Direct Supply:** heat supply agreements entered into between generator and end consumer;
  - **Bulk Supply**:
    - bulk heat supply agreements entered into between generator and (e.g.) landlord,
    - heat delivered by landlord to end consumer tenants as part of the services delivered pursuant to lease or tenancy
- Source of heat for DHN is commonly on-site CHP
- However: increasing pressure from carbon, efficiency, planning:
  - ➔ drivers to source waste heat
  - ➔ E.g. energy from waste plants or industrial processing plants

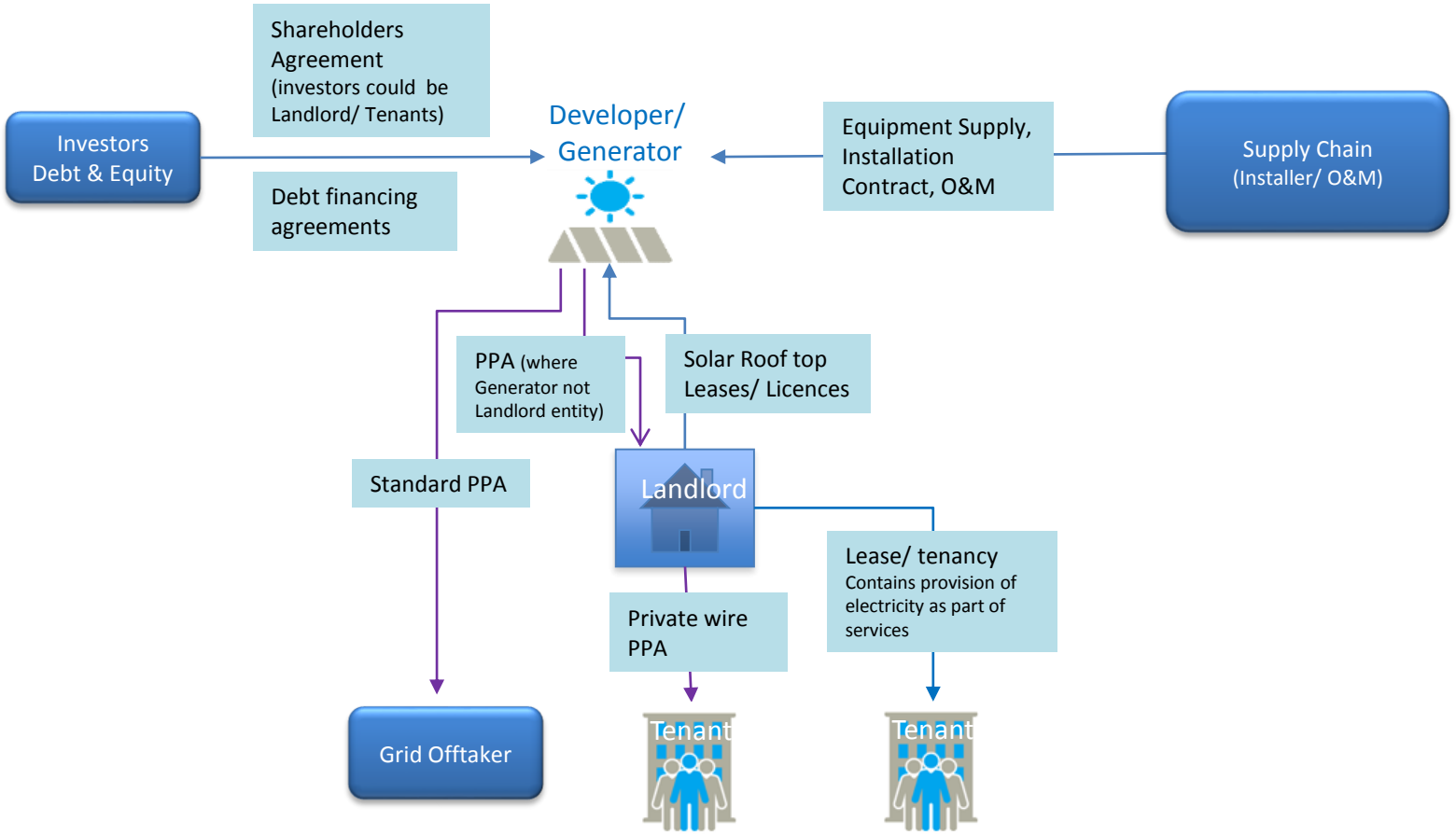
5. Trading of Power: restrictions

- Electricity Act 1989
  - Requires a licence to be obtained for generation, distribution and supply activities
  - Unless exempt under a class exemption (Class Exemption Order 2001)
    - Class A small supplier licence exemption
    - Class B: resale supply licence exemption
    - Class C: on-site supply licence exemption
  - Criminal activity not to hold a licence/ be validly exempt

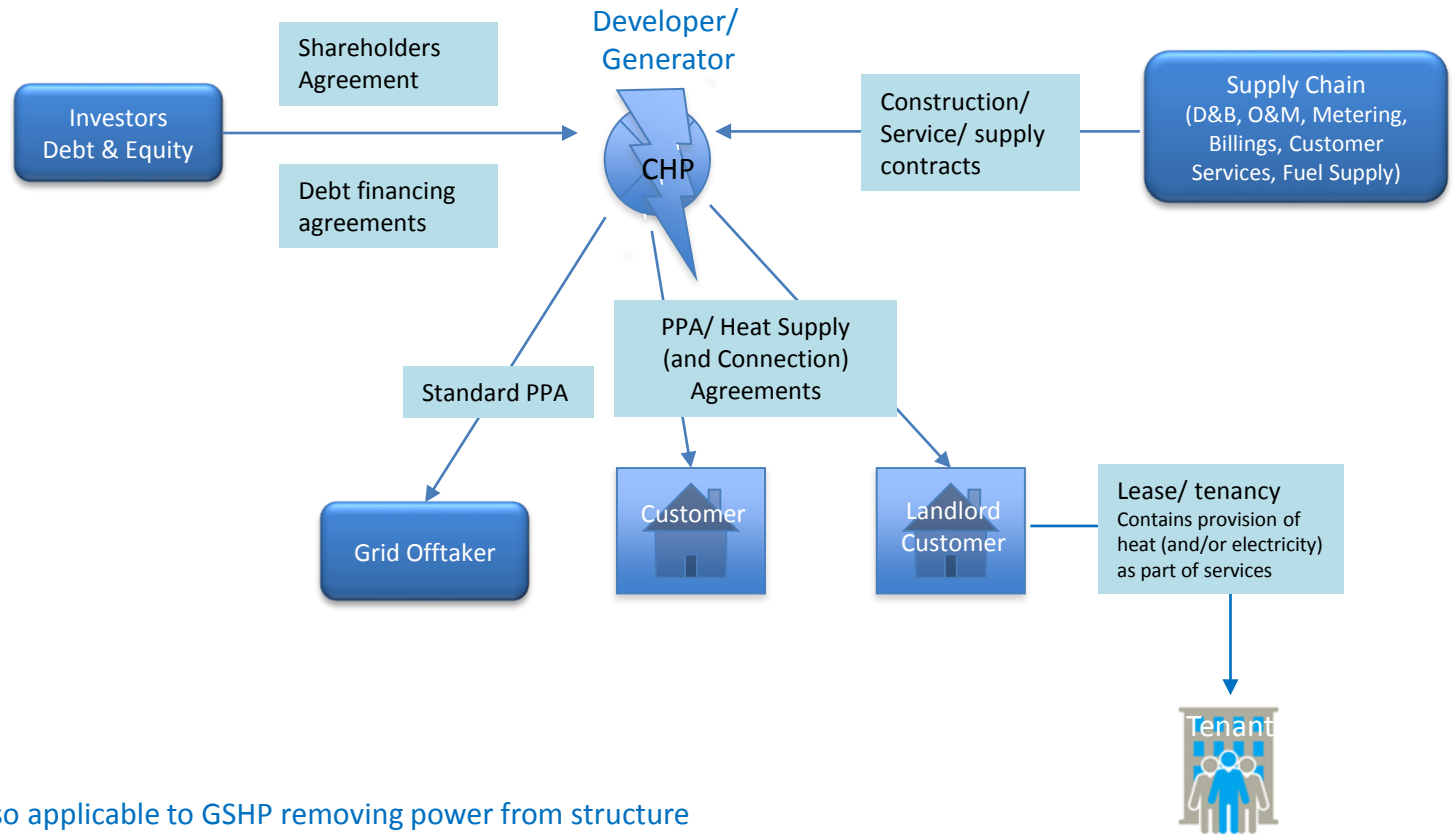
- Supplies to a consumer across existing public network:
  - could theoretically fall under Class A
  - however, requirements regarding grid balancing: must generally be licensed supplier involvement

- Supplies across a private wire network:
  - would likely fall under the Class C
  - would not require any third party licensed supplier involvement

5. Trading of Power: Model 1: solar rooftop

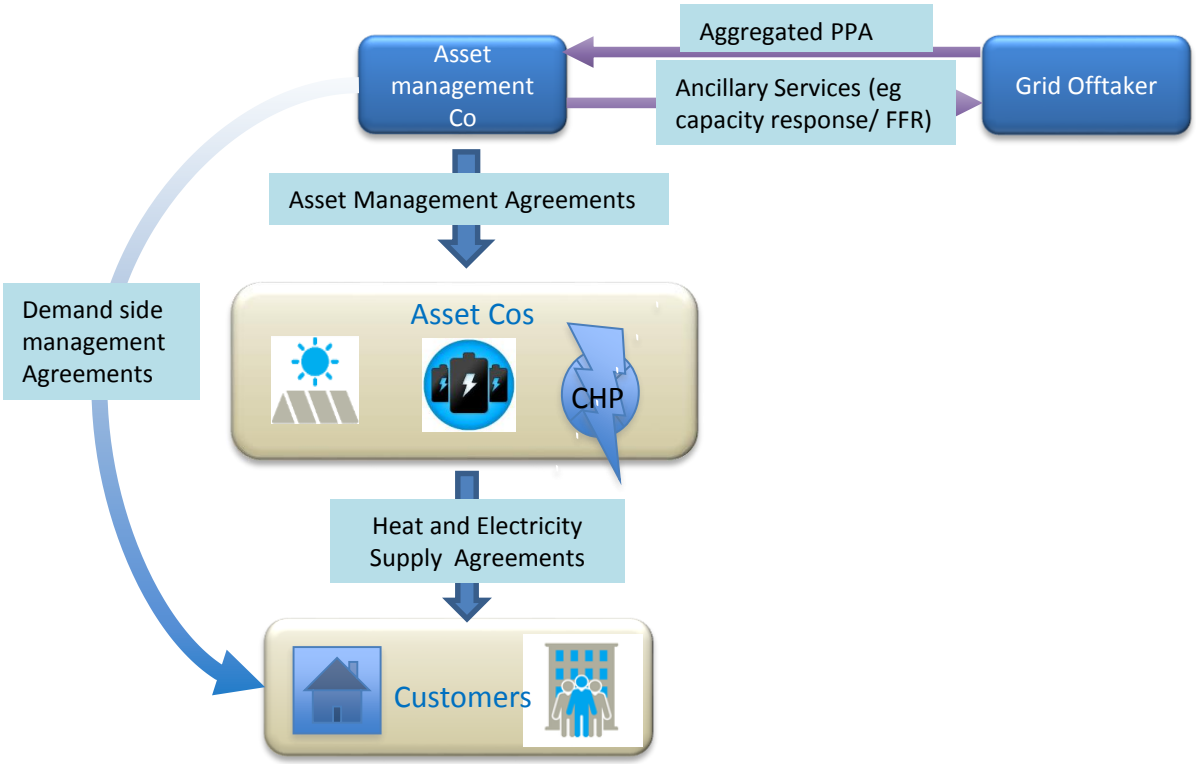


5. Trading of Power: Model 1: CHP*

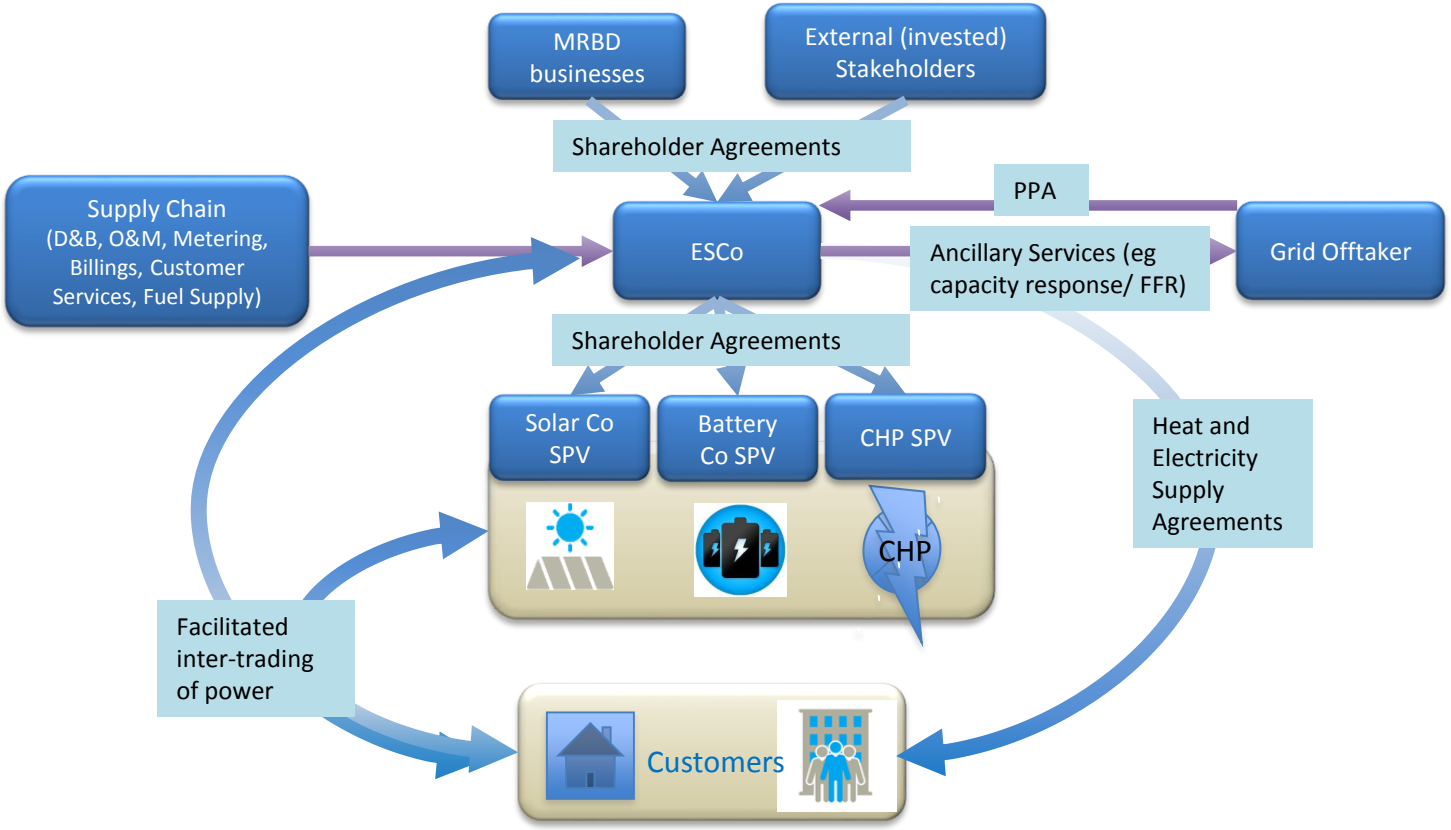


*Also applicable to GSHP removing power from structure

5. Trading of Power: Model 2: centralised management



5. Trading of Power: Model 3: site-wide ESCo

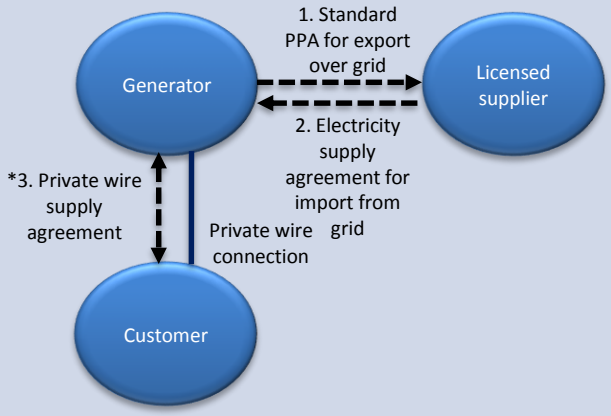


5. Trading of Power: PPA models (1)

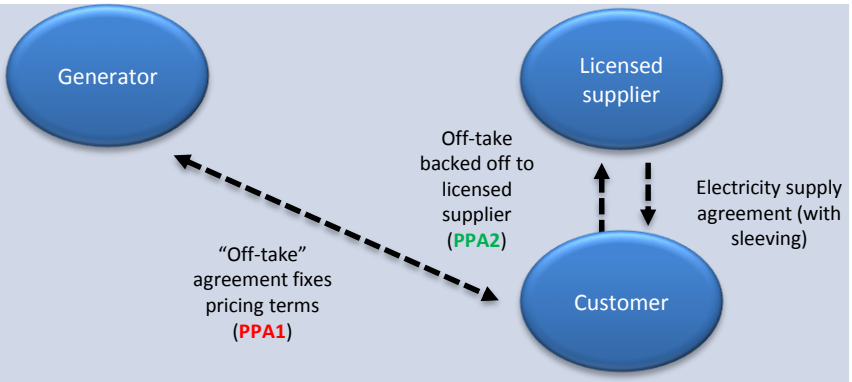
Model	Structure

Standard electricity PPA
• Generator is exporting electrical output onto the 'grid'
• Generator will seek a number of offerings from potential licensed supplier off-takers.
• Off-takers will pitch different offers, varying by:
  • price they pay for electricity exported;
  • proportion of any 'embedded benefits' offered;
  • extent of forecasting and imbalance risk taken as opposed to generator;
  • own credit rating;
  • own terms and conditions.
	

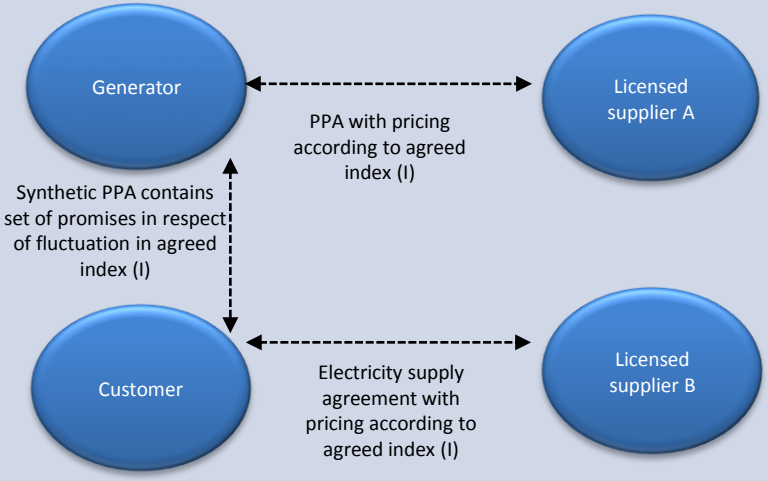
5. Trading of Power: PPA models (2)

Model	Structure
Private wire PPA • Generator/ supplier supplies on-site Customers under Class C supply exemption. • Generator may be 'spilling' or 'exporting' some electrical output onto the 'grid' (Contact 1- above example structure). • Generator/supplier will have in place an agreement for the supply of electricity to the site from the grid (contract 2). This may be a fairly standard supply agreement. • Generator/supplier also has a Private Wire Supply Agreement(s) with its Customer(s) (Contract 3). • Customer(s) will be on the "same site" or connected by "private wire" to the Generator's generation facility.	

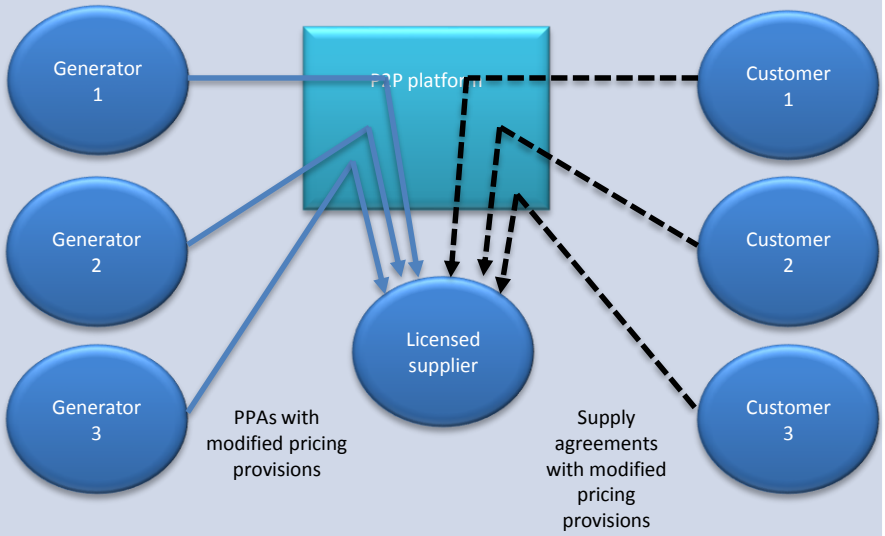
5. Trading of Power: PPA models (2)

Model	Structure
Sleeved PPA • Generator forms agreement with a demand Customer to supply electricity over the grid • To enable this agreement, a licensed Supplier is used as a facilitator by arranging for the transport of that electricity across the public grid and managing the risk of a supply and demand mismatch or 'imbalance'. • Sleeving allows a Generator to approach demand Customers and agree terms that suit both parties. • Allows for longer term offtakes to be agreed which creates certainty for both parties. • Involves the Customer buying legal title to the Generator's output directly from the Generator (under **PPA1**) but then immediately on-selling title to that electricity to the Supplier (under **PPA2**). • Supplier then sells the electricity back to the Customer under a supply agreement that wraps in the Generator's electricity.	 • Supplier's involvement allows the electricity to be conveyed from the Generator to the Customer over the licensed transmission and distribution systems and for the Supplier to provide additional back-up and top-up supplies to the Customer.

5. Trading of Power: PPA models (2)

Model	Structure
Synthetic PPA • Allows Generator and Customer to negotiate only the components of an offtake agreement that matters to them • Leaves the complex regulatory matters to others • Regular PPA will exist between the Generator and Supplier • Regular Supply Agreement will exist between a Supplier and the Customer • Consequently, synthetic PPA might only cover price and guarantee of origin.	

5. Trading of Power: PPA models (3)

Model	Structure
Peer to Peer PPA • Only P2P model currently operating adopts approach comparable to a sleeved supply. • Generators and demand Customers (who are not on the 'same site' or connected via 'private wire' but who are all half-hourly metered) agree a pricing structure through a P2P platform • Notional supply of that power is effected over the grid through a licensed Supplier. • Supplier also manages all risk of a supply and demand mismatch or 'imbalance'. • P2P matching allows demand Customers to build portfolio of preferred generation assets/types and reach agreement on pricing with Generators. • Approach involves each Customer and each Generator entering into terms of use of the P2P platform. • Each Generator also enters into a PPA. • Principal purchaser is the Licensed Supplier. • Each Customer also enters into a supply agreement. • Principal seller is the Licensed Supplier.	

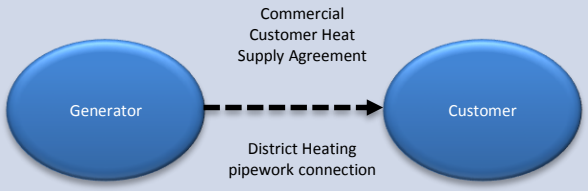
5. Trading of Power: PPA Heat Supply Contract

Model

Heat Supply Contract

- Heat generator (expected to be a CHP generator) supplies heat directly to a commercial customer
- Via a district heating network
- Consumer Billing consists of:
  - Connection Fee
  - Standing Charge / Service Charge
  - per Kwh heat charge (inflation linked)
  - Power/Cooling (if applicable)

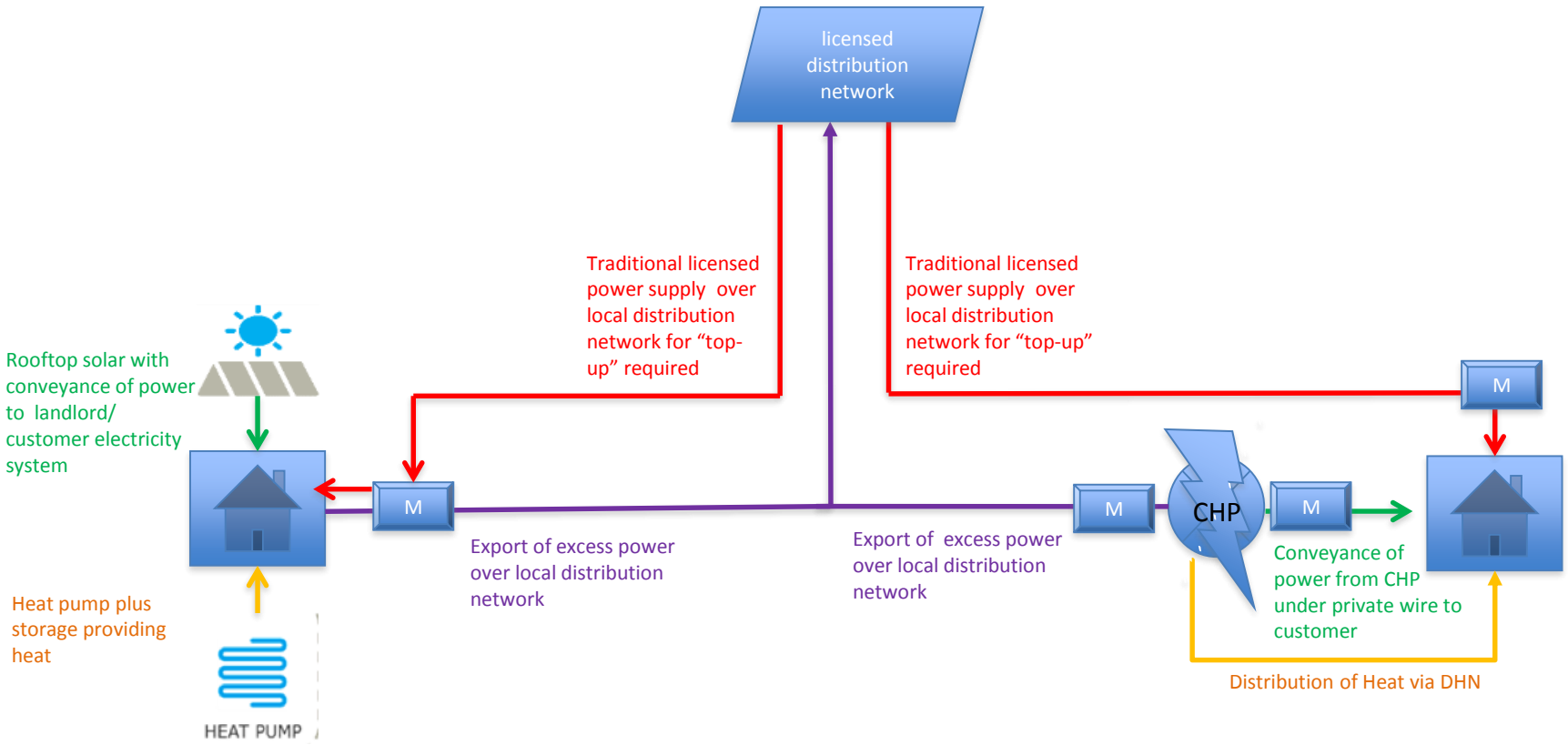
Structure



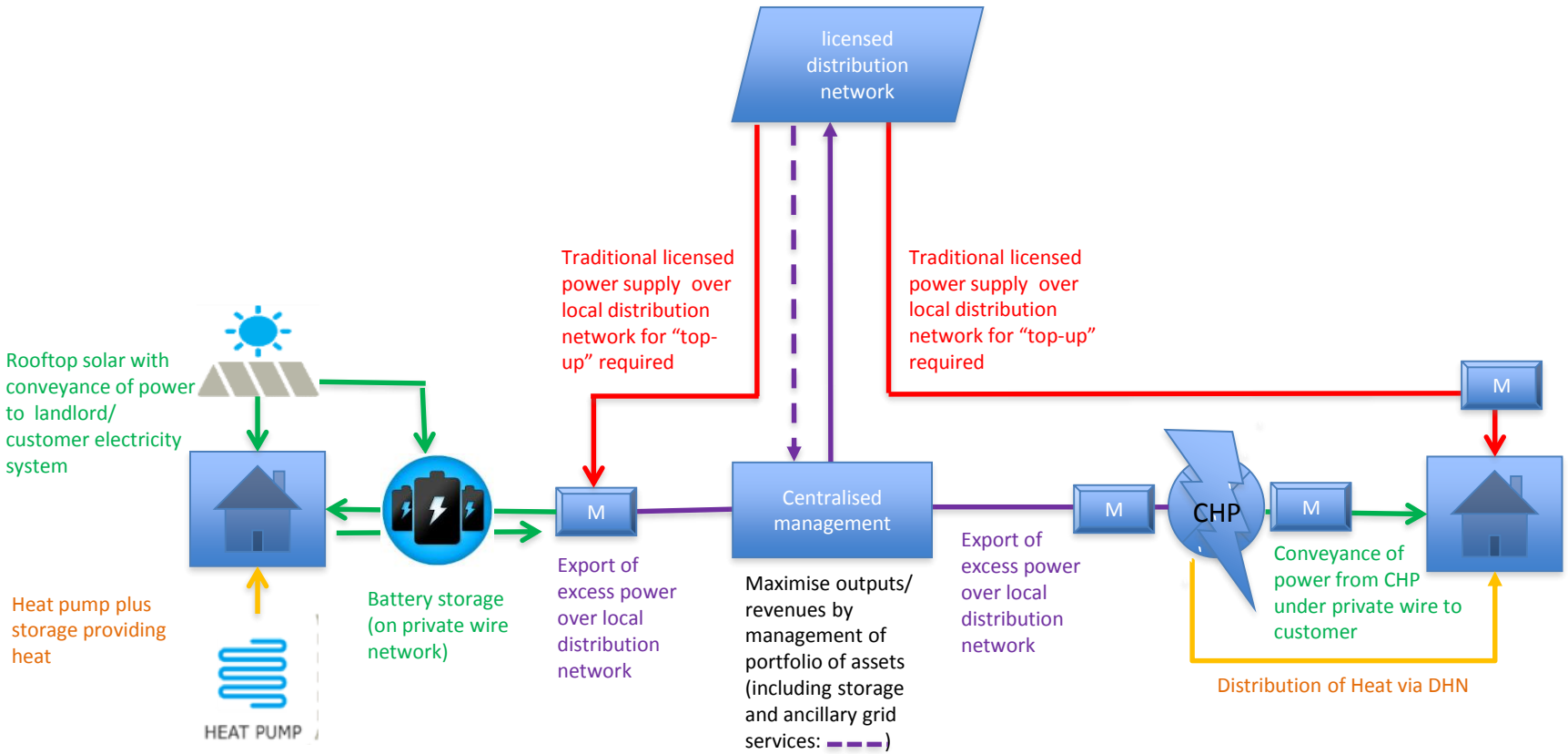
6. Breakout session

- Reminder of 3 models
- Consideration of what roles businesses may take

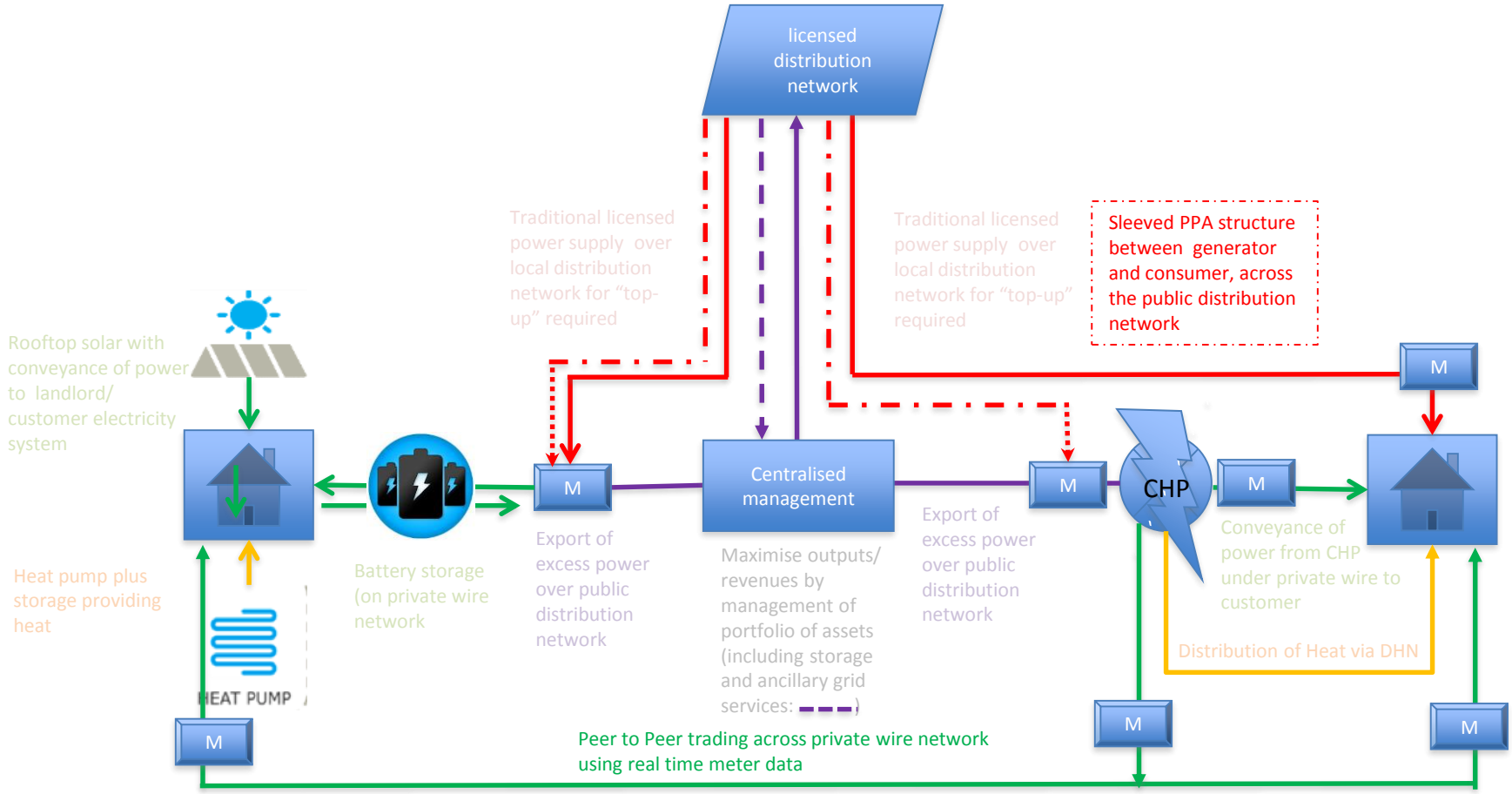
6. Breakout Session Recap: Model 1



6. Breakout Session Recap: Model 2



6. Breakout Session Recap: Model 3



6. Breakout Session: potential MRBD business roles (1)

Role	Which stakeholder?	Roles and Responsibilities (examples)

Developer	• Either a third party developer wishing to undertake low carbon development on the MRBD or an individual or group of businesses on the District willing to undertake development risk with a view to returns.
	• Most roles of developer normally ceases in relation to a particular asset on "financial close".
	• Same stakeholder(s) entity(ies) potentially also asset owner/ generator/ operator
		• Defining physical nature of the project
		• Commissioning studies to establish the viability of the potential electricity or heat projects and networks.
		• Identifying funding options
		• Defining the scale and timing of demand for heat, electricity or ancillary services
		• Co-ordinating other stakeholders, including potentially sourcing funding
		• Co-ordinating advisors to enable project development
		• Arranging (and possibility procuring) supply chain for project delivery:
		  • Equipment supply
		  • Design & Build/ Installation

6. Breakout Session: potential MRBD business roles (2)

Role	Which stakeholder?	Roles and Responsibilities (examples)
Asset Owner	• Either third party specialist company (such as an ESCo provider), or an individual or a group of businesses on the District who wish to make returns from owning energy generating infrastructure • Ownership could be split for different classes of assets (eg primary and secondary heating networks, CHP plant, solar plant) and returns could be made from renting assets (for example, from a use of system charge), or from generation revenue streams. • Normally ownership is a long term function and survives completion of installation and repayment of finance, however beneficial ownership of assets may vary over lifetime of a project (e.g. equity may vary). • Same stakeholder(s) entity(ies) potentially also developer/ generator/ operator	• Securing an income stream to match its responsibilities and to cover its risks • Insuring or procuring insurance for the assets • Ensuring the assets are maintained and components replaced when life expired • Contracting with installers, maintenance providers, and service companies (where the Asset Owner does not undertake such activities itself)

6. Breakout Session: potential MRBD business roles (3)

Role	Which stakeholder?	Roles and Responsibilities (examples)

Generator/ Operator (Generation Assets)	• Either third party specialist company (such as an ESCo provider), **or**
	• Individual or a group of businesses on the District who wish to make returns from:
	  • operating assets to generate heat and/or
	  • Electricity and/or
	  • providing storage service and/or
	  • providing maintenance services.
	• Same stakeholder(s) entity(ies) potentially also developer/ asset owner
		• Undertakes specialist generation/ storage activities and/or management of asset to maximise output/ value of asset
		• For a CHP asset will also be responsible for purchasing gas and electricity for generation of heat/ electricity
		• For a CHP asset will be required to meet minimum output / quality standards in relation to heat (and potentially cooling and electricity) for onward delivery to Customers
		• For all assets, ensuring minimum availability/ performance standards are met
		• Undertaking maintenance, repair and (in some cases) replacement works (NB some of these functions may be subcontracted)

6. Breakout Session: potential MRBD business roles (4)

Role	Which stakeholder?	Roles and Responsibilities (examples)

Generator/ Operator (Generation Assets)	• Either third party specialist company (such as an ESCo provider), or
	• Individual or a group of businesses on the District who wish to make returns from:
	  • operating assets to generate heat
	  • and/or electricity; or
	  • providing storage service and/or providing maintenance services.
	• Same stakeholder(s) entity(ies) potentially also developer/ asset owner
		• Undertakes specialist generation/ storage activities and/or management of asset to maximise output/ value of asset
		• For a CHP asset will also be responsible for purchasing gas and electricity for generation of heat/ electricity
		• For a CHP asset will be required to meet minimum output / quality standards in relation to heat (and potentially cooling and electricity) for onward delivery to Customers
		• For all assets, ensuring minimum availability/ performance standards are met
		• Undertaking maintenance, repair/ replacement works (NB some of these functions may be subcontracted)

Operator (non - generation assets)	• Likely to be specialist company (although could be individual/ group of businesses on the District), responsible for ensuring operation of distribution infrastructure • Role may involve charging users of the infrastructure (eg a generator or a supplier) for use of the assets.	• Undertakes management of asset to ensure availability for power flows • May also be involved in management of real time data flows across the local distribution infrastructure in order to assist in the matching of demand and generation

6. Breakout Session: potential MRBD business roles (5)

Role	Which stakeholder?	Roles and Responsibilities (examples)
Heat/ Electricity Supplier	• Either third party specialist company (such as an ESCo provider), or an individual or a group of businesses on the District who wish to make returns from supplying customers with heat or electricity. • Note, the sale of heat or electricity as a service is distinct from the physical delivery of the commodity. • Same stakeholder(s) entity(ies) likely to also be the generator on a private wire/ heat network, however note where activities licensed under the Electricity Act take place, there is mandated separation of generation, distribution and supply roles.	• Procuring heat/ power/ cooling delivery to customers • Metering • Billing • Undertaking price reviews • Attracting and securing new customers • Collection of revenues • Managing customer debt and default • Communicating with customers
Customer	• Any individual business on the MRBD wishing to be supplied with locally generated heat/ electricity and entering into a relevant heat supply agreement/ power purchase agreement. • The Customer may also be a landlord who is a bulk purchaser of heat/ electricity/cooling which is then supplied on to tenants or a tenant of a landlord undertaking such role.	• Agreeing terms of purchase agreement (e.g. price formula, service levels, carbon intensity) • Paying an agreed price for the service • In relation to heat, may operate a secondary and/or tertiary network within customers unit/ building/ block in accordance with the terms of the supply agreement (e.g. maximum return temperature)

6. Breakout Session: potential MRBD business roles (6)

Role	Which stakeholder?	Roles and Responsibilities (examples)
Funder	• A third party funder (debt/ equity) or any business or group of business on the district, wishing to provide funding to a generation (or storage) project on the district. • Role ceases once finance has been repaid (for example on an asset sale or following debt repayment).	• The role of the Funder will depend on the type of finance (debt or equity), the term of the finance and the manner in which the interest of the Funder are secured (for example through assignment of rights to shares, a direct agreement, a lien over assets or shareholder rights pursuant to a Shareholders Agreement). • The Funder will provide sources of financing and enter into relevant loan or shareholder agreements • Some Funders will have certain governance functions over a project to ensure that appropriate revenue streams are generated in order to pay interest/ dividends on debt/ equity.
Regulator/ Governance	• A collective body of interested stakeholders on the MRBD, which have the relevant powers (eg through a governance agreement/ concession agreement) to enforce standards in relation to heat/ electricity/ cooling/ other related services. • May be the same entity as the developer.	• Setting overall direction and objectives for the energy generation and supply across the MRBD. • Overseeing commercial behaviour and high level performance • Taking high level commercial decisions • Monitoring performance standards • Resolving disputes between generators/ operators and customers • Enforcing fair pricing

6. Breakout Session: potential MRBD business roles (7)

Role	Which stakeholder?	Roles and Responsibilities (examples)
Landlord	• The role can relate to land or roofspace on which the generation assets/ distribution assets are located or the building to which the heat/ electricity/ cooling is delivered. • The relevant stakeholders will be de facto be the relevant businesses on the MRBD who have title to relevant plots of land/ buildings and who are wanting to utilise such land	• Granting leases for siting of generation assets • Granting easements for routing of buried assets • Providing rights of access for installation, operation maintenance and replacement of equipment • In relation to the Landlord of a building into which services are delivered, responsibilities may also include: • ensuring generator/ operator / supplier has sufficient rights of access to equipment located within the building/ tenants' demises (normally through appropriate provisions in tenant leases) • insuring network assets within the building • maintaining and replacing network assets within the building
Tenant	• The relevant stakeholders will be de facto be the relevant businesses on the MRBD who have rented relevant plots of land/ buildings. • It is assumed such tenants will also be customers of heat/ electricity/ cooling services.	• As for customers • May also include obligations to permit access to service providers to ensure relevant assets can be operated/ maintained

6. Breakout Session: Key Questions for MRBD Businesses (1)

- What role could you see your business taking? (e.g.)
  - Passive consumer of low carbon/ green energy?
  - Renewable or low carbon heat and/or electricity Generator:
    - With own building consumption?
    - With tenant consumption?
    - With trading?
  - Developer with equity to invest?
  - Equity investor only?
  - Stakeholder in site wide energy arrangement?
  - Active trader of power?

6. Breakout Session: Key Questions for MRBD Businesses (2)

- What is your main incentive to undertake one of these roles?
- Would you be interested in engaging with other businesses on the MRBD to maximise the potential of on-site renewable energy generation?
- Do you think WSCC has a continued role in facilitating businesses to become more engaged/ establish more co-ordinated renewable power generation?
- What do you see as the main barriers to developing on-site renewable energy generation on MRBD?

6. Breakout Session: Key Questions for MRBD Businesses (3)

- Next Steps:
  - What will be your next steps to engage with delivery of on-site renewable solutions?
  - What would be your expected timeline for engagement/ delivery?
  - Who within your organisation will take this forward?

7. Questions