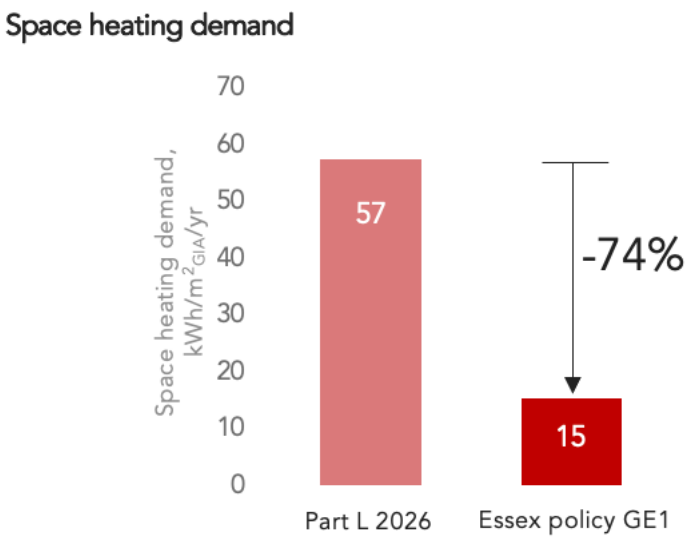
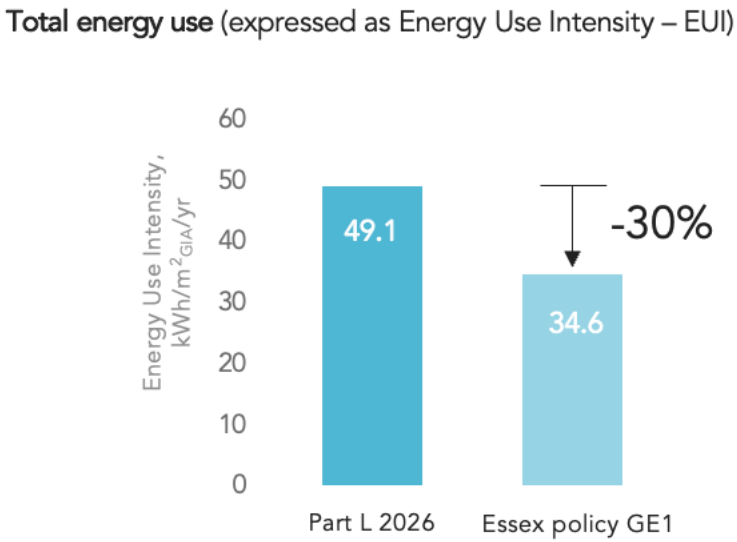




TASK 2.2 – COMPARISON BETWEEN ESSEX POLICY GE1 AND CONFIRMED FUTURE HOMES STANDARD (Part L 2026)

INCLUDING COST ANALYSIS FOR RESIDENTIAL TYPOLOGIES

Etude

Introduction

Study objective

The objective of this study is to explore the cost difference in building a typical semi-detached house to Essex's model GE1 policy and the *confirmed* Future Homes Standard (FHS)/Part L2026 specification (details of the FHS were published in March 2026).

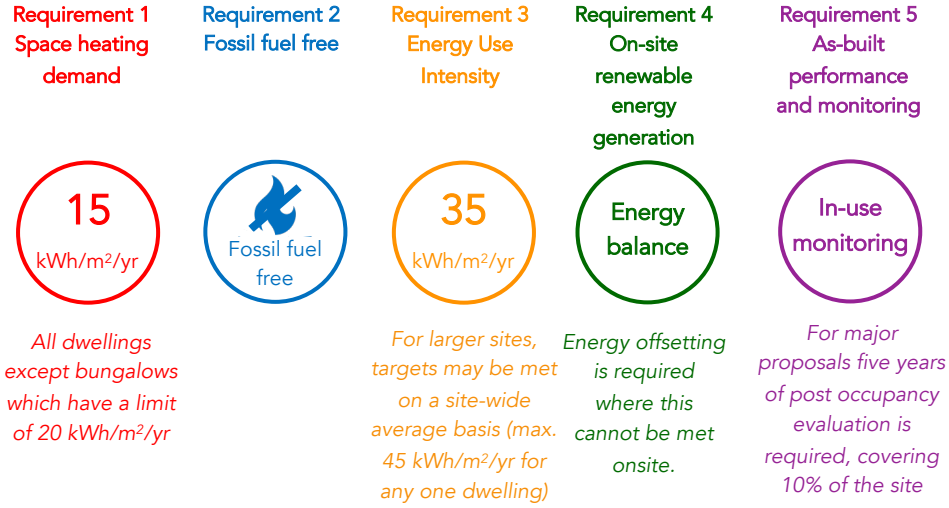
Key requirements of the model energy and carbon policy for Essex

The key targets and requirements of the model planning policy (GE1: Operational Energy & Carbon in Homes and Buildings) are summarised on the right.

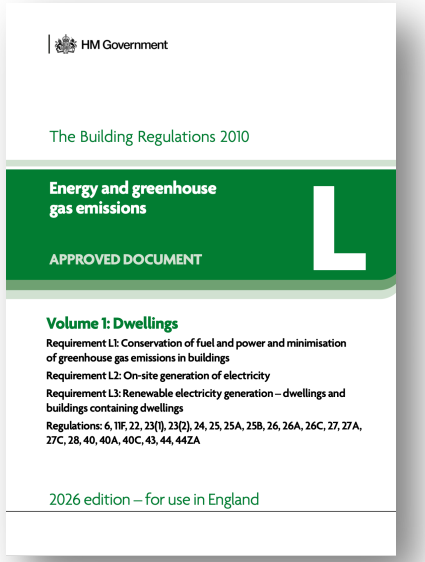
The confirmed Future Homes Standard

Part L 2026 (or the Future Homes Standard) replaces Part L 2021 - the building regulations on energy and carbon reduction requirements for new homes. The standard was released in March 2026. The notional building specification is given on the following page. Compared with Part L 2021 the main changes are:

- The notional building includes an Air Source Heat Pump.
- The carbon factors used in the calculation are much lower and mean that dwellings with gas boilers are unable to pass.
- There is a requirement for solar PV on all new homes and it cannot be offset by improving energy efficiency of the building (see appendix B for more information on solar PV for Part L 2026).
- The amount of solar PV required will be based on matching or exceeding the generation of an unshaded array of a size equivalent to 40% of the ground floor area (GFA), facing south-east, inclined at 45 degrees.
- Applicants will be required to maximise PV across any available roof space (regardless of orientation and shading) to meet the minimum generation requirement.
- Improved air-permeability (from 5m^3/m^2/yr to 4 m^3/m^2/yr), but no other changes to the notional building fabric specification.



Summary of Essex's model planning policy [GE1: Operational Energy& Carbon in Homes and Buildings](#).



Part L 2026 (or the Future Homes Standard) was released in March 2026

Methodology

The semi-detached house from the Essex Specifications Guidance

The modelling and analysis in this report has been done using the semi-detached house typology (a common typology in Essex).

The specification modelled and costed in this analysis has been taken from the Essex Building Specification Guidance published in September 2025 (Introba, Etude, Levitt Bernstein, Currie & Brown) which identified specifications that met the GE1 model policy requirements for different dwelling typologies (see appendix A).

The Future Homes Standard / Part L 2026 specifications

The confirmed notional building specification for Part L 2026 has been used as the baseline against which energy performance, capital costs and running costs are compared. See appendix A for details of the specifications used, and also see caveat note on the right.

Energy modelling

Energy modelling has been undertaken using PHPP 10.6.

Solar PV requirement and generation

The required kWp for Part L 2026 compliance has been calculated using the Part L 2026 methodology. The actual annual output has been calculated by taking the required kWp for compliance and using the Photovoltaic Geographical Information System (PVGIS), which accurately predicts actual electricity generation based on location (Chelmsford in this case). We use this for energy balance and energy costs purposes.

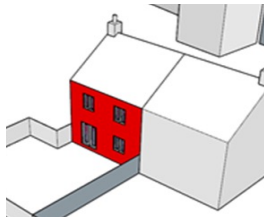
Capital cost modelling

The specifications for each scenario were passed to Currie & Brown for costing using 2026 Q1 cost data (see Appendix D for more detail).

Energy cost modelling

Estimated energy costs were modelled by Etude using our in-house methodology. See Appendix C for details.

The semi-detached house has been used as the basis for this study.



Scenarios modelled		Description
Baseline	**Future Homes Standard / Part L 2026 notional building specification**	• Fabric and services – as per notional specification (see following page for details). • Solar PV as per minimum requirement – see appendix B for details. • kWp of baseline building adjusted to match generation requirement with the actual building's orientation, inclination and overshading (using UK average weather file).
Policy GE1	**Policy GE1 compliant specification + PV to meet Part L 2026**	• The specification identified in the Essex Specifications Guidance (September 2025). • Solar PV – as per Part L 2026 requirement (because it exceeds Essex's energy balance requirement for this particular dwelling).

Caveat note on Part L 2026 compliance

At the time of undertaking this analysis Part L 2026 was only recently released. We have been examining the new requirements carefully, and software providers have been providing steady updates to their SAP 10.3 compliant software. At this time there are still some anomalies that need to be ironed out (e.g. the notional building specification falls slightly short of meeting the Target Emissions Rate (TER) – this should not be the case).

Rather than potentially artificially increasing the fabric performance (which already passes the fabric tests) or increasing the amount of solar PV to "pass", our response is to continue to match the notional building specification for the baseline on the assumption that these teething issues will be ironed out.

Essex model policy GE1 vs Part L 2026 – Requirement 1: Space heating demand

Policy GE1 delivers a significantly lower space heating demand

Requirement 1 of Essex's model policy GE1 Operational Energy and Carbon in Homes and Buildings, requires homes to achieve a space heating demand of 15 kW/m^2/yr (or 20 kWh/m^2/yr in the case of bungalows). For this semi-detached house, this policy requirement achieves a reduction in space heating demand of 74% compared to the Part L 2026 scenario.

A lower space heating demand brings many co-benefits

Space heating demand is a measure of how well insulated a building is, and how efficiently it is ventilated.

To achieve the space heating demand targets required by policy GE1, the baseline building specification is upgraded as follows:

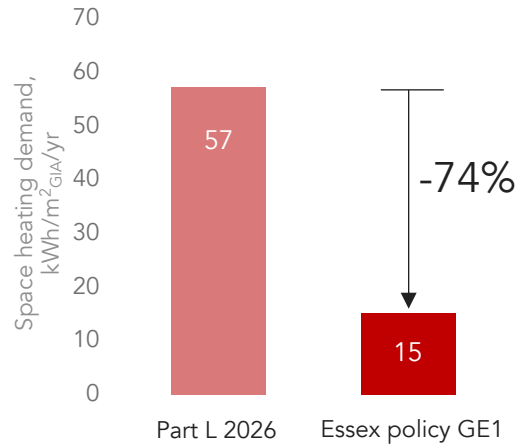
- Better insulated walls, roofs and floors – this will reduce the risk of condensation and mould;
- Triple glazed windows (rather than double glazed) – this will reduce cold drafts and reduce the risk of condensation and mould;
- Excellent levels of air-tightness – this will further reduce drafts and improve comfort;
- Mechanical ventilation with heat recovery (MVHR), a ventilation system that efficiently recovers heat from outgoing air. Incoming air is filtered and pre-heated – this will deliver improved indoor air quality and comfort.

More flexibility and more resilience

A more insulated, more air-tight dwelling loses heat much more slowly and requires much less heat to keep warm. Therefore:

- A home with a very low space heating demand will give occupants the option to use their heat pumps flexibly and save money – running them when electricity is cheap and avoiding peak times.
- Occupants will be less exposed to increases in energy costs.
- Homes will be more resilient in the case of any power outages and extreme cold weather.

Space heating demand



The building fabric and ventilation system of the Essex policy GE1 compliant semi-detached house are much more efficient than a home built to Part L 2026 standards.

Essex model policy GE1 vs Part L 2026 – Requirement 3: Energy Use Intensity (EUI)

Policy GE1 delivers lower overall energy demand

Requirement 3 of Essex's model policy GE1, requires homes to achieve an energy use intensity (EUI) of 35 kW/m^2/yr. Energy use intensity reflects the total energy use of a building.

For this semi-detached house, this policy requirement achieves a reduction in total energy use of 30% compared with Part L 2026.

Lower total energy use will lead to lower energy bills

The total energy use of a building directly impacts running costs and energy bills. We compare potential differences in running costs between the two scenarios on page 6.

Taking a simplistic view, a home that uses 30% less energy will cost 30% less to run. However, the presence of solar PV also has a big impact on energy costs. Therefore, our energy cost analysis on page 6 also considers solar PV.

Lower total energy use reduces impact on the local electricity grid

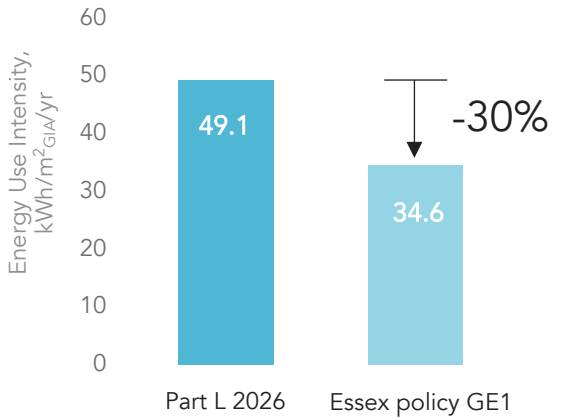
As our energy systems move away from fossil fuels the demand for electricity continues to rise, and will continue in coming decades. Meeting increasing electricity demands nationally and locally will require investment in electricity generation infrastructure. The lower the total energy use of new developments, the less additional strain they place on infrastructure.

This will also be true of peak heating demands in the winter.

The EUI metric is a helpful performance indicator that Part L 2026 does not measure

The EUI metric is a very useful metric for understanding the energy performance of buildings. It includes all energy used in the building (not just regulated energy*), is simple to understand, and it can be monitored in-use by measuring electricity consumption at the meter. It also allows us to easily compare energy performance between buildings.

Total energy use (expressed as Energy Use Intensity – EUI)



The Essex policy GE1 compliant semi-detached house would be much more energy efficient, using 1,350 kWh less than the same house if it was only compliant with Part L 2026.

*regulated energy is energy consumption covered by building regulations Part L 2026 and incudes heating, hot water, pumps and fans. It does not include energy used for appliances and cooking and therefore does not represent total energy use measured at the energy meter.

Essex model policy GE1 vs Part L 2026 – Requirement 4: On-site renewable energy generation

Essex's policy GE1 Requirement 4 requires at least an energy balance to be achieved with solar PV on-site.

The renewable energy generation requirement for Part L 2026 has been significantly improved compared with Part L 2021. A good level of renewable energy generation is now required for all dwellings (exemptions are allowed only after all practicable roof space has been used for solar PV).

For the two-storey semi-detached house we have assessed, meeting the minimum renewable energy requirement for Part L 2026 actually delivers a PV array that generates more energy than the home uses in the course of a year - in other words, the energy balance is exceeded.

Therefore, in this case, the Part L 2026 requirement requires more renewable energy than Essex's policy GE1 requirement.

The Part L 2026 renewable energy requirement will not always achieve an energy balance

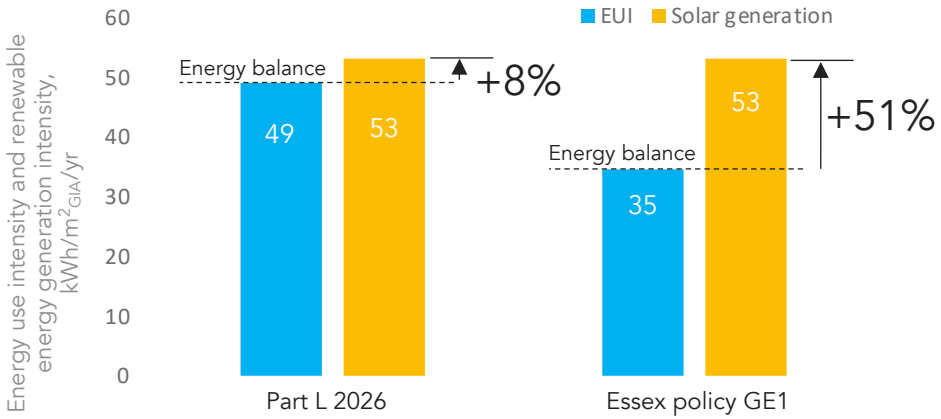
For dwellings and buildings with more than 2 storeys, the energy balance requirement will likely be greater than the Part L 2026 renewable energy requirement. This is because the Part L 2026 renewable energy requirement is based on a function of ground floor area, but total energy is a function of total floor area.

For this reason, Essex's policy GE1 energy balance requirement goes further than building regulations for many dwelling types, particularly high-density developments.

Energy offsetting

Where the energy balance requirement cannot be met on-site there is the possibility of an allowance to offset the shortfall through payment into an Essex energy offset fund. The offsetting requirement will likely be triggered on higher density developments and will result in an increase the amount of renewable energy generation in the local area, contributing towards the requirement for clean, local electricity generation.

On-site renewable energy



The amount of solar PV required to achieve the Part L 2026 renewable energy requirement exceeds the energy balance in both scenarios for this semi-detached house. For the Essex policy GE1 scenario, the Part L 2026 functional renewable energy requirement is the driver for the the renewable energy generation, not the energy balance, as it is the greater of the two.

Essex model policy GE1 vs Part L 2026 – comparing energy costs

Policy GE1 delivers lower running costs

Requirements 1-4 of Essex's model policy GE1, deliver lower overall running costs compared with a home just compliant with Part L 2026.

In the case of this particular semi-detached house, the policy is predicted to deliver annual running costs savings of 62%*.

Actual running costs can be highly variable

There are many factors that affect running costs of a dwelling: import tariffs, export tariffs, how much solar energy is used directly in the building, the presence or not of a battery, the quality of construction and occupant behaviour. All of these variables act independently of each other and therefore variations between one dwelling and another can be large.

Policy GE1 protects occupants from the biggest variations

However, policy GE1 gives occupants greater protection from potential swings in import tariffs through the lower space heating demand and lower overall energy use, compared with a just Part L 2026 compliant home.

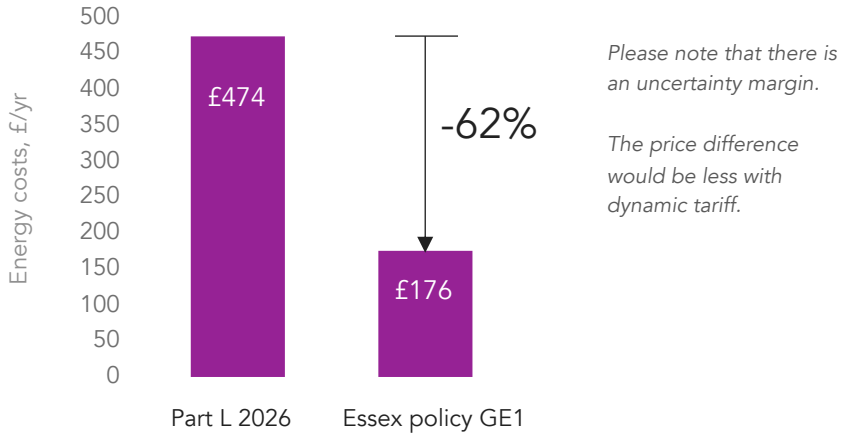
Of note in this respect is requirement 5, which requires monitoring in-use. This requirement may lead to better overall construction quality and useful learnings for future developments.

Dynamic tariffs and batteries can lower energy bills further

Where occupants are able to take advantage of dynamic tariffs, energy bills can be reduced even further. This is particularly the case with homes built to policy GE1 requirement 1, as the lower space heat demands affords flexibility over when the home is heated, allowing occupants to use electricity when it is cheapest.

Battery storage will further enable energy bill reductions.

Annual energy costs



Please note that there is an uncertainty margin.

The price difference would be less with dynamic tariff.

Energy cost modelling shows that the Essex policy GE1 compliant semi-detached house would cost 62% less to run than an identical house that was only compliant with Part L 2026.

**predicted running costs are highly dependant on the assumptions made in the calculation. Please see the appendix C for details of our running costs methodology and assumptions made.*

Essex model policy GE1 vs Part L 2026 – comparing capital costs

Policy GE1 costs marginally more to deliver than Part L 2026

Requirements 1-4 of Essex's policy GE1 will cost marginally more to deliver than a home only just compliant with Part L 2026.

The % cost uplift will vary depending on the particular dwelling, but in the case of this semi-detached house the uplift is calculated to be 3.9%.

The increase in upfront capital costs delivers ongoing benefits:

The increase in capital costs is mostly due to higher levels of building fabric insulation, triple glazing (as opposed to double glazing) and mechanical ventilation with heat recovery.

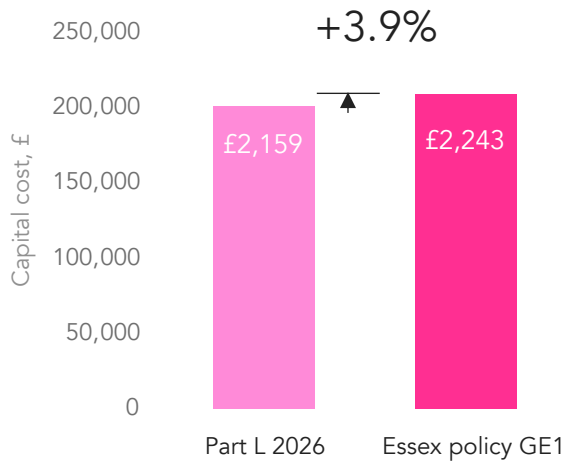
These all deliver ongoing benefits for occupants:

- A better insulated home, with significantly lower heating demand and therefore more resilience to energy prices and disruption to energy supply.
- A more comfortable, resilient and healthy home, with less cold drafts.
- Better indoor air quality and improved health outcomes through the use of mechanical ventilation with heat recovery (MVHR).
- Lower energy bills
- Greater renewable energy generation (depending on the density of the development)
- New developments built to policy GE1 standards will place less demand for energy on the local electricity grid than developments built to Part L 2026 standards.

Consumer demand and likely higher value at sale

Due to the benefits of homes built to policy GE1 standards, homes will likely have a higher value at sale due to increased consumer demand for homes with low energy bills.

Capital costs



Capital costs are estimated to be 3.9% higher for the Essex policy GE1 house
Amounts in white labels are £/m².

What the changes to Part L mean for Essex's model policy GE1 (1 of 2)

This table summarises Essex's model policy GE1 requirements and provides comment on them in light of the changes to Part L 2026.

Requirement 1: Space heating demand	Policy justification	Recommendation
15 kWh/m²/yr *All dwellings except bungalows which have a limit of 20 kWh/m²/yr*	This policy delivers a space heating demand that is approximately 75% lower than the Part L 2026 compliant equivalent building (this is based on our modelling of the semi-detached house). Co-benefits of the space heating demand policy include: • Better insulated walls, roofs and floors – this will reduce the risk of condensation and mould. • Triple glazed windows (rather than double glazed windows) – this will reduce cold drafts and reduce the risk of condensation and mould. • Excellent levels of air-tightness – this will further reduce drafts and improve comfort. • Mechanical ventilation with heat recovery (MVHR), a ventilation system that efficiently recovers heat from outgoing air. Incoming air is filtered and pre-heated – this will deliver improved indoor air quality and comfort. • Resilience to energy price fluctuations and extreme cold weather.	Retain Requirement 1 in policy GE1 for the reasons outlined under policy justification.
Requirement 2: All new developments must be fossil fuel free	**Policy justification**	**Recommendation**
Fossil fuel free	The new Part L 2026 effectively removes the ability to install gas boilers in new homes and buildings. This is due to the notional building now including an ASHP, and the grid electricity carbon factors having been updated (they are now much lower). As a result, the carbon emissions associated with gas heating systems is large and has a negative impact on the ability to comply with the Target Emissions Rate (TER). It appears that it is not possible to pass Part L 2026 using a gas boiler in individual dwellings (more work is needed to understand the implications of gas boilers in heat networks).	Retain Requirement 2 in policy GE1 for the reasons outlined under policy justification. It is a backstop to any instances where homes with gas boilers are able to meet Part L 2026.
Requirement 3: Energy use intensity	**Policy justification**	**Recommendation**
35 kWh/m²/yr	Essex's policy will deliver homes with overall lower total energy use than a Part L 2026 equivalent home. This, together with the presence of solar PV, will result in running cost savings for residents of approximately 62% (based on the semi-detached house). Benefits of the EUI policy include: • It is a target that can be measured at the meter. This means that energy performance can be verified in-use, providing valuable feedback which helps reduce the 'performance gap'. • It is directly related to energy costs. It helps protect occupants from high energy bills by limiting where direct electric heating can be used. • It may make inefficient heat networks unable to comply. • It potentially addresses the ability to use biomass heating in Part L 2026, which is not a viable or sustainable source of energy at scale.	Retain Requirement 3 in policy GE1for the reasons outlined under policy justification.

Continued on following page

What the changes to Part L mean for Essex's model policy GE1 (2 of 2)

This table summarises Essex's model policy GE1 requirements and provides comment on them in light of the changes to Part L 2026.

Requirement 4: On-site renewable energy generation	Policy justification	Recommendation
Energy balance	**How the Essex's policy GE1 performs compared with Part L 2026 requirements** Part L 2026 now includes a minimum solar PV requirement for all dwellings. The Part L 2026 requirement is based on ground floor area, in contrast to Essex's policy GE1 which is based on total energy use. Therefore, how the two approaches compare will depend on the number of storeys the building has: • For 2-storey houses - Part L 2026 is likely* to exceed the energy balance requirement (see page 5). However, if roof design is not optimized for solar PV this may not be the case. • For 3-storey houses and flats - the energy balance requirement is likely* to exceed the Part L 2026 requirement. *Further testing of different houses and flats with different number of storeys is needed. **Benefits of Essex's policy GE1 for on-site renewable energy generation** • The policy is likely to provide a greater ambition for dwellings of more than 2-storeys. • The policy can act as a back-stop requirement for all dwellings if there is a requirement to optimise roof design to achieve the policy requirement (this does not appear to be a strong requirement of Part L 2026). Appendix B gives more information on solar PV requirements under Part L 2026.	Retain Requirement 4 in policy GE1 for the reasons outlined under policy justification. The energy balance requirement provides a useful backstop for renewable energy generation. Particularly if accompanied by guidance on how roof design should be optimized for maximum solar PV generation, and if development management have the ability to challenge inefficient roof design.
	Renewable Energy Offsetting Mechanism Essex requires any renewable energy not met on-site to be offset through payment into an energy offset fund. This is a stronger requirement than Part L 2026, particularly for flats where the energy balance requirement will be difficult to achieve.	This part of policy requirement 4 should be retained as a requirement where an energy balance cannot be achieved on-site. The fund will be used to install additional renewable energy capacity elsewhere in the plan area or county e.g. rooftop solar PV on public amenity facilities.
Requirement 5: As-built performance confirmation and in-use monitoring	**Policy justification**	**Recommendation**
In-use monitoring	Requirement 5 helps to ensure that the objectives of policy GE1 are delivered in practice. The requirement to submit as-built performance information and undertake in-use energy monitoring for a proportion of dwellings will likely deliver the following benefits: • More attention to construction quality on-site, helping to close the widely acknowledged "performance gap" (where dwellings do not perform in practice as intended at design). • In-use monitoring can provide data that if fed back to project and design teams can build useful knowledge that can improve future dwellings.	Retain Requirement 5 in policy GE1 for the reasons outlined under policy justification. (Part L 2026 does not require in-use monitoring).

Appendix

Appendix A: Essex's model Policy GE1 vs Part L 2026 - specification and performance summary

The objective of this study is to compare the energy performance, capital costs and running costs of a Part L 2026 compliant home with a home compliant with Essex's model policy GE1 Operational Energy and Carbon in Homes and Buildings.

Part L 2026 (or the Future Homes Standard) was released in March 2026. The release confirms the energy and carbon requirements of new homes from March 2027.

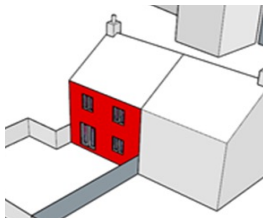
The semi-detached house from the Essex Specifications Guidance

The modelling and analysis in this report has been done using the semi-detached house typology (a common typology in Essex).

The specification modelled and costed in this analysis has been taken from the Essex Building Specification Guidance published in September 2025 (Introba, Etude, Levitt Bernstein, Currie & Brown) which identified specifications that met the GE1 model policy requirements for different dwelling typologies.

Energy modelling

We used PHPP 10.6 to calculate space heating demands and energy use intensities for the baseline and Policy GE1 scenarios. PHPP is proven to be an accurate tool to predict total operational energy consumption. PVGIS was used to calculate renewable energy generation



The semi-detached house has been used as the basis for this study.

Building element specifications	Part L 2026	Essex model policy GE1
Floor (W/m²K)	0.13	0.09
Walls (W/m²K)	0.18	0.12
Roof (W/m²K)	0.11	0.1
Windows (W/m²K)	1.2	0.8
External doors (W/m²K)	1.0	1.0
Thermal bridging (kWh/m²/yr)	2.55	2.55
Air permeability (ACH)	3.61	0.60
Air permeability (m³/(h.m²))	4	0.66
Ventilation (efficiency)	Decentralised MEV	MVHR (90%)
Space heating	ASHP	ASHP
Hot water	ASHP	ASHP
Solar PV (kWp)[1]	4.1	4.1
RESULTS		
Space heating demand[2]	57.3 kWh/m²/yr	15.1 kWh/m²/yr
Energy Use Intensity[2]	49.1 kWh/m²/yr	34.6 kWh/m²/yr
Energy Use	4,564 kWh/yr	3,218 kWh/yr
Renewable energy generation[3]	4,940 kWh/yr (with PVGIS)	4,940 kWh/yr (with PVGIS)
Capital cost change (£/unit)[4]	n/a	3.9% (or £84 /m²)
Running cost difference (/yr)[5]	n/a	-£298 / yr (or £24/month)

Notes

1. *kWp requirement calculated using SAP 10.3 as per Part L 2026 methodology.*
2. *SHD and EUI calculated using PHPP.*
3. *Renewable energy generation calculated using PVGIS.*
4. *Capital costs calculated by Currie & Brown.*
5. *Running costs calculated by Etude. See appendix C for assumptions.*

Appendix B: Solar PV - requirements of the Future Homes Standard (Part L 2026)

Solar PV as a mandatory requirement

Part L 2026 introduces a new functional requirement for solar photovoltaic (PV) panels on **all new dwellings**. This is a significant change from Part L 2021, under which PV was not mandatory. Critically, the amount of PV required cannot be offset by higher levels of energy efficiency, it must be provided.

The generation requirement

The amount of solar PV that must be provided on the actual building must meet or exceed the annual generation of a notional PV array. The capacity of the "notional" PV array (kWp) is determined by the ground floor area of the dwelling: **40% of ground floor area × 0.22 kWp/m²**. The generation of the "notional" PV array is determined using **fixed assumptions on orientation (south-east), tilt (45 degrees), and overshading (no overshading)** – therefore it does not mirror the actual building like other aspects of the notional building. The actual dwelling's solar energy generation must match or exceed that of the notional array, but must account for actual orientation, tilt and overshading. Compliance is assessed using the SAP methodology.

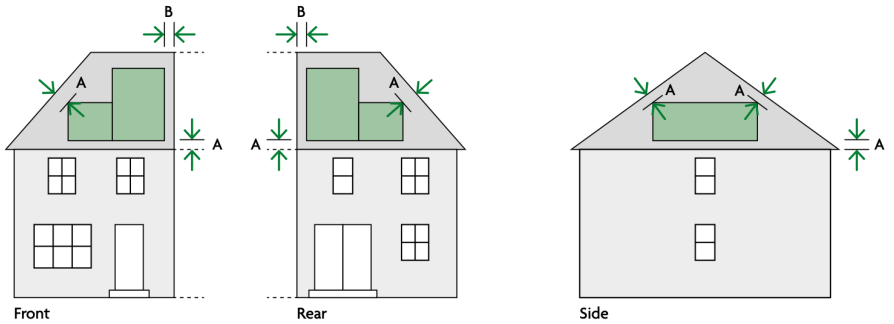
Rules for maximising solar PV generation

Solar panels must be installed on each "reasonably practicable roof area", with all roof faces used where necessary to meet the generation target, regardless of orientation or overshading. Minimum offsets from roof edges, ridges and windows must be adhered to.

Exemptions to Part L 2026 PV requirement

Exemptions are very limited. North-facing pitches and heavily shaded roofs are not exempt from the maximisation requirement. The only full exemption applies where, despite maximising PV across all roof faces, annual generation remains below **720 kWh/year**. Applications for exemption must include diagrams demonstrating maximised PV provision. How building control officers will make judgements on exemptions is unknown. Development management officers will have a role in ensuring solar PV is suitably maximised through roof design.

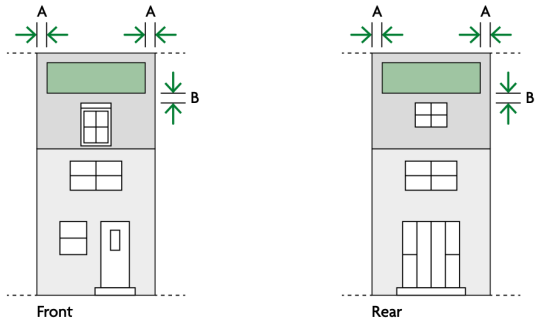
Foundation area	39m²
Photovoltaic area	16m²
Installed capacity	3.52kWp



A distance between panel and closest edge of roof (mm)
B distance between panel and party wall (mm)

Diagram B1 Semi-detached or end of terrace hipped roof

Foundation area	35m²
Photovoltaic area	8m²
Installed capacity	1.76kWp



A distance between panel and closest edge of roof (mm)
B distance between panel and window (mm)

Diagram B3 Mid-terrace pitched roof with dormer windows

These diagrams from the Approved Document L 2026 illustrate how PV must be maximised.

Appendix C: Running costs methodology

Running cost variables

There are many factors that affect running costs of a dwelling: import tariffs, export tariffs, how much solar energy is used directly in the building, the presence or not of a battery, the quality of construction and occupant behaviour. Each variable acts independently of each other and therefore the combination of variables used in calculations can have a big impact on the overall results. It is therefore not possible to be precise about potential future running costs.

Our running cost calculations methodology

To establish indicative comparative running costs for each scenario we need to make some assumptions. These are detailed on the right.

Selecting import and export tariffs

We use average price cap data from Ofgem from the previous year.

Import and export tariffs can change regularly and are influenced by external, global factors and therefore future tariffs are difficult to predict. For this reason, we use historic average data (1 year).

Price cap tariffs have been selected. Dynamic tariffs could further reduce running costs of both scenarios but these are not always available on the market and therefore have not been used.

Accounting for energy generation from solar

Solar PV on a dwelling impacts running costs in two ways:

1. Through using solar energy directly as it is generated (solar self-consumption). This offsets the need to import electricity from the grid at that time (and saves on imported electricity costs).
2. Through selling excess solar energy generation back to the electricity grid (exporting it).

The % of generated electricity used on-site will depend on the total electricity demand of the home and the size of the PV array. We use MCS guidance to determine the % solar self consumption figure.

	Assumptions	
Variables	**Part L 2026**	**Essex policy GE1**
Energy consumption	Energy modelling outputs from PHPP are used as the basis for establishing running costs for all scenarios. All energy uses are accounted for (space heating, hot water, lights, ventilation pumps, fans, cooking and appliances). EV charging is excluded.	
Performance gap	None assumed	
Electricity cost[1], £/kWh	£0.26	£0.26
Gas cost[1], £/kWh	n/a	n/a
Standing charges[2], £/yr	£200.60	
Solar export revenue[3], £/kWh	£0.15	£0.15
Solar self consumption[4]	31.8%	22.1%
Battery storage and smart controls	None assumed	
Construction quality (fabric and heating)	Not accounted for	
Occupant preferences and habits	Not accounted for	

Table of variables and assumptions used in the running cost modelling.

1. *Energy costs: Ofgem price cap, 2025 average.*
2. *Standing charges. Ofgem price cap, 2025 average.*
3. *Solar export: Ofgem Solar Export Guarantee 2025 average, tied tariff.*
4. *Solar self consumption: from MCS Guidance Note 'Determining the electrical self-consumption of domestic solar PV installations', "home all day" scenarios.*

Appendix D: Capital cost calculations methodology

Capital cost calculations methodology

- Capital costs calculated as incremental uplift (£/m² GIA) from baseline to improved energy specification and as percentage uplift over Building Cost Information Service (BCIS) baseline cost.
- Calculations based on building typologies specifications modelled by Etude for the baseline scenario (Part L 2026) and the policy GE1 compliant scenario.

Baselines used

- Future Homes Standard (FHS) baseline (as published).
- Only energy and carbon related elements were costed in detail; remaining construction costs are captured via the baseline build cost £/m² allowance.

Cost Sources

- Currie & Brown internal cost database.
- Reference baseline build costs were derived using BCIS average mean rate for the period of the last 5 years, with an uplift for Part L 2021.
- BCIS Q1 2026 indices for Essex location to account for inflation.

Note on capital cost methodology

The baseline cost approach has two separate components: the BCIS reference build cost database and the modelled specification uplifts.

The BCIS reference baseline build cost is taken from a sample of constructed buildings over the last five years. This provides a recent market-based construction cost benchmark. However, because the sample includes buildings delivered over a five-year period, it is likely to include schemes built to different regulatory standards. Most of the sample would be expected to reflect standards closer to Part L 2013, with only the most recent schemes beginning to reflect Part L 2021.

For this reason, the BCIS benchmark was not treated as a direct Part L 2021 baseline. A specific Part L 2021 uplift was applied to the BCIS figure to bring the reference baseline in line with current Part L 2021 requirements.

Separately, the energy/cost model then applies specification-based adjustments to reflect the Part L 2026 / Future Homes Standard specification (uplift over Part L 2021). The Part L 2026 / FHS-adjusted baseline was then used as the comparison point for deriving the Essex semi-detached house results.

In summary, the BCIS data provides the market-based starting cost, while the modelled data provides the additional cost adjustments needed to align that starting point with Part L 2026 / FHS requirements and then Policy GE1 energy and carbon requirements.