

EnergySmart challenges in Latvia's Residential Market

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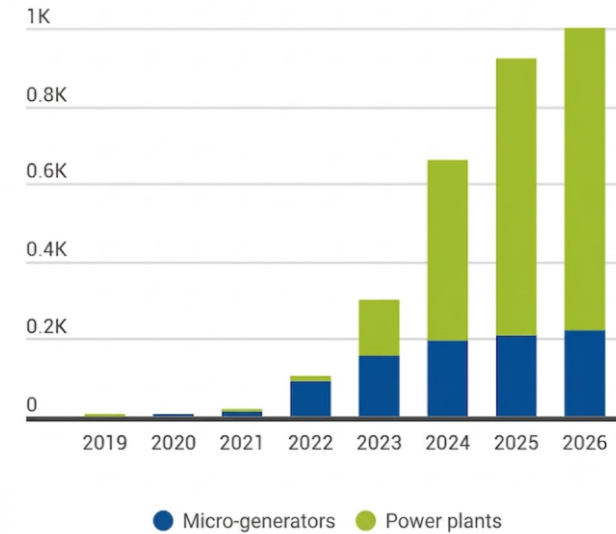
The B2C Market Landscape

Latvian residential market is facing unprecedented structural shifts. As renewable generation capacity increases and consumer behaviour evolves, the grid faces severe balancing challenges.

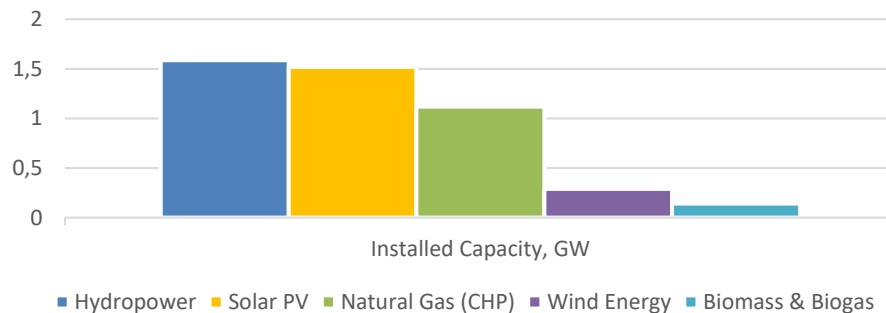
The current static two-way accounting system fails to incentivise active consumer participation during peak demand.

Our Challenge: Transitioning customers from passive grid users to active participants in energy optimisation.

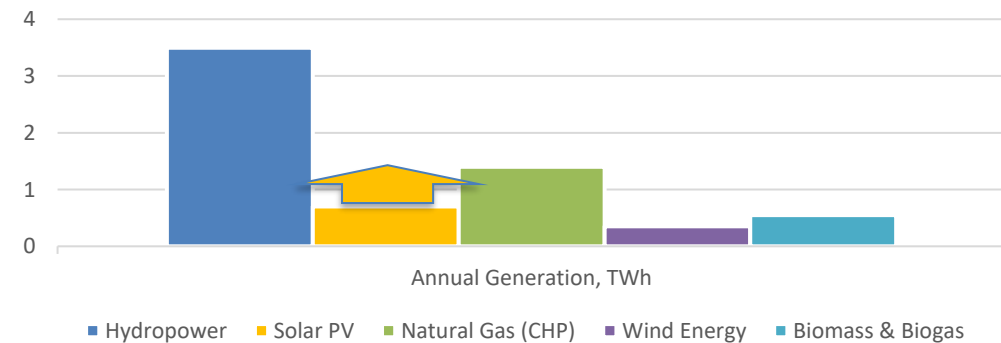
Connected Solar Generation Capacity (Cumulative), MW



Latvian electricity production capacities, estimate 2026



Latvian electricity production portfolio, estimate 2026



Nordpool spot prices 2024

Unusually high water levels
and early floods in the
Daugava river.

The 7-Month Disconnect (The EstLink 2 Bottleneck) Period: January 26 – September 6
Cut off access to cheap Scandinavian wind and hydro power for over 7 months. This
kept the baseline price in the Baltics artificially high all spring and summer.

Row Labels	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
0:00:00	0.071	0.052	0.053	0.054	0.076	0.103	0.110	0.106	0.053	0.054	0.047	0.044
1:00:00	0.075	0.053	0.053	0.048	0.073	0.105	0.118	0.113	0.051	0.054	0.051	0.046
2:00:00	0.069	0.050	0.051	0.044	0.064	0.089	0.085	0.098	0.047	0.042	0.046	0.043
3:00:00	0.065	0.048	0.050	0.041	0.062	0.082	0.083	0.086	0.044	0.045	0.044	0.040
4:00:00	0.066	0.047	0.048	0.042	0.061	0.077	0.072	0.086	0.045	0.041	0.044	0.041
5:00:00	0.071	0.051	0.055	0.045	0.065	0.073	0.072	0.092	0.054	0.048	0.050	0.043
6:00:00	0.093	0.069	0.062	0.057	0.078	0.082	0.092	0.103	0.072	0.075	0.063	0.061
7:00:00	0.122	0.078	0.073	0.077	0.102	0.102	0.112	0.130	0.106	0.118	0.090	0.084
8:00:00	0.172	0.096	0.097	0.096	0.118	0.111	0.118	0.147	0.125	0.159	0.114	0.125
9:00:00	0.161	0.099	0.090	0.086	0.079	0.091	0.096	0.116	0.109	0.145	0.117	0.141
10:00:00	0.147	0.089	0.070	0.065	0.062	0.069	0.080	0.094	0.082	0.100	0.108	0.130
11:00:00	0.141	0.075	0.062	0.052	0.045	0.058	0.064	0.070	0.066	0.088	0.101	0.112
12:00:00	0.132	0.069	0.057	0.045	0.039	0.045	0.051	0.050	0.055	0.074	0.099	0.109
13:00:00	0.138	0.076	0.053	0.042	0.030	0.046	0.051	0.049	0.050	0.078	0.096	0.108
14:00:00	0.130	0.072	0.054	0.038	0.030	0.043	0.045	0.047	0.049	0.078	0.103	0.111
15:00:00	0.138	0.078	0.060	0.035	0.034	0.041	0.052	0.046	0.051	0.085	0.109	0.121
16:00:00	0.149	0.083	0.069	0.037	0.045	0.042	0.061	0.059	0.060	0.087	0.121	0.131
17:00:00	0.157	0.093	0.077	0.045	0.058	0.055	0.070	0.091	0.090	0.109	0.139	0.129
18:00:00	0.151	0.106	0.092	0.061	0.074	0.087	0.103	0.106	0.131	0.151	0.145	0.124
19:00:00	0.141	0.100	0.106	0.084	0.112	0.128	0.132	0.167	0.174	0.171	0.124	0.117
20:00:00	0.121	0.089	0.095	0.104	0.146	0.180	0.183	0.212	0.210	0.151	0.104	0.105
21:00:00	0.114	0.082	0.079	0.104	0.150	0.198	0.202	0.219	0.143	0.105	0.081	0.085
22:00:00	0.105	0.074	0.067	0.080	0.122	0.171	0.170	0.156	0.087	0.075	0.072	0.070
23:00:00	0.084	0.064	0.060	0.066	0.096	0.123	0.129	0.122	0.065	0.062	0.061	0.053
Average	0.117	0.075	0.068	0.060	0.076	0.092	0.098	0.107	0.084	0.091	0.089	0.091

Nordpool spot prices 2025

Synchronization of the Baltic states with Europe (BRELL ring)

Unusually hot, plus from December 25, 2024, until June 19, 2025, the important interconnection between Finland and Estonia, EstLink 2, was out of service.

Increase of renewable energy (RES) – solar can cover >50% of domestic energy needs. Negative prices are common

Repairs and downtimes of interconnections (EstLink, NordBalt)

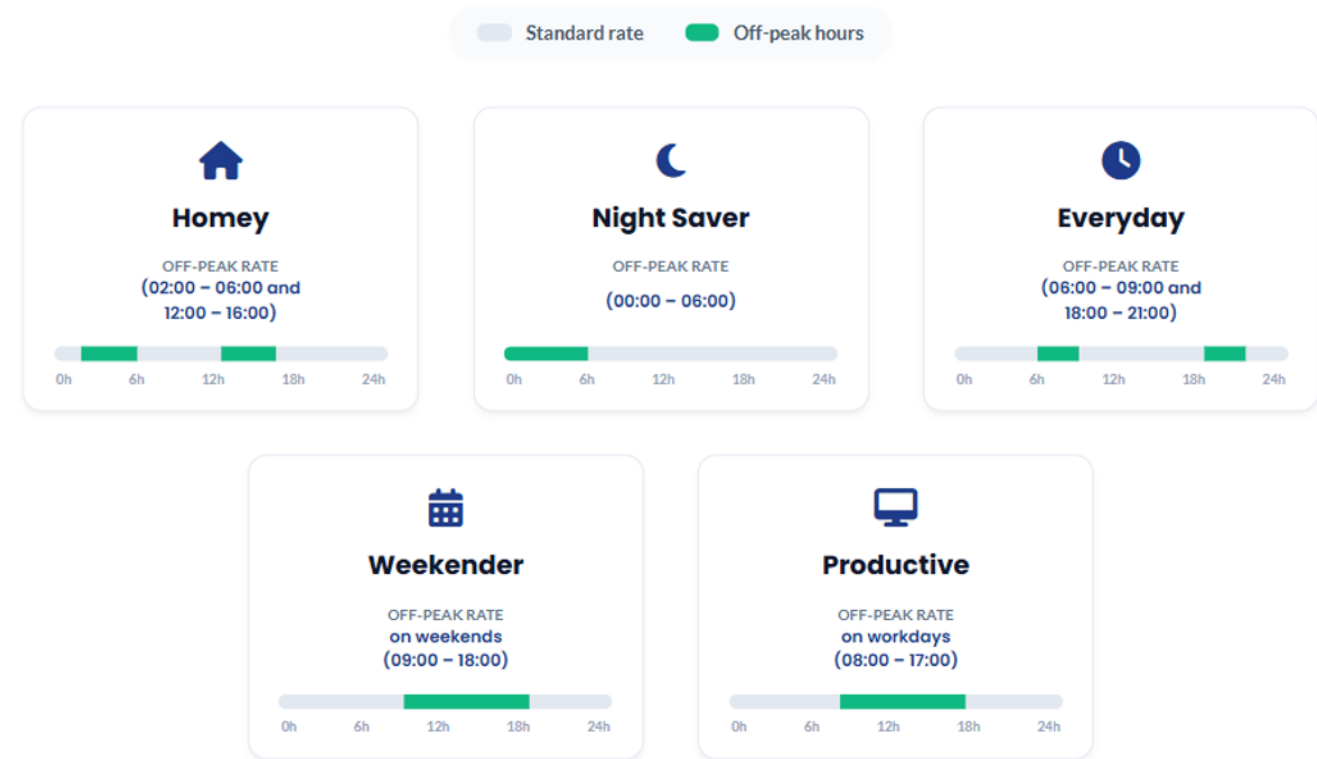
On October 1, 2025, a historic transition from 1-hour to 15-minute trading periods took effect across the entire European Day-Ahead (Day-Ahead) exchange.

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1:00:00	0.047	0.120	0.065	0.128	0.076	0.054	0.042	0.077	0.061	0.061	0.069	0.055
2:00:00	0.041	0.103	0.058	0.098	0.063	0.042	0.037	0.072	0.052	0.051	0.058	0.050
3:00:00	0.037	0.091	0.051	0.103	0.060	0.036	0.033	0.066	0.049	0.049	0.054	0.045
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5:00:00	0.043	0.103	0.062	0.093	0.068	0.033	0.031	0.066	0.054	0.057	0.062	0.047
6:00:00	0.060	0.153	0.094	0.200	0.084	0.046	0.039	0.079	0.089	0.089	0.091	0.053
7:00:00	0.088	0.167	0.127	0.395	0.088	0.059	0.050	0.094	0.124	0.151	0.113	0.078
8:00:00	0.117	0.214	0.145	0.376	0.089	0.057	0.054	0.100	0.141	0.221	0.131	0.101
9:00:00	0.138	0.211	0.103	0.197	0.072	0.041	0.050	0.083	0.106	0.149	0.146	0.114
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18:00:00	0.142	0.239	0.169	0.117	0.064	0.029	0.047	0.086	0.136	0.179	0.159	0.105
19:00:00	0.129	0.208	0.185	0.226	0.099	0.065	0.064	0.133	0.170	0.193	0.139	0.101
20:00:00	0.112	0.178	0.152	0.228	0.132	0.088	0.097	0.155	0.209	0.178	0.123	0.095
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23:00:00	0.054	0.131	0.080	0.091	0.108	0.073	0.065	0.099	0.073	0.084	0.068	0.063
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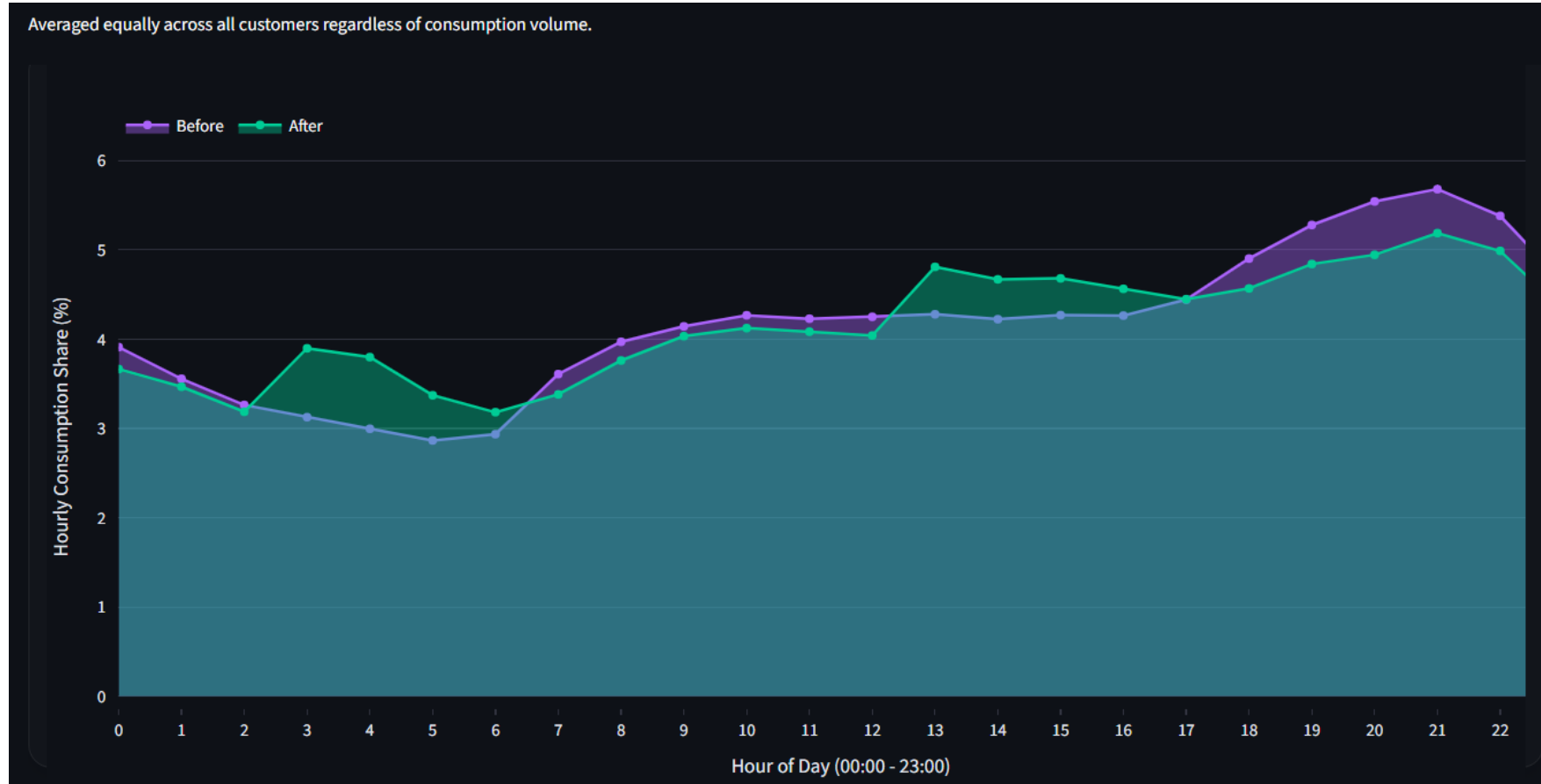
Power of Personalized Tariffs

Reshaping Habits: Ignitis is transforming consumption patterns by introducing truly personalized energy tariffs tailored to individual lifestyles.

- **Shifting Load:** We incentivize customers to move heavy usage away from peak network hours.
- **The Green Electron:** By shifting to off-peak hours, customers utilize "green electrons" - energy that is abundant, highly renewable, and fundamentally more cost-effective.
- **Win-Win Scenario:** Customers lower their monthly bills while Ignitis successfully mitigates intra-day price differences and high balancing costs.

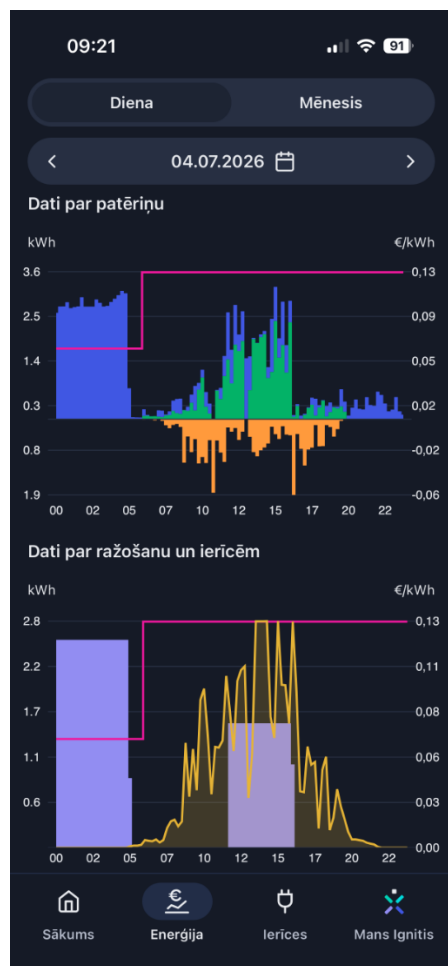


Power of Personalized Tariffs



By incentivizing usage during mid-day (high solar output) and nighttime, we flatten the evening peak. This perfectly balances the local grid and capitalizes on lower wholesale prices.

Smart Integrations & Forecasting



What we are doing now:

- **Predictive Forecasting:** Building consumption forecasts with partners to help clients optimize their energy use.
- **AI Analytics:** Using AI on metering data to identify the most resource-heavy appliances.
- **3rd-Party Integrations:** Collaborating with tech partners to provide consumers (and EV users) with clear visibility and highly accurate consumption forecasts.

What we plan for the future:

- **Automated Load Shifting:** Connecting directly to heavy appliances to automatically redirect energy use and production to the most efficient times, without sacrificing comfort.

Future B2C Ecosystem Plans

EV Smart Charging

Transitioning beyond simple charging. We will utilize algorithms to optimize EV charging schedules dynamically, aligning with low grid load and the cheapest green tariffs available.

Solar Curtailing

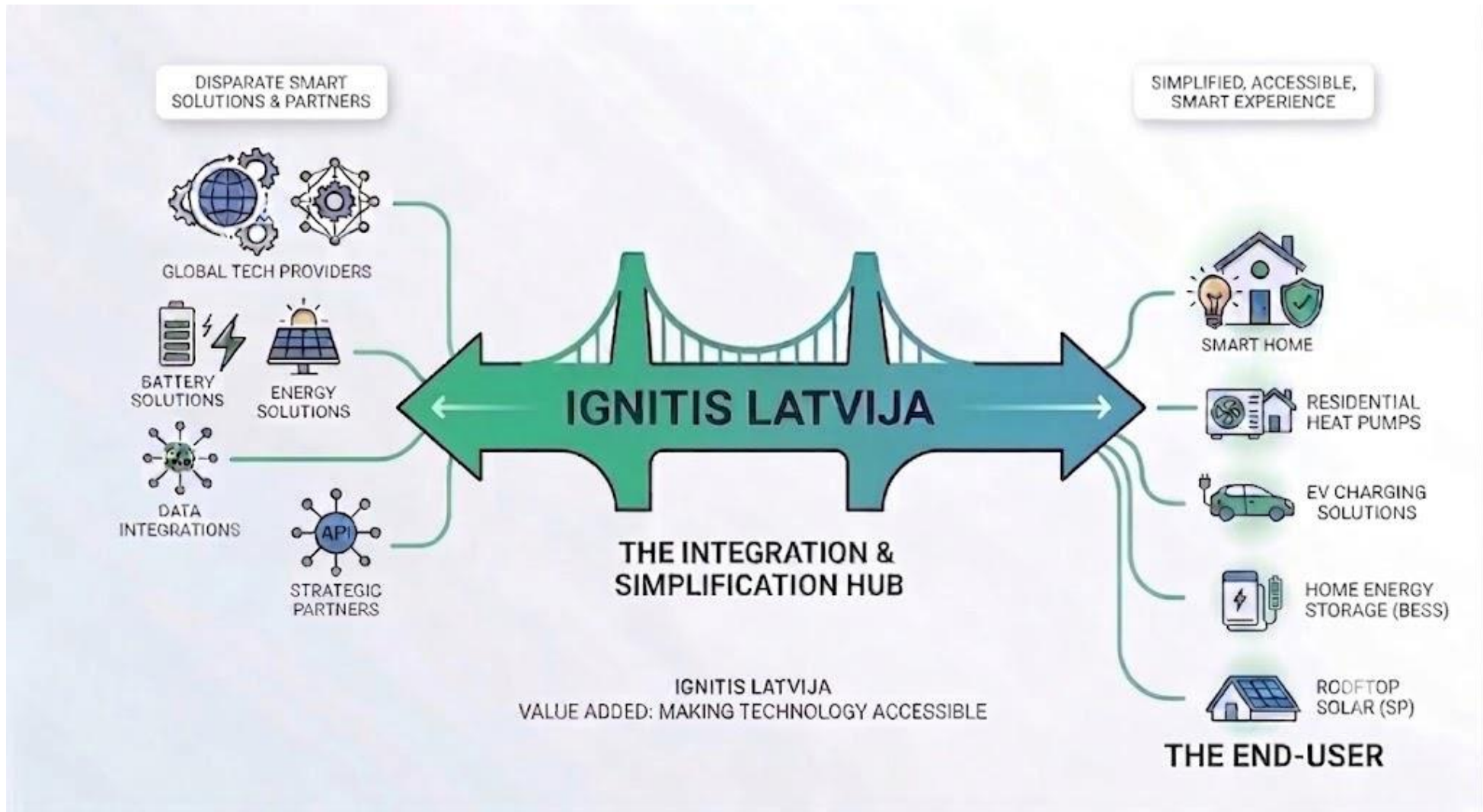
Intelligently managing residential solar generation. By controlling inverter outputs during extreme negative price events, we protect the grid and prevent prosumer-generated market losses.

Battery Flexibility

Unlocking the potential of residential energy storage. Future integrations will allow B2C customers to discharge home batteries back to the grid, actively participating in network balancing.



Our added value and needs

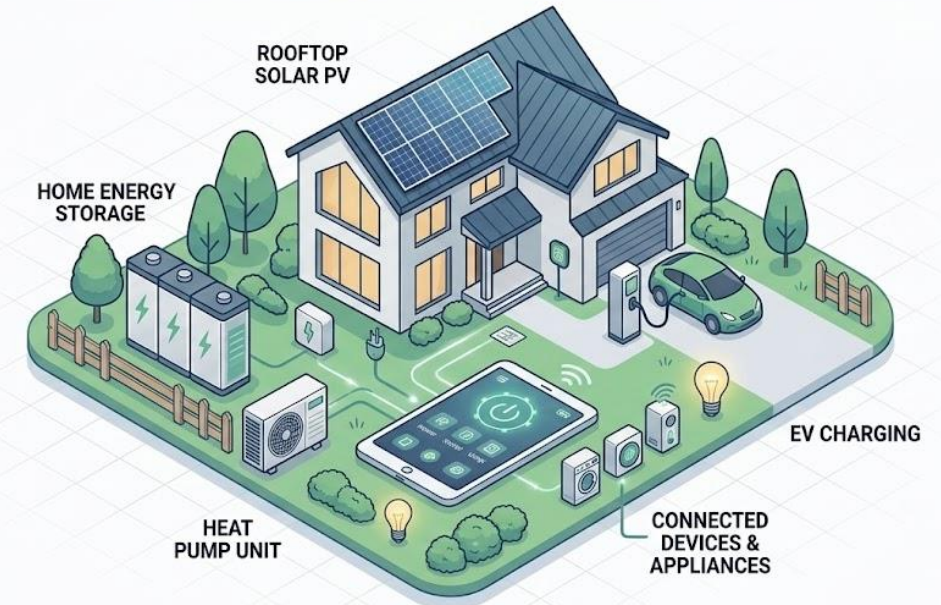


What We Need?

The Idea: We cannot build this bridge alone. To overcome these technical hurdles and deliver this seamless experience to the end-user, we need strategic partners in smart solutions.

The Ask: We are looking for tech innovators and integration partners who can provide the "smart" layer. While Ignitis Latvija clears the regulatory paths and manages the energy market side, we need partners to help us package these complex integrations into a simplified, accessible, and user-friendly final product for our clients.

INTEGRATED SMART HOME SYSTEM





Let's build a smarter grid.

Thank you for your attention. Any questions?