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TIMEPAC-2022

International Workshop

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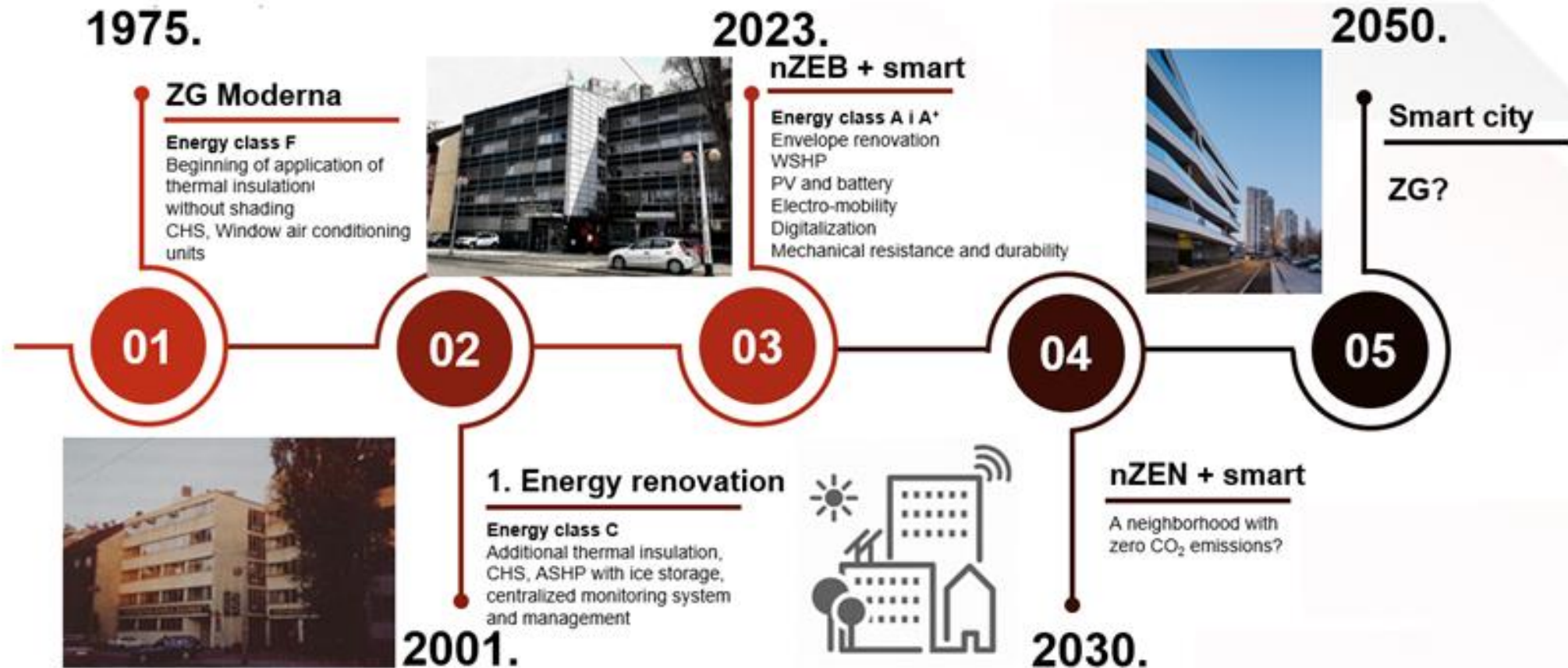


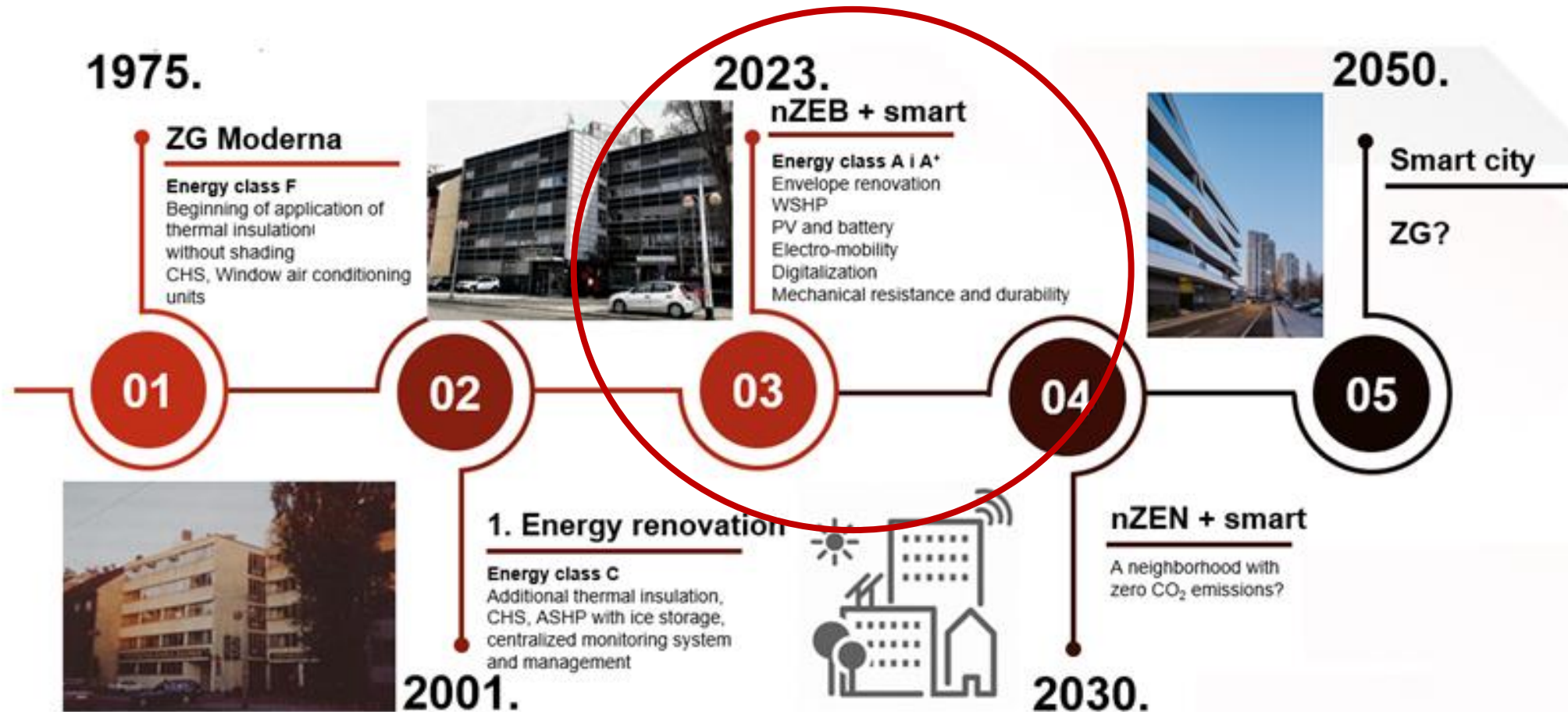
**Politecnico
di Torino**

Selection of the optimal solution for deep energy renovation of a building

Ružica Budim

Associate Consultant, Energy Institute Hrvoje Požar, Croatia





... not just one building

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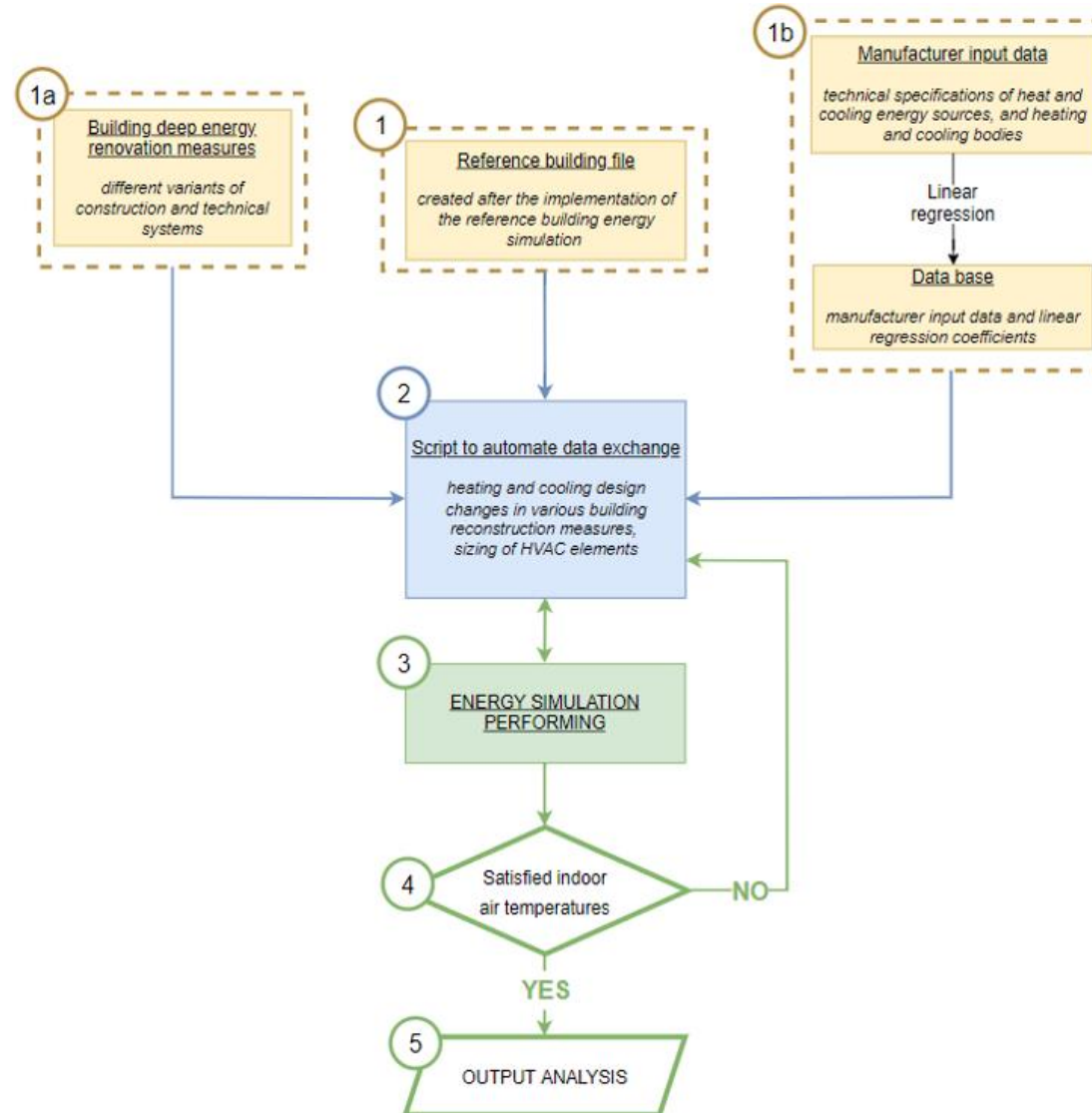
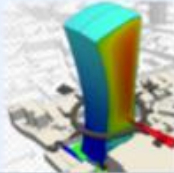


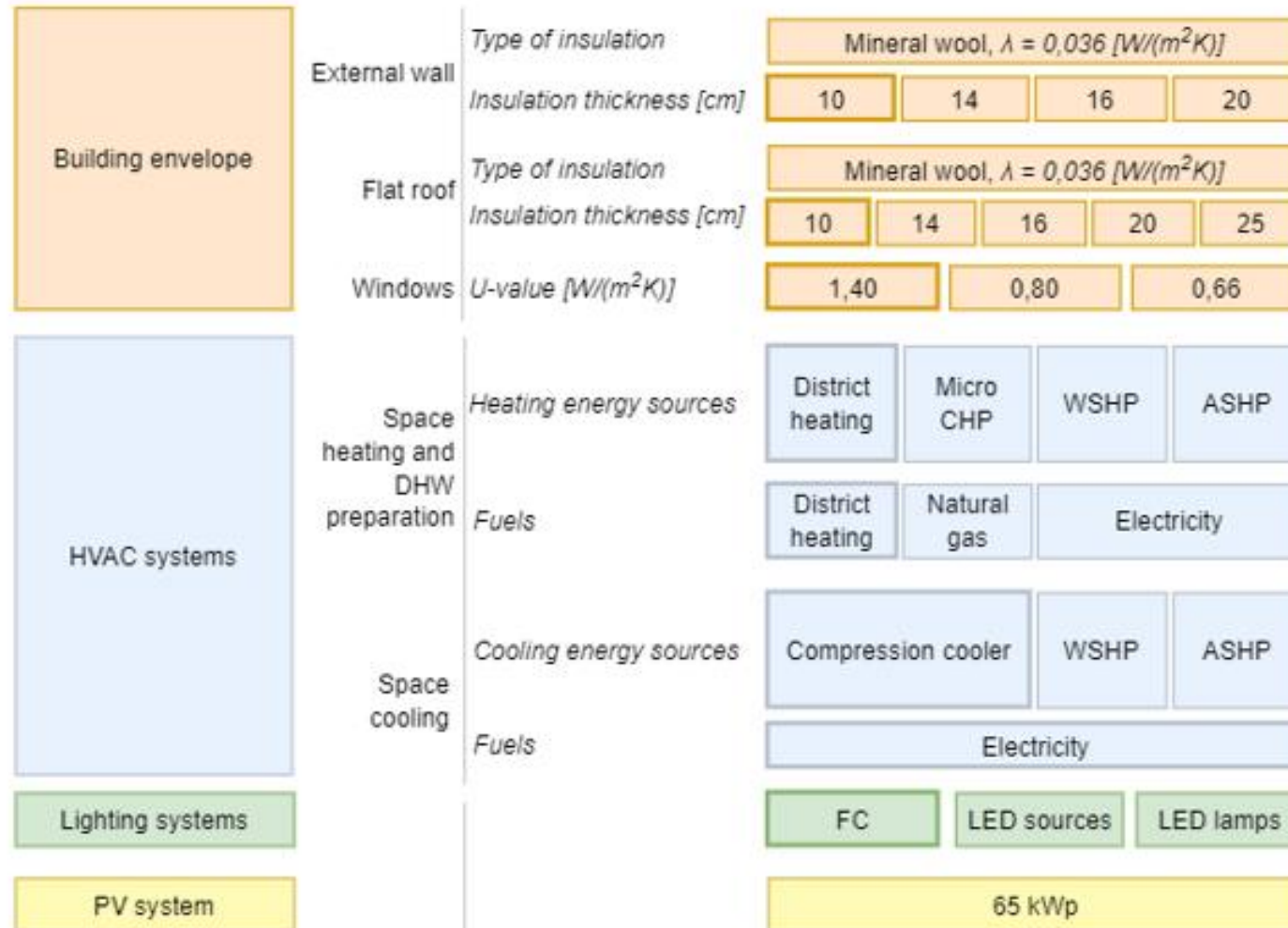
NEW METHOD!

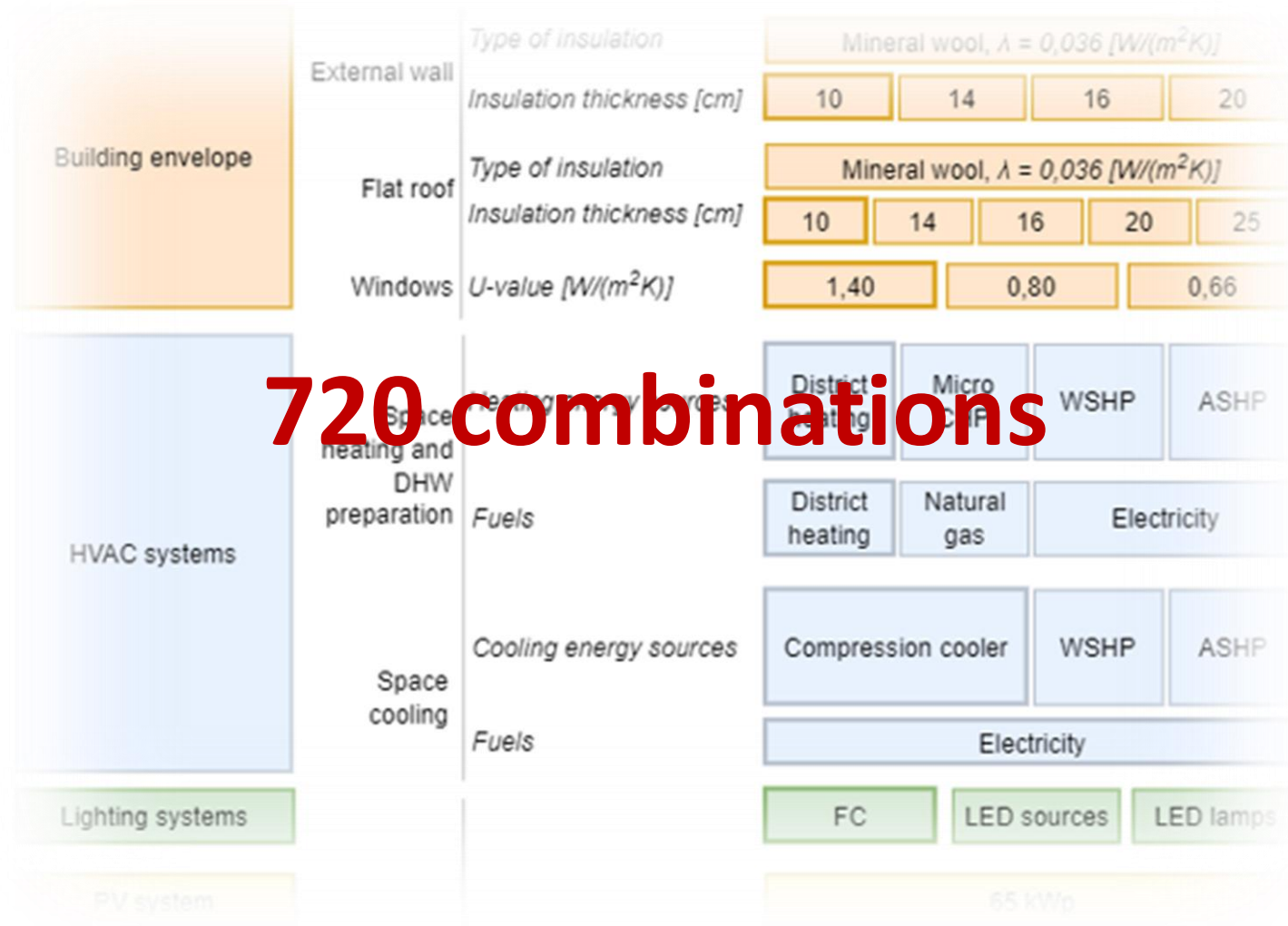


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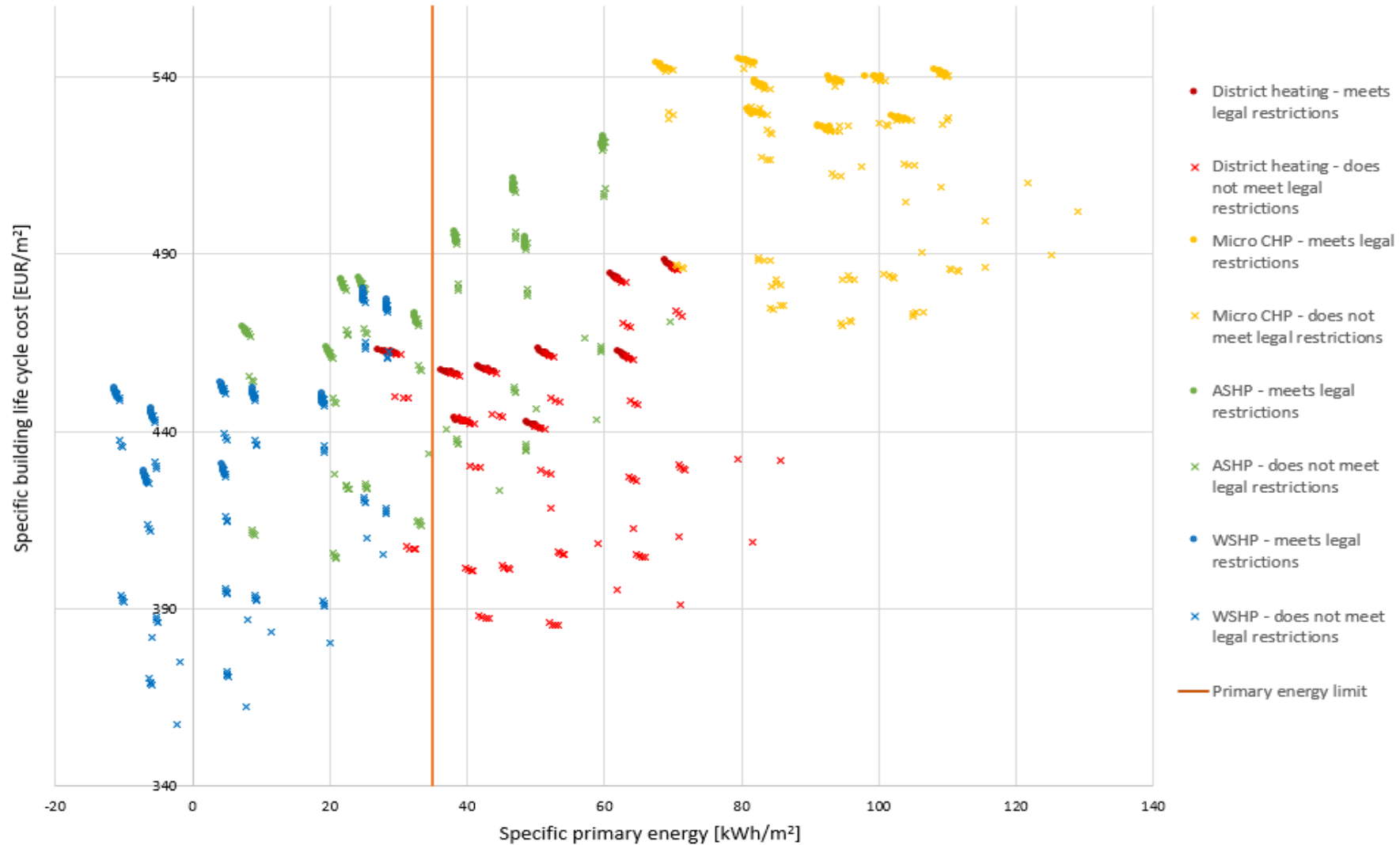
Performing dynamic simulation
implementation of huge number of combinations of building deep energy renovation measures

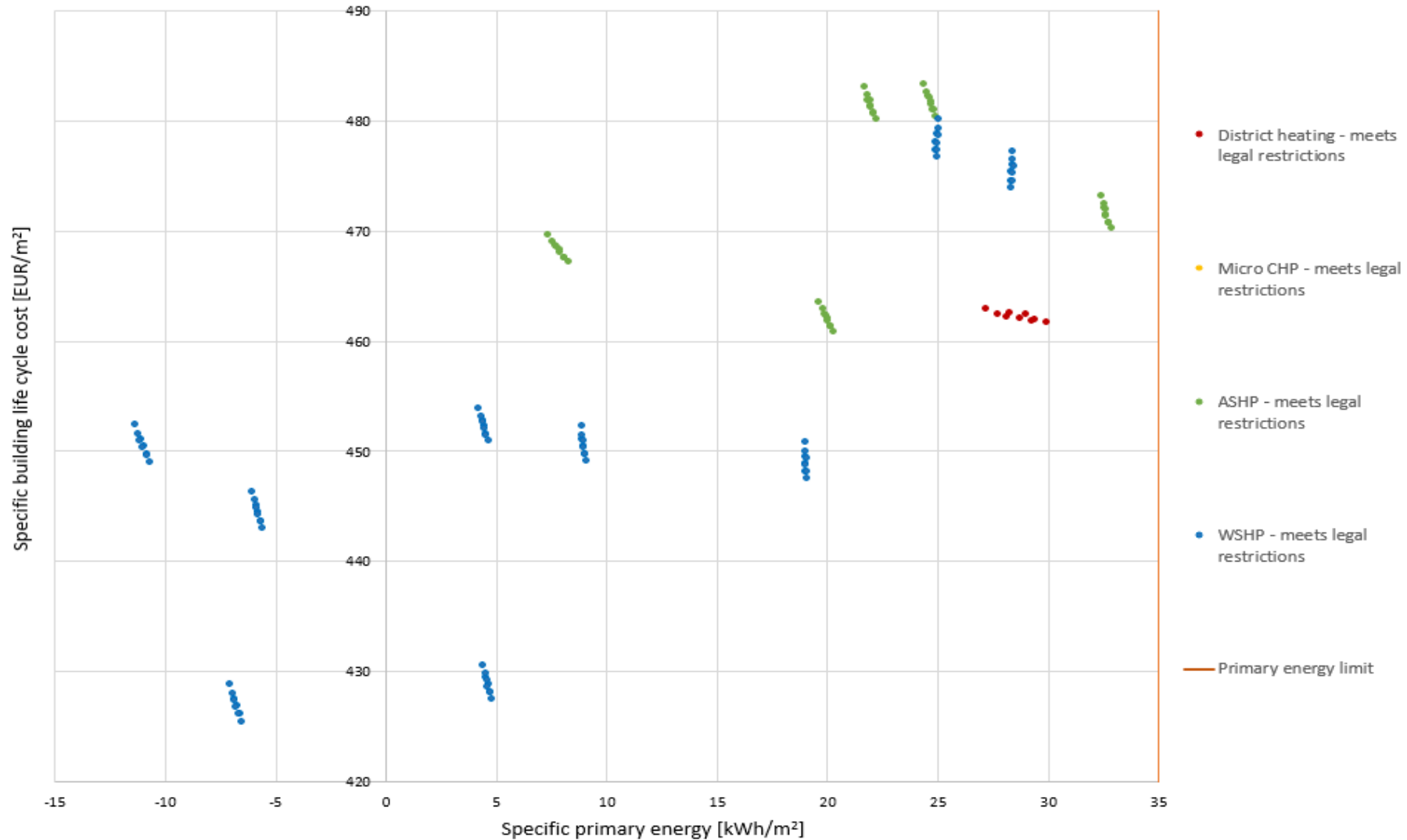






720 combinations





- Optimal solution of building deep energy renovation

Source of heating/cooling energy	E_{prim} [kWh/(m ² a)]	Specific building life cycle cost [EUR/m ²]	Lighting system	External wall insulation thickness [cm]	Flat roof insulation thickness [cm]	Window U -value [W/(m ² K)]
WSHP	-6	425,5	LED lamps	14	16	1,40

- Manual entry of all combinations: 4950.7 times slower than the proposed method

**If you would like more information,
please contact us at**

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Thanks for your attention!