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Energy Efficiency
Beyond Standards

DOMESTIC HOT WATER HEATING – SBT BUFFER

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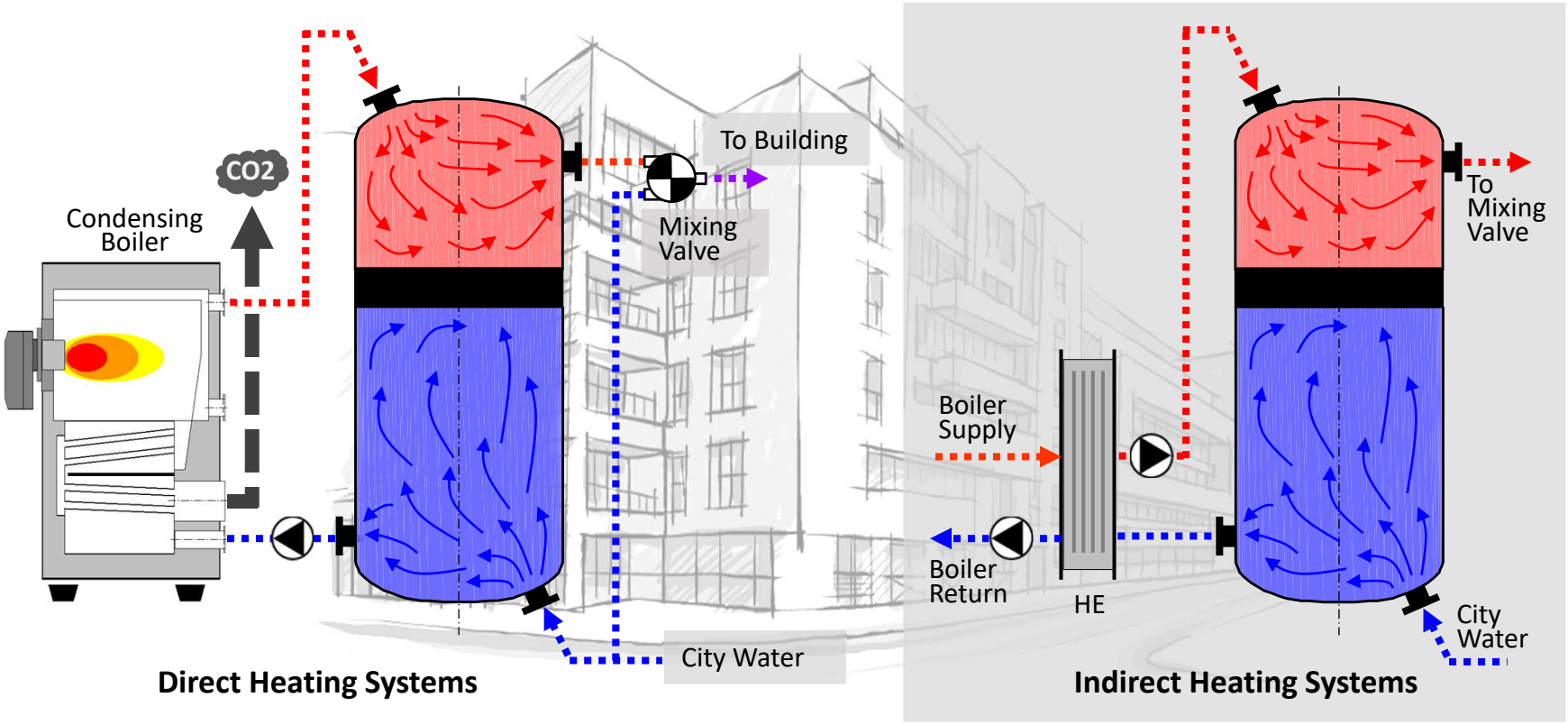

LEGEND:

P – Pump
HE – Heat Exchanger
SBT – Split Buffer Tank

Low Temp. Return
High Temp. Supply
Medium Temp.[Mixed water]

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DOMESTIC HOT WATER HEATING – COMMERCIAL BUFFER

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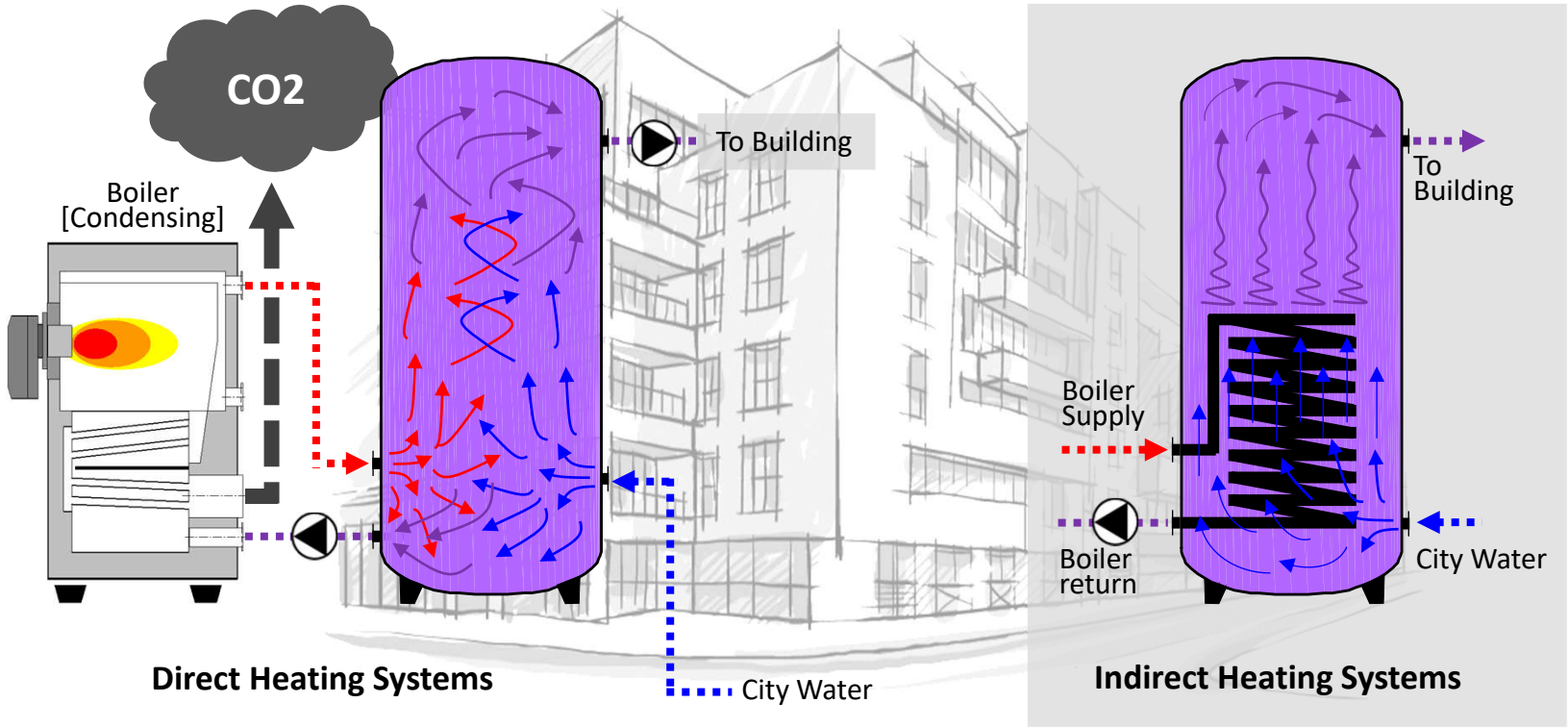

LEGEND:

P – Pump
E – Heat Exchanger
SBT – Split Buffer Tank

Low Temp. Return
High Temp. Supply
Medium Temp.[Mixed water]

SBT DOMESTIC HOT WATER HEATING ADVANTAGE

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- Replacing existing boiler-direct/indirect heating [operating with conventional commercial buffers/water heaters] with new boiler-SBT doubles hot water production capacity.
- Condensing-boiler/SBT system operation installation increase energy efficiencies by 40% due to higher ΔT ≈ 40˚C/50˚C operation, compared to **ΔT ≈ 10˚C/20˚C.**
- New SBT on-stream control optimize hot water tank capacity by overcoming inefficient hotwell temperature censoring on conventional commercial tanks.
- Reduce boiler wear and tear maintenance costs caused by short-cycling.
- Allow seamless building-heating/DHW operation. Many building heating/DHW integrated systems impose DHW high-temperature requirements to the building's secondary heating system, forcing boilers to continuously operate on non-condensing mode.
- Reduce CO_2e emissions from boiler-DHW inefficient operation.
- Improve cash flow opportunities from reduced CO2 emissions.