Supplementary Material

for the Atmosphere (MDPI) article entitled "**Low-Cost Sensor Monitoring of Air Quality Indicators during Outdoor Renovation Activities around a Dwelling House**" by László Bencs

total length of SM: 2 pages (3 Tables and 1 Figure)

Table S1. Timeline of the renovation activities between August 1st and September 26th, 2022.

August 1-7.	week before the renovation
August 8.	rain day (intermission)
August 9.	demolition of the garden workshop and old fence at the side street
August 10.	demolition of old fence at the main street
August 11.	building a substructure for the new fence
August 12.	building a foundation for the new fence (1st row of bricks)/iron pols
August 13-14.	weekend (intermission)
August 15.	building the bottom part for new fence (2nd row of bricks)/iron pols
August 16.	fixing the iron crossbars/railing (welding)
August 17.	fixing the iron crossbars/railing (welding)
August 18.	painting the iron bars/railing (paint primer)
August 19.	painting the iron bars/railing (cover paint)
August 20-21.	weekend (intermission)
August 22.	rain day (intermission)
August 23.	fitting/(with screws) the metal plates on railing (upper part of fence)
August 24.	fitting the metal plates on the railing
August 25.	rain day (intermission)
August 26.	fitting the metal plates on the railing
August 27-28.	weekend (intermission)
August 29.	fitting and cementing brick layer (cap) on the top of the plinth
August 30.	fitting and cementing brick layer (cap) on the top of the plinth
August 31.	painting the bottom part of the fence (paint primer)
September 1.	rain day (intermission)
September 2.	rain day (intermission)
September 3-4.	weekend (intermission)
September 5.	fixing the new side gate
September 6.	painting the plinth of the fence (colour paint)
September 7.	painting the plinth of the fence (colour paint)
September 8.	painting the plinth of the fence (colour paint)
September 9.	rain day (intermission)
September 10-11.	weekend (intermission)
September 12-18.	week after the renovation (Week-7)
September 19-26.	week after the renovation (Week-8)

Figure S1. Summary of the meteorological conditions (air temperature, air pressure, wind speed, wind gusts, precipitation) during the sampling campaign, registered at a nearby weather station (Gilice square, Budapest).

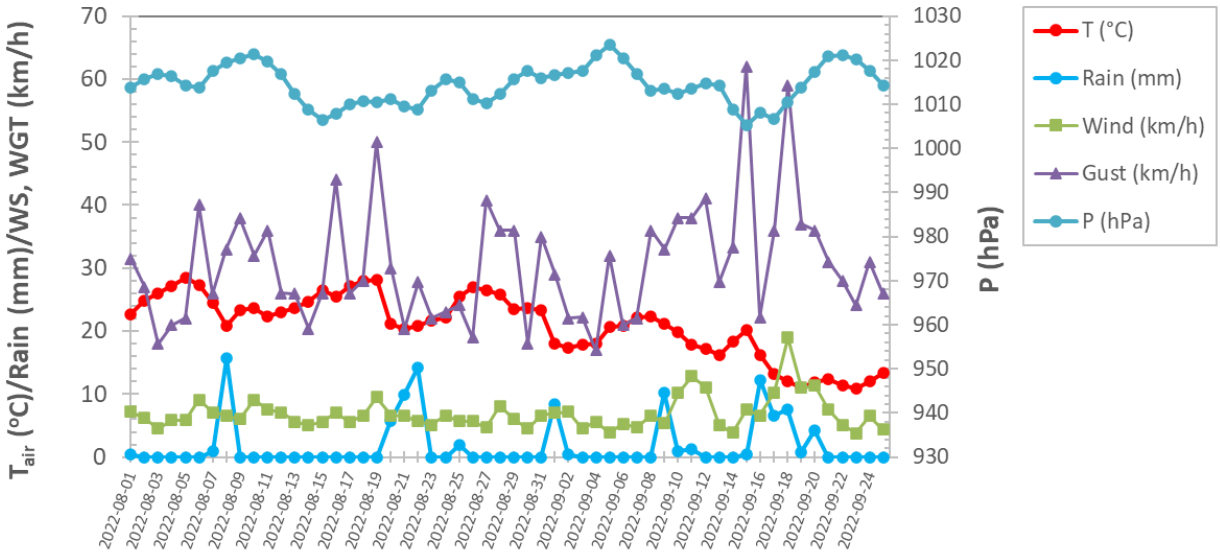


Table S2. Correlation coefficients of the outdoor air pollutants and microclimatic variables during the sampling campaign.

	PM_1	$PM_{2.5-1}$	$PM_{10-2.5}$	CO_2	HCHO	VOC	Temp.	RH
PM_1	1.0	**0.89**	**0.84**	0.12	0.16	0.17	-0.09	0.17
$PM_{2.5-1}$		1.00	**0.76**	0.11	0.12	0.14	-0.04	0.15
$PM_{10-2.5}$			1.00	0.11	0.09	0.12	-0.13	0.16
CO_2				1.00	-0.03	0.02	-0.53	**0.67**
HCHO					1.00	0.33	0.04	-0.04
VOC						1.00	0.09	-0.09
Temp.							1.00	**-0.73**
RH								1.00

Table S3. Correlation coefficients of the indoor air pollutants and microclimatic variables during the sampling campaign.

	PM_1	$PM_{2.5-1}$	$PM_{10-2.5}$	CO_2	HCHO	VOC	Temp.	RH
PM_1	1.0	**0.94**	**0.94**	0.13	0.04	0.02	0.07	0.00
$PM_{2.5-1}$		1.00	**0.84**	0.11	0.05	0.02	0.11	0.01
$PM_{10-2.5}$			1.00	0.12	0.02	0.00	0.04	0.00
CO_2				1.00	0.31	0.00	-0.22	0.08
HCHO					1.00	0.01	0.10	0.00
VOC						1.00	-0.13	0.10
Temp.							1.00	-0.30
RH								1.00