Supplementary Materials:

An Assessment of Indoor Air Quality in the Arrivals Hall of Beirut–Rafic Hariri International Airport: Monitoring of VOCs and NO_2

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Table S1. Sampling schedule for indoor VOC measurements, using adsorbant tubes and automatic samplers, at the arrivals hall in Beirut Airport (2014).

17-18 June 2014 Summer Regular Ventilation		**30-31 October 2014 Fall/Winter Irregular Ventilation**		**25-26 November 2014 Fall/Winter Regular Ventilation**	
8-channel Sampler		**1-channel Sampler**		**1-channel Sampler**	
Date	Sampling time (Center)	Date	Sampling time (Center)	Date	Sampling time (Center)
17-Jun-14	16:00	30-Oct-14	10:15	25-Nov-14	09:15
17-Jun-14	18:00	30-Oct-14	16:15	25-Nov-14	12:15
17-Jun-14	20:45	30-Oct-14	19:15	25-Nov-14	15:15
18-Jun-14	00:30	30-Oct-14	22:15	25-Nov-14	21:15
18-Jun-14	07:30	31-Oct-14	04:15	25-Nov-14	23:15
18-Jun-14	10:45	31-Oct-14	08:45	26-Nov-14	08:45
18-Jun-14	13:30				
18-Jun-14	16:00				

Regular ventilation corresponds to the mixing of 20% fresh air with 80 returning indoor air, while irregular ventilation corresponds to the mixing of 50% fresh air with 50% returning indoor air.

-The sampling duration was fixed at 30 min at a rate of 100 mL min^{-1} (total volume of 3L). All tubes were analysed with GC/FID.

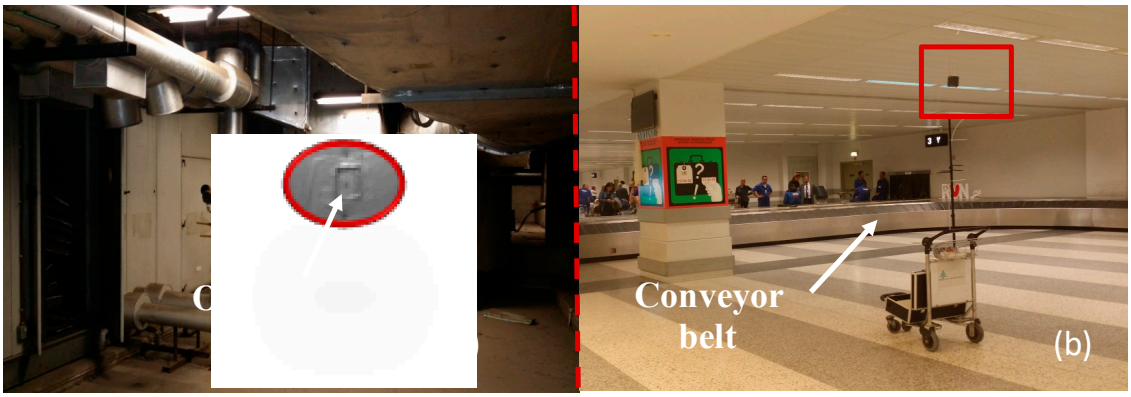

Figure S1. (a) Sampling through the opening in the return duct at the mechanical room at which the air climate unit for the arrivals hall is installed (Beirut Airport, June 2014) (b) one-channel autosampler during the winter campaign and NO_2 cage (red square). (Beirut Airport, October and November 2014)

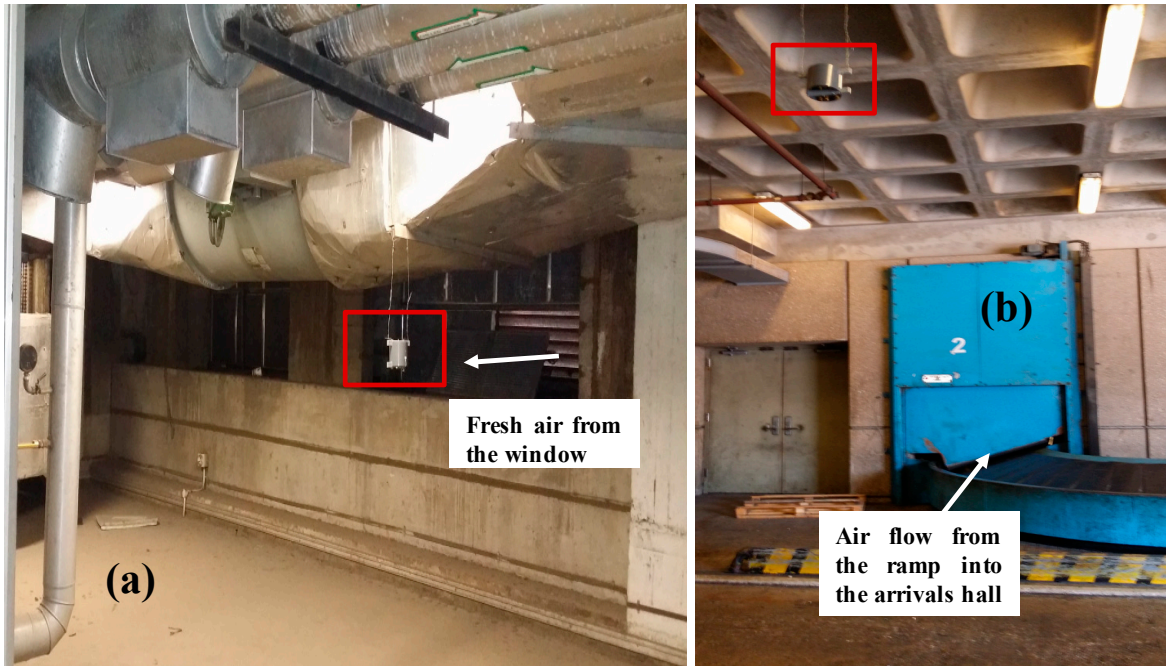

Figure S2. Installation of polyethylene cage (red square) (a) in the mechanical room to measure NO_2 levels in fresh air supplying the arrivals hall at Beirut Airport and (b) near the baggage loaders to measure NO_2 levels in the air that enters from the ramp into the arrivals hall through openings

Table S2. Sampling schedule for NO_2 measurements at the arrivals hall (Beirut Airport, 2014-2015).

Date	30-31/10/14	25-26/11/14	17-24/6/15	24-29/6/15
Location		**Duration**		
Indoor	24 hr	15 hr	7 d	7 d
Outdoor Baggage	24 hr	15 hr	7 d	7 d
Fresh Air	24 hr	15 hr	7 d	7 d

Table S3. GC-FID analytical performance parameters (June 2014)

VOC Family	VOC	Linear Regression [†]	R^2	Δa/a	LOD [‡, §] (ng)	LOD [‡, ¶] (μg m^{-3})	Blank [‖] (ng)	ΔC/C [‖*] (%)
LIQUID SPIKING								
HEAVY ALKANES (C_8-C_{14})	n-Octane	y=4666.7x	0.9992	0.0151	0.10	0.04	0.01	2.97
	n-Nonane	y=4741.7x	-	-	0.10	0.03	0.09	-
	n-Decane	y=4610.4x	-	-	0.08	0.03	0.03	-
	n-Undecane	y=4496.6x + 1468.6	0.9989	0.0232	0.10	0.05	0.00	3.78
	n-Dodecane	y=4347.9x	-	-	0.06	0.02	0.08	-
	n-Tridecane	y=4216.7x	-	-	0.05	0.02	0.08	-
	n-Tetradecane	y=4085.4x	-	-	0.03	0.01	0.00	-
MONOARO-MATICS	Toluene	y=5353x	0.9998	0.0076	0.07	0.02	0.02	2.22
	Ethylbenzene	y=5035x	0.9987	0.0093	0.10	0.03	0.02	2.39
	m,p-xylenes	y=9834x	0.9989	0.0112	0.07	0.02	0.04	2.58
	o-xylene	y=5085x	0.9977	0.0075	0.10	0.03	0.07	2.21
	Styrene	y=4764x	0.996	0.0170	0.24	0.08	0.36	3.16
	1,2,4-TMB	y=4831x	0.9982	0.0136	0.21	0.07	0.01	2.82
LIGHT ALDEHYDES (C_2-C_6)	Acrolein	y =383x + 2278	0.9955	0.0598	1.40	0.46	4.53	7.44
	Propanal	y=616x + 543	0.9812	0.1237	1.40	0.47	3.64	13.83
	Butanal	y=1647x + 2328	0.9991	0.0168	0.40	0.12	0.97	3.14
	Pentanal	y=2901x	0.9930	0.0443	0.50	0.16	0.29	5.89
	Hexanal	y=2903x	0.9971	0.0282	0.80	0.26	0.38	4.28
LIGHT KETONES	Acetone	y=1248x	0.9832	0.0691	0.10	0.04	4.62	8.37
	2-Butanone	y=2402x + 4308	0.9991	0.025	0.40	0.15	0.46	4.04
TERPENE	D-Limonene	y=5163x	0.9977	0.0252	0.20	0.05	0.01	3.98
ON-LINE								
LIGHT ALKANES (C_2-C_7)	Ethane	y=5528x	0.9989	0.0199	0.20	0.06	0.00	3.45
	Propane	y=5596x	0.9996	0.0100	0.20	0.06	0.02	2.46
	Isobutane	y=5029x	0.9998	0.0071	0.40	0.05	0.00	2.17
	n-Butane+cis-2-Butene	y=11020x	0.9997	0.0071	0.10	0.14	0.07	2.17
	Isopentane	y=3861x	0.9986	0.0221	0.60	0.21	0.00	3.67
	n-Pentane+cis-2-Pentene	y=10228x	0.9999	0.0038	0.10	0.05	0.02	1.84
	n-Hexane	y=5392x	0.9940	0.0394	0.20	0.06	0.39	5.40
	n-Heptane	y=5001.2x	0.9998	0.0071	0.10	0.03	0.01	2.17
ACETYLENE/ ALKENES (C_2-C_6)	Ethene +Acetylene	y=3971x	0.9990	0.0182	0.20	0.06	0.80	3.28
	Propene	y=5512x	0.9997	0.0094	0.10	0.04	1.23	2.40
	1-Butene	y=5426x	0.9998	0.0072	0.10	0.05	0.68	2.18
	1,3-Butadiene	y=5070x	0.9997	0.0084	0.20	0.06	0.20	2.30
	Trans-2-butene	y=4852x	0.9997	0.0098	0.20	0.07	0.06	2.44
	1-Pentene	y=4838x	0.9994	0.0125	0.30	0.09	0.04	2.71
	Trans-2-pentene	y=5016x	0.9999	0.0062	0.30	0.09	0.40	2.08
	Isoprene	y=4512x	0.9999	0.0053	0.40	0.12	0.12	1.99
	1-Hexene	y=5036x	0.9999	0.0057	0.30	0.09	0.33	2.03

† Slopes in ng; ‡ LOD is calculated for S/N ratio = 3; § Instrumental LOD converted to injected quantity; ¶ LOD transposed to airborne concentrations for a sampling volume of 3L; ‖ Average blank; * The uncertainty of the measured concentrations (ΔC/C) was evaluated as the sum of the relative errors on the slope (Δa/a) and intercept (Δb/b) and the sampling volume (ΔV/V) by considering the equation of the fit straight line obtained during calibration: y= ax + b, where Δa and Δb are equal to 2 times the value of the standard deviations of the slope and intercept, respectively. Note that for most VOCs, b = 0.

Table S4. GC-FID analytical performance parameters (October 2014)

Family	VOC	Linear Regression†	R^2	Δa/a	LOD‡,§ (ng)	LOD‡,¶ (μg m^{-3})	Blank[e] (ng)	ΔC/C[II*] (%)
LIQUID SPIKING								
HEAVY ALKANES (C_8-C_{14})	n-Octane	y=4104	0.9993	0.0151	0.1	0.04	0.01	4.45
	n-Nonane	y=4259x	-	-	0.1	0.03	0.05	-
	n-Decane	y=4216x	-	-	0.08	0.03	0.04	-
	n-Undecane	y=3875x+1468	0.9989	0.0232	0.1	0.05	0.00	3.78
	n-Dodecane	y=3859x	-	-	0.06	0.02	0.02	-
	n-Tridecane	y=3726x	-	-	0.05	0.02	0.04	-
	n-Tetradecane	y=3593x	-	-	0.03	0.01	0.00	-
MONOARO-MATICS	Toluene	y=4896x	0.9983	0.0280	0.07	0.02	0.00	4.26
	Ethylbenzene	y=4489x	0.9917	0.0551	1.4	0.46	0.07	6.97
	m,p-xylenes	y=8614x	0.9958	0.0451	0.07	0.02	0.13	5.97
	o-xylene	y=4912x	0.9981	0.0302	0.1	0.03	0.06	4.48
	Styrene	y=3395x	0.996	0.0170	0.24	0.08	0.23	3.16
	1,2,4-TMB	y=3635x	0.9498	0.1655	0.21	0.07	0.00	18.1
LIGHT ALDEHYDES (C_2-C_6)	Acrolein	y =330x + 2278	0.9955	0.0470	1.4	0.46	0.00	6.16
	Propanal	y=530x + 543	0.9812	0.0488	1.4	0.47	0.68	6.34
	Butanal	y=1419x + 2328	0.9991	0.0502	0.4	0.12	0.00	6.48
	Pentanal	y=2500x	0.9930	0.0299	0.5	0.16	0.23	4.45
	Hexanal	y=2502x	0.9971	0.0365	0.8	0.26	1.18	5.11
LIGHT KETONES	Acetone	y=1076x	0.9832	0.1040	0.1	0.04	2.59	11.86
	2-Butanone	y=2226x+4308	0.9991	0.0527	0.4	0.15	0.51	6.73
TERPENE	D-Limonene	y=5163x	0.9977	0.0092	0.2	0.05	0.00	2.38
ON-LINE								
LIGHT ALKANES (C_2-C_7)	Ethane	y=4817x	0.9989	0.0208	0.2	0.06	0.06	3.54
	Propane	y=5222x	0.9998	0.0115	0.2	0.05	0.04	2.61
	Isobutane	y=4923x	0.9999	0.0142	0.4	0.14	0.00	2.88
	n-Butane+cis-2-Butene	y=10910x	0.9999	0.0082	0.1	0.04	0.06	2.28
	Isopentane	y=3733x	0.9997	0.0204	0.6	0.21	0.01	3.50
	n-Pentane+cis-2-Pentene	y=10191x	0.9999	0.0125	0.1	0.05	0.04	2.71
	n-Hexane	y=5125x	0.9995	0.0347	0.2	0.05	0.74	4.93
	n-Heptane	y=4678	0.9995	0.0071	0.1	0.03	0.01	
ACETYLENE/ ALKENES (C2-C7)	Ethene +Acetylene	y=3971x	0.9986	0.0186	0.1	0.05	0.00	3.32
	Propene	y=5512x	0.9998	0.0129	0.1	0.04	1.24	2.75
	1-Butene	y=5426x	0.9998	0.0164	0.1	0.05	0.97	3.10
	1,3-Butadiene	y=5070x	0.9999	0.0090	0.2	0.06	0.29	2.36
	Trans-2-butene	y=4852x	0.9999	0.0042	0.2	0.07	0.13	1.88
	1-Pentene	y=4838x	0.9999	0.0059	0.3	0.09	0.49	2.05
	Trans-2-pentene	y=5016x	0.9999	0.0105	0.3	0.09	0.04	2.51
	Isoprene	y=4512x	0.9999	0.0048	0.4	0.12	0.32	1.94
	1-Hexene	y=5036x	0.9999	0.0160	0.3	0.09	0.40	3.06

†Slopes in ng

‡ LOD is calculated for S/N ratio = 3

§Instrumental LOD converted to injected quantity

¶LOD transposed to airborne concentrations for a sampling volume of 3L

‖Average blank

*The uncertainty of the measured concentrations (ΔC/C) was evaluated as the sum of the relative errors on the slope (Δa/a) and intercept (Δb/b) and the sampling volume (ΔV/V) by considering the equation of the fit straight line obtained during calibration: y= ax + b, where Δa and Δb are equal to 2 times the value of the standard deviations of the slope and intercept, respectively. Note that for most VOCs, b = 0.

Table S5. Statistical distribution of gaseous pollutants data measured during the 2 campaigns conducted in the arrivals hall at Beirut Airport (June and October 2014)

		June 17-18, 2014 (μg m^{-3}) (Summer, n=8) Normal Ventilation: 20% Outdoor air+50% indoor air									October 30-31, 2014 (μg m^{-3}) (Fall/Winter, n=6) Irregular ventilation: 50% Outdoor air+50% indoor air								
	VOCs	**Mean**	**SD**	**CV**	**Min**	**1st Quartile**	**Median**	**3rd Quartile**	**Max**	**% occurrence**	**Mean**	**SD**	**CV**	**Min**	**1st Quartile**	**Median**	**3rd Quartile**	**Max**	**% occurrence**
Heavy Alkanes (C_7-C_{14})	n-Heptane	0.49	0.40	0.81	0.00	0.19	0.49	0.76	1.07	75	15.8	14.8	0.94	0.82	3.15	13.5	27.0	35.9	100
	n-Octane	2.97	3.41	1.15	0.00	0.00	1.83	5.24	9.32	63	43.5	44.0	1.01	1.98	4.48	37.9	74.2	103	100
	n-Nonane	0.92	0.74	0.80	0.03	0.15	1.12	1.49	1.81	100	79.3	80.4	1.01	4.82	7.44	72.8	137	182	100
	n-Decane	1.81	1.42	0.78	0.02	0.20	2.58	2.74	3.34	100	135	122	0.90	6.79	30.8	133	233	274	100
	n-Undecane	4.24	2.39	0.56	0.04	3.71	5.00	5.47	6.75	100	106	95.3	0.90	5.47	25.9	101	191	203	100
	n-Dodecane	1.05	0.92	0.88	0.02	0.41	0.82	1.75	2.60	100	37.8	37.2	0.98	3.56	5.61	31.3	61.4	92.0	100
	n-Tridecane	0.47	0.36	0.77	0.02	0.17	0.50	0.67	1.05	100	6.13	6.09	0.99	0.98	1.60	4.26	8.38	16.8	100
	n-Tetradecane	n.d.									n.d.								
Monoaromatics	Benzene	Invalid results									Invalid results								
	Toluene	11.1	15.0	1.34	0.00	1.98	6.53	12.3	44.8	88	20.2	17.9	0.89	2.56	4.26	18.5	34.9	41.7	100

	Ethylbenzene	6.75	9.25	1.37	0.00	0.48	3.47	7.73	26.1	88	12.0	13.4	1.12	0.08	0.51	8.29	22.3	30.2	100
	m+p-xylenes	7.59	9.59	1.26	0.06	0.88	5.55	9.54	28.7	100	16.6	18.1	1.09	0.59	0.89	12.7	29.5	41.8	100
	o-xylene	4.22	5.42	1.28	0.00	0.11	3.12	5.48	16.0	75	12.2	10.8	0.88	1.40	2.81	11.1	19.6	27.5	100
	Styrene	0.46	0.66	1.44	0.00	0.00	0.02	0.91	1.54	50	2.48	2.06	0.83	0.13	0.99	2.42	3.30	5.77	100
	1,2,4-TMB	1.29	1.63	1.27	0.00	0.11	0.89	1.47	4.84	75	67.1	68.1	1.01	2.76	6.12	60.9	123	146	100
Chloro-alkenes	trichloroethene+isooctane	0.36	0.47	1.29	0.00	0.00	0.13	0.68	1.27	63	3.55	1.74	0.49	0.97	2.56	3.83	4.47	5.86	100
	Tetrachloro-ethene	0.19	0.33	1.72	0.00	0.00	0.00	0.30	0.94	38	6.75	6.66	0.99	0.24	0.79	6.16	11.6	15.5	100
Light Aldehydes/Ketones	Acroleine	5.64	4.58	0.81	0.85	3.58	4.49	6.50	15.86	100	4.57	2.44	0.54	1.98	2.71	3.96	6.52	7.80	100
	propanal	12.3	9.77	0.79	0.00	3.30	14.65	16.80	29.40	88	2.09	2.88	1.38	0.00	0.12	0.88	2.88	7.36	83
	Butanal	1.60	1.75	1.09	0.00	0.00	1.09	2.83	4.16	63	0.25	0.47	1.90	0.00	0.00	0.00	0.23	1.16	33
	Pentanal	0.31	0.54	1.72	0.00	0.00	0.00	0.40	1.48	38	7.90	4.87	0.62	2.03	3.62	8.98	11.37	13.4	100
	Hexanal	1.39	1.21	0.87	0.00	0.37	1.29	2.25	3.26	88	4.28	3.92	0.91	0.04	1.04	3.84	7.16	9.60	100
	acetone	10.5	7.00	0.67	0.27	5.86	11.44	15.9	19.1	100	6.09	2.45	0.40	3.44	3.96	6.02	7.78	9.40	100
	2-butanone	0.91	1.22	1.34	0.00	0.04	0.29	1.43	3.29	88	0.37	0.58	1.59	0.00	0.00	0.06	0.50	1.44	50

Terpene	d-limonene	2.77	2.34	0.85	0.00	0.00	3.73	4.76	5.11	63	6.85	6.00	0.88	0.04	1.76	6.96	11.6	14.0	100
Light Alkanes (C_2-C_7)	Ethane	0.06	0.06	0.92	0.00	0.00	0.07	0.10	0.14	63	0.10	0.05	0.47	0.01	0.10	0.11	0.11	0.16	100
	Propane	0.58	0.55	0.95	0.00	0.06	0.55	0.97	1.46	75	2.80	1.65	0.59	1.02	1.48	2.61	4.06	4.92	100
	Isobutane	1.18	0.99	0.84	0.00	0.36	1.02	2.00	2.58	88	3.14	1.66	0.53	1.26	2.08	3.02	3.57	6.00	100
	n-Butane+ cis-2-Butene	7.32	6.98	0.95	0.52	2.42	4.01	13.32	18.76	100	1.96	0.90	0.46	0.60	1.40	2.20	2.66	2.83	100
	isopentane	0.56	0.40	0.71	0.00	0.31	0.55	0.81	1.09	88	2.32	1.56	0.67	0.36	1.24	2.60	2.86	4.65	100
	n-Pentane+ cis-2-pentene	0.88	0.68	0.78	0.08	0.29	0.75	1.40	1.92	100	0.72	0.58	0.80	0.19	0.25	0.60	1.05	1.60	100
	n-Hexane	0.22	0.18	0.84	0.00	0.08	0.17	0.37	0.51	88	3.49	2.83	0.81	0.15	0.99	3.96	5.50	6.89	100
Light Alkenes/Acetylene	Ethene+acetylene	4.45	2.58	0.58	0.00	3.38	4.09	5.84	8.56	100	0.24	0.31	1.30	0.00	0.00	0.13	0.36	0.76	50
	Propene	1.25	0.53	0.42	0.30	0.93	1.30	1.64	1.98	100	1.37	0.90	0.65	0.32	0.82	1.20	1.81	2.82	100
	1-Butene	0.73	0.37	0.50	0.05	0.53	0.77	0.96	1.24	100	0.56	0.52	0.92	0.14	0.24	0.34	0.71	1.49	100
	1.3-Butadiene	0.40	0.95	2.38	0.00	0.02	0.06	0.15	2.75	75	0.49	0.39	0.79	0.05	0.29	0.41	0.61	1.16	100
	trans-2-butene	0.16	0.13	0.84	0.02	0.09	0.11	0.21	0.45	100	0.30	0.16	0.56	0.11	0.17	0.30	0.36	0.56	100
	1-pentene	0.25	0.23	0.93	0.00	0.07	0.17	0.41	0.63	88	0.43	0.30	0.70	0.01	0.33	0.40	0.53	0.92	100

	Trans-2-pentene	0.04	0.06	1.48	0.00	0.00	0.01	0.05	0.15	50	0.08	0.09	1.08	0.01	0.02	0.06	0.11	0.25	100
	Isoprene	1.22	1.64	1.35	0.04	0.18	0.46	1.44	4.42	100	0.48	0.35	0.74	0.09	0.30	0.34	0.63	1.07	100
	1-Hexene	0.35	0.49	1.41	0.00	0.08	0.15	0.33	1.35	75	0.37	0.48	1.29	0.07	0.09	0.11	0.48	1.25	100
	C(µg m^{-3})	**Mean**	**SD**	**CV**	**Min**	**1st Quartile**	**Median**	**3rd Quartile**	**Max**		**Mean**	**SD**	**CV**	**Min**	**1st Quartile**	**Median**	**3rd Quartile**	**Max**	
	Light Alkanes (C_2-C_7)	11.3	8.99	0.80	1.70	5.01	7.52	18.3	26.6		30.4	18.01	0.59	6.22	19.2	31.0	39.6	56.3	
	Heavy Alkanes (C_8-C_{13})	11.5	7.59	0.66	0.12	7.54	12.5	16.2	21.0		407	378	0.93	23.6	79.7	393	732.10	813	
	Light Alkenes/Acetylene	8.85	4.40	0.50	2.18	6.36	9.25	11.19	15.5		4.32	2.28	0.53	1.33	3.13	3.96	5.57	7.73	
	Monoaromatics	31.4	37.5	1.19	0.24	5.34	20.5	42.4	111		135	131	0.97	9.64	17.0	127	235	297	
	Aldehydes/ Ketones	32.7	22.2	0.68	5.12	13.3	35.5	45.2	68.6		25.5	12.7	0.50	8.25	16.2	27.3	35.2	40.2	
	D-Limonene	2.77	2.34	0.85	0.00	0.00	3.73	4.76	5.11		6.85	6.00	0.88	0.04	1.76	6.96	11.6	14.0	
	Total VOCs	99.0	70.6	0.71	16.0	33.3	104	138	197		620	548	0.88	78.6	127	605	1066	1244	

Table S6. Statistical distribution of gaseous pollutants data measured during the 2 campaigns conducted in the arrivals hall at Beirut Airport (November, 2014)

		November 25-26, 2014 (μg m^{-3}) (Winter, n=6) Normal Ventilation: 20% Outdoor air+50% indoor air								
	VOCs	**Average**	**SD**	**CV**	**Min**	**1st Quartile**	**Median**	**3rd Quartile**	**Max**	**% occurrence**
Heavy Alkanes (C_7-C_{14})	n-Heptane	1.14	1.16	1.02	0.03	0.17	0.84	2.19	2.57	100
	n-Octane	2.86	4.35	1.52	0.01	0.16	0.92	3.37	11.2	100
	n-Nonane	5.70	8.48	1.49	0.04	0.44	2.67	5.81	22.3	100
	n-Decane	3.97	4.92	1.24	0.08	0.47	2.51	5.07	13.01	100
	n-Undecane	1.56	2.09	1.34	0.00	0.07	0.77	2.17	5.37	67
	n-Dodecane	0.65	0.98	1.52	0.03	0.07	0.34	0.54	2.60	100
	n-Tridecane	0.12	0.12	0.96	0.02	0.04	0.08	0.17	0.33	100
	n-Tetradecane	n.d.								
Monoaromatics	Benzene	invalid results								
	Toluene	3.02	2.71	0.89	0.64	0.93	1.96	5.18	6.73	100
	Ethylbenzene	0.87	1.22	1.40	0.00	0.07	0.16	1.64	2.72	83
	m+p-xylenes	1.82	2.47	1.36	0.00	0.13	0.60	2.97	5.98	83
	o-xylene	0.57	0.64	1.13	0.02	0.10	0.46	0.68	1.75	100
	Styrene	0.20	0.22	1.11	0.00	0.02	0.15	0.31	0.56	67
	1,2,4-TMB	3.62	6.03	1.67	0.00	0.05	0.63	4.20	15.2	67
Chloro-alkenes	trichloroethene+isooctane	1.07	1.03	0.96	0.00	0.44	0.91	1.27	2.92	83
	Tetrachloroethene	0.00	0.01	2.45	0.00	0.00	0.00	0.00	0.02	17
Light Aldehydes/Ketones	Acroleine	1.11	1.13	1.01	0.00	0.14	0.89	2.12	2.47	67
	propanal	0.44	0.62	1.41	0.00	0.00	0.10	0.84	1.39	50
	Butanal	0.09	0.22	2.45	0.00	0.00	0.00	0.00	0.53	17
	Pentanal	0.52	0.32	0.62	0.08	0.26	0.67	0.73	0.79	100
	Hexanal	0.07	0.16	2.45	0.00	0.00	0.00	0.00	0.40	17
	acetone	6.80	6.60	0.97	0.88	3.68	3.71	8.47	18.8	100

	2-butanone	0.45	0.53	1.19	0.00	0.05	0.30	0.61	1.39	67

Table S6 (Continued). Statistical distribution of gaseous pollutants data measured during the 2 campaigns conducted in the arrivals hall at Beirut Airport (November, 2014)

		November 25-26, 2014 (μg m^{-3}) (Winter, n=6) Normal Ventilation: 20% Outdoor air+50% indoor air								
	VOCs	**Average**	**SD**	**CV**	**Min**	**1st Quartile**	**Median**	**3rd Quartile**	**Max**	**% occurrence**
Terpene	d-limonene	0.64	0.93	1.45	0.00	0.02	0.08	1.35	1.92	83
Light Alkanes	Ethane	0.27	0.11	0.40	0.06	0.27	0.30	0.33	0.38	100
	Propane	3.05	1.24	0.41	1.98	2.07	2.56	3.98	4.81	100
	Isobutane	5.18	1.98	0.38	2.41	3.97	5.28	6.37	7.87	100
	n-Butane+cis-2-Butene	3.82	1.45	0.38	2.44	2.76	3.38	4.63	6.11	100
	isopentane	2.49	1.64	0.66	0.99	1.26	2.05	3.23	5.24	100
	n-Pentane+cis-2-pentene	0.28	0.19	0.69	0.06	0.15	0.24	0.41	0.55	100
	n-Hexane	6.46	15.31	2.37	0.00	0.05	0.21	0.53	37.71	67
Light Alkenes/Acetylene	Ethene+acetylene	2.21	1.48	0.67	0.63	1.66	1.86	2.18	5.02	100
	Propene	1.21	0.55	0.46	0.68	0.82	1.13	1.36	2.18	100
	1-Butene	0.85	0.51	0.60	0.24	0.51	0.75	1.22	1.56	100
	1.3-Butadiene	0.18	0.24	1.36	0.00	0.02	0.09	0.21	0.64	83
	trans-2-butene	0.35	0.16	0.46	0.21	0.25	0.30	0.37	0.65	100
	1-pentene	0.24	0.22	0.89	0.00	0.09	0.19	0.41	0.54	83
	Trans-2-pentene	0.03	0.03	0.97	0.00	0.01	0.03	0.05	0.09	67
	Isoprene	0.10	0.10	1.00	0.00	0.02	0.10	0.13	0.27	67
	1-Hexene	0.16	0.19	1.17	0.00	0.03	0.11	0.20	0.51	83

	C(μg m^{-3})	Mean (n=8)	SD	CV	Min	1st Quartile	Median	3rd Quartile	Max	
	Light Alkanes (C_2-C_7)	22.7	12.4	0.55	12.4	16.2	19.2	22.3	46.9	
	Heavy Alkanes (C_8-C_{13})	14.9	19.3	1.30	0.19	1.25	7.32	21.0	49.6	
	Light Alkenes/Acetylene	5.34	2.98	0.56	3.15	3.56	4.13	5.71	11.0	
	Monoaromatics	10.1	12.7	1.25	0.76	1.45	4.01	15.6	31.8	
	Aldehydes/Ketones	9.47	7.56	0.80	1.51	4.66	7.37	13.1	21.8	
	D-Limonene	0.64	0.93	1.45	0.00	0.02	0.08	1.35	1.92	
	Total VOCs	64.2	38.9	0.61	18.8	34.7	66.4	80.5	124	