

ICARO



Centrale "Edoardo Amaldi" di La Casella

Progetto di installazione di una Nuova
Unità a gas

Allegato 5
Risultati di dettaglio assessment tossicologico

VALUTAZIONE DI IMPATTO SANITARIO

ai sensi dell'art. 5 c. 1 lettera 1-1bis del D.Lgs. 152/06 e s.m.i.



Progetto n. 20530I
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1 ASSESSMENT TOSSICOLOGICO
1.1 Fase 1 – Territori Comunali

Comune	Hazard Quotient					Effetti a lungo termine in condizioni di normale esercizio sui nodi del reticolo considerando le polveri come <u>PM 10</u>		Effetti a lungo termine in condizioni di normale esercizio sui nodi del reticolo considerando le polveri come <u>PM 2.5</u>	
	NO ₂	PM2.5	CO	NH ₃	PM10	Hazard Index	Incertezza (±)	Hazard Index	Incertezza (±)
Arena Po	1,49E-02	1,40E-02	1,35E-07	2,30E-04	7,02E-03	2,22E-02	1,11E-02	2,92E-02	1,46E-02
Badia Pavese	5,89E-03	6,78E-03	5,93E-08	9,51E-05	3,39E-03	9,37E-03	4,69E-03	1,28E-02	6,38E-03
Borgonovo Val Tidone	4,18E-03	5,40E-03	4,46E-08	6,84E-05	2,70E-03	6,95E-03	3,48E-03	9,65E-03	4,83E-03
Bosnasco	4,16E-03	5,30E-03	4,32E-08	6,57E-05	2,65E-03	6,88E-03	3,44E-03	9,52E-03	4,76E-03
Calendasco	9,56E-03	1,04E-02	9,66E-08	1,60E-04	5,19E-03	1,49E-02	7,45E-03	2,01E-02	1,00E-02
Castel San Giovanni	1,67E-02	1,56E-02	1,51E-07	2,55E-04	7,81E-03	2,48E-02	1,24E-02	3,26E-02	1,63E-02
Chignolo Po	5,12E-03	5,83E-03	5,10E-08	8,09E-05	2,91E-03	8,11E-03	4,06E-03	1,10E-02	5,51E-03
Corteolona e Genzone	4,12E-03	5,05E-03	4,17E-08	6,52E-05	2,53E-03	6,71E-03	3,36E-03	9,24E-03	4,62E-03
Costa de' Nobili	5,78E-03	6,65E-03	5,74E-08	9,30E-05	3,33E-03	9,20E-03	4,60E-03	1,25E-02	6,26E-03
Gragnano Trebbiense	4,77E-03	6,25E-03	5,35E-08	8,35E-05	3,12E-03	7,98E-03	3,99E-03	1,11E-02	5,55E-03
Livraga	2,81E-03	3,56E-03	2,92E-08	4,28E-05	1,78E-03	4,63E-03	2,31E-03	6,41E-03	3,20E-03
Miradolo Terme	3,05E-03	3,89E-03	3,18E-08	4,67E-05	1,94E-03	5,04E-03	2,52E-03	6,99E-03	3,49E-03
Monticelli Pavese	1,33E-02	1,37E-02	1,31E-07	2,20E-04	6,85E-03	2,04E-02	1,02E-02	2,73E-02	1,36E-02
Orio Litta	4,13E-03	4,84E-03	4,15E-08	6,46E-05	2,42E-03	6,62E-03	3,31E-03	9,04E-03	4,52E-03
Ospedaletto Lodigiano	3,11E-03	3,78E-03	3,18E-08	4,72E-05	1,89E-03	5,05E-03	2,53E-03	6,94E-03	3,47E-03
Pieve Porto Morone	1,49E-02	1,37E-02	1,33E-07	2,27E-04	6,85E-03	2,20E-02	1,10E-02	2,88E-02	1,44E-02
Rottofreno	1,12E-02	1,19E-02	1,13E-07	1,86E-04	5,93E-03	1,73E-02	8,65E-03	2,32E-02	1,16E-02
Rovescala	3,05E-03	3,69E-03	2,81E-08	4,00E-05	1,84E-03	4,93E-03	2,47E-03	6,77E-03	3,39E-03
San Colombano al Lambro	2,84E-03	3,71E-03	3,03E-08	4,43E-05	1,86E-03	4,74E-03	2,37E-03	6,60E-03	3,30E-03
San Damiano al Colle	3,11E-03	4,18E-03	3,29E-08	4,78E-05	2,09E-03	5,25E-03	2,63E-03	7,35E-03	3,67E-03
San Zenone al Po	8,86E-03	8,77E-03	7,92E-08	1,31E-04	4,38E-03	1,34E-02	6,69E-03	1,78E-02	8,88E-03
Santa Cristina e Bissone	4,89E-03	5,93E-03	5,07E-08	8,05E-05	2,96E-03	7,93E-03	3,97E-03	1,09E-02	5,45E-03
Sarmato	1,66E-02	1,66E-02	1,63E-07	2,75E-04	8,29E-03	2,52E-02	1,26E-02	3,35E-02	1,67E-02
Senna Lodigiana	5,81E-03	6,62E-03	5,87E-08	9,36E-05	3,31E-03	9,21E-03	4,61E-03	1,25E-02	6,26E-03
Zerbo	1,18E-02	1,15E-02	1,08E-07	1,82E-04	5,74E-03	1,77E-02	8,85E-03	2,34E-02	1,17E-02
Ziano Piacentino	4,34E-03	4,31E-03	3,42E-08	5,09E-05	2,16E-03	6,55E-03	3,27E-03	8,70E-03	4,35E-03

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1.2 Fase 1 – Recettori rappresentativi

Recettore	Hazard Quotient					Effetti a lungo termine in condizioni di normale esercizio sui nodi del reticolo considerando le polveri come <u>PM 10</u>		Effetti a lungo termine in condizioni di normale esercizio sui nodi del reticolo considerando le polveri come <u>PM 2.5</u>	
	NO ₂	PM2.5	CO	NH ₃	PM10	Hazard Index	Incertezza (±)	Hazard Index	Incertezza (±)
Badia Pavese	5,77E-02	4,78E-02	4,86E-07	8,07E-04	1,15E-01	1,74E-01	8,70E-02	1,06E-01	5,32E-02
Santa Cristina	2,86E-02	3,30E-02	2,66E-07	4,20E-04	5,72E-02	8,63E-02	4,31E-02	6,20E-02	3,10E-02
San Zenone al Po	1,23E-01	9,71E-02	1,05E-06	1,80E-03	2,46E-01	3,71E-01	1,85E-01	2,22E-01	1,11E-01
Miradolo Terme	2,54E-02	3,22E-02	2,46E-07	3,98E-04	5,07E-02	7,65E-02	3,82E-02	5,79E-02	2,90E-02
Monticelli Pavese	5,33E-02	4,53E-02	5,04E-07	8,04E-04	1,07E-01	1,61E-01	8,04E-02	9,94E-02	4,97E-02
Pieve Porto Morone	1,30E-01	1,05E-01	9,35E-07	1,97E-03	2,60E-01	3,92E-01	1,96E-01	2,37E-01	1,18E-01
Chignolo Po	2,90E-02	4,19E-02	2,87E-07	4,66E-04	5,80E-02	8,74E-02	4,37E-02	7,14E-02	3,57E-02
Corteolona	2,59E-02	2,42E-02	2,25E-07	3,43E-04	5,19E-02	7,81E-02	3,91E-02	5,05E-02	2,53E-02
Costa de' Nobili	1,23E-01	8,44E-02	8,37E-07	1,56E-03	2,46E-01	3,70E-01	1,85E-01	2,09E-01	1,04E-01
Zerbo	1,29E-01	8,43E-02	8,83E-07	1,52E-03	2,58E-01	3,88E-01	1,94E-01	2,15E-01	1,07E-01
Gragnano Trebbiense	3,06E-02	5,36E-02	3,16E-07	4,81E-04	6,12E-02	9,23E-02	4,61E-02	8,47E-02	4,23E-02
Sarmato	5,15E-02	5,73E-02	5,38E-07	9,28E-04	1,03E-01	1,55E-01	7,77E-02	1,10E-01	5,49E-02
Castel San Giovanni	4,18E-02	3,78E-02	3,34E-07	5,57E-04	8,37E-02	1,26E-01	6,30E-02	8,02E-02	4,01E-02
Rottofreno	3,92E-02	3,89E-02	3,91E-07	6,78E-04	7,83E-02	1,18E-01	5,91E-02	7,88E-02	3,94E-02
Borgonovo Valtidone	1,56E-02	2,56E-02	1,72E-07	2,63E-04	3,12E-02	4,70E-02	2,35E-02	4,15E-02	2,07E-02
Orio Litta	2,89E-02	2,73E-02	2,68E-07	4,34E-04	5,78E-02	8,71E-02	4,35E-02	5,66E-02	2,83E-02
Ospedaletto Lodigiano	2,33E-02	2,30E-02	2,23E-07	3,55E-04	4,65E-02	7,02E-02	3,51E-02	4,66E-02	2,33E-02
Senna Lodigiana	2,72E-02	2,88E-02	2,29E-07	3,70E-04	5,43E-02	8,19E-02	4,09E-02	5,63E-02	2,82E-02
Bruciate	2,55E-02	2,38E-02	1,87E-07	3,39E-04	5,11E-02	7,70E-02	3,85E-02	4,97E-02	2,48E-02
Fornello	2,51E-02	2,29E-02	1,81E-07	3,19E-04	5,02E-02	7,57E-02	3,78E-02	4,84E-02	2,42E-02
Bissone	4,39E-02	5,26E-02	4,45E-07	7,38E-04	8,77E-02	1,32E-01	6,62E-02	9,72E-02	4,86E-02
Camporinaldo	2,83E-02	3,58E-02	2,30E-07	3,83E-04	5,65E-02	8,52E-02	4,26E-02	6,44E-02	3,22E-02
Fabbrica	5,20E-02	4,22E-02	3,83E-07	5,85E-04	1,04E-01	1,56E-01	7,82E-02	9,48E-02	4,74E-02
Ripaldina	5,34E-02	6,78E-02	5,46E-07	9,00E-04	1,07E-01	1,61E-01	8,06E-02	1,22E-01	6,10E-02
Cardazzo	6,45E-02	4,64E-02	4,62E-07	7,73E-04	1,29E-01	1,94E-01	9,72E-02	1,12E-01	5,59E-02
Casoni	7,43E-02	5,84E-02	6,03E-07	1,01E-03	1,49E-01	2,24E-01	1,12E-01	1,34E-01	6,69E-02
Alberone	5,67E-02	4,38E-02	4,78E-07	7,87E-04	1,13E-01	1,71E-01	8,55E-02	1,01E-01	5,07E-02
Lambrinia	5,33E-02	5,39E-02	3,84E-07	9,66E-04	1,07E-01	1,61E-01	8,04E-02	1,08E-01	5,41E-02
Mariotto	3,74E-02	3,21E-02	2,54E-07	4,38E-04	7,47E-02	1,13E-01	5,63E-02	6,99E-02	3,49E-02

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	NO ₂	PM2.5	CO	NH ₃	PM10	Hazard Index	Incertezza (±)	Hazard Index	Incertezza (±)
Campremoldo Sotto	3,93E-02	5,91E-02	3,76E-07	5,85E-04	7,85E-02	1,18E-01	5,92E-02	9,90E-02	4,95E-02
Centora	3,62E-02	5,71E-02	3,72E-07	5,84E-04	7,24E-02	1,09E-01	5,46E-02	9,39E-02	4,69E-02
Gragnanino	2,42E-02	4,47E-02	2,70E-07	4,39E-04	4,83E-02	7,30E-02	3,65E-02	6,93E-02	3,46E-02
Bosco Tosca	1,51E-01	1,26E-01	1,36E-06	2,31E-03	3,02E-01	4,56E-01	2,28E-01	2,80E-01	1,40E-01
Creta-Bruciate	2,67E-02	2,46E-02	2,01E-07	3,64E-04	5,35E-02	8,06E-02	4,03E-02	5,18E-02	2,59E-02
Fontana Pradosa	4,52E-02	4,80E-02	4,22E-07	7,27E-04	9,05E-02	1,36E-01	6,82E-02	9,40E-02	4,70E-02
Ganaghello	2,80E-02	2,71E-02	2,20E-07	3,68E-04	5,59E-02	8,43E-02	4,21E-02	5,55E-02	2,77E-02
Pievetta-Dogana Po	1,34E-01	1,13E-01	1,21E-06	2,05E-03	2,68E-01	4,05E-01	2,02E-01	2,49E-01	1,25E-01
Centora	3,81E-02	5,90E-02	3,90E-07	6,14E-04	7,61E-02	1,15E-01	5,74E-02	9,76E-02	4,88E-02
Sant'Imento	9,88E-02	7,23E-02	8,10E-07	1,33E-03	1,98E-01	2,98E-01	1,49E-01	1,72E-01	8,62E-02
Mottaziana	4,89E-02	5,53E-02	4,86E-07	1,03E-03	9,78E-02	1,48E-01	7,39E-02	1,05E-01	5,26E-02
Boscone Cusani	3,93E-02	3,89E-02	3,30E-07	5,53E-04	7,86E-02	1,19E-01	5,93E-02	7,87E-02	3,94E-02
Sant'Imento	9,68E-02	7,12E-02	7,98E-07	1,31E-03	1,94E-01	2,92E-01	1,46E-01	1,69E-01	8,47E-02
Corte Sant'Andrea	4,83E-02	3,41E-02	3,80E-07	6,13E-04	9,67E-02	1,46E-01	7,28E-02	8,30E-02	4,15E-02
Guzzafame	2,71E-02	3,19E-02	2,50E-07	4,02E-04	5,42E-02	8,17E-02	4,08E-02	5,94E-02	2,97E-02

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1.3 Fase 1 – Recettori sensibili

Recettore	Comune	Hazard Quotient					Effetti a lungo termine in condizioni di normale esercizio sui nodi del reticolo considerando le polveri come <u>PM 10</u>		Effetti a lungo termine in condizioni di normale esercizio sui nodi del reticolo considerando le polveri come <u>PM 2.5</u>	
		NO ₂	PM2.5	CO	NH ₃	PM10	Hazard Index	Incertezza (±)	Hazard Index	Incertezza (±)
Ospedale Civile di Castel San Giovanni	Castel San Giovanni	4,07E-03	5,18E-03	4,21E-08	6,38E-05	2,59E-03	6,73E-03	3,36E-03	9,32E-03	4,66E-03
Istituto Superiore di II° Grado Alessandro Volta	Castel San Giovanni	3,87E-03	4,95E-03	3,99E-08	6,01E-05	2,47E-03	6,40E-03	3,20E-03	8,88E-03	4,44E-03
Scuola elementare	Castel San Giovanni	3,96E-03	5,05E-03	4,09E-08	6,17E-05	2,53E-03	6,55E-03	3,28E-03	9,08E-03	4,54E-03
Scuola Paritaria dell'infanzia San Francesco	Castel San Giovanni	4,18E-03	5,28E-03	4,31E-08	6,55E-05	2,64E-03	6,89E-03	3,44E-03	9,53E-03	4,76E-03
Scuola media Giuseppe Mazzini	Castel San Giovanni	4,17E-03	5,27E-03	4,30E-08	6,53E-05	2,63E-03	6,87E-03	3,44E-03	9,51E-03	4,75E-03
Scuola elementare P. Maserati	Sarmato	4,69E-03	5,97E-03	4,98E-08	7,73E-05	2,99E-03	7,75E-03	3,88E-03	1,07E-02	5,37E-03
Scuola media Guido Moia	Sarmato	4,94E-03	6,24E-03	5,24E-08	8,22E-05	3,12E-03	8,14E-03	4,07E-03	1,13E-02	5,63E-03
Scuola Primaria di Rottofreno	Rottofreno	5,43E-03	6,86E-03	6,02E-08	9,56E-05	3,43E-03	8,96E-03	4,48E-03	1,24E-02	6,20E-03
Asilo Materno comunale di Rottofreno	Rottofreno	5,37E-03	6,79E-03	5,95E-08	9,43E-05	3,40E-03	8,86E-03	4,43E-03	1,23E-02	6,13E-03
Istituto Comprensivo San Nicolò Rottofreno	Gragnano Trebbiense	3,15E-03	4,22E-03	3,41E-08	5,00E-05	2,11E-03	5,31E-03	2,66E-03	7,42E-03	3,71E-03
Casa della Salute Borgonovo	Borgonovo Val Tidone	2,49E-03	3,42E-03	2,61E-08	3,64E-05	1,71E-03	4,24E-03	2,12E-03	5,94E-03	2,97E-03
Istituto Tecnico Commerciale Statale Alessandro Volta	Borgonovo Val Tidone	2,45E-03	3,36E-03	2,57E-08	3,58E-05	1,68E-03	4,16E-03	2,08E-03	5,84E-03	2,92E-03
Scuola dell'infanzia Statale	Borgonovo Val Tidone	2,60E-03	3,56E-03	2,74E-08	3,84E-05	1,78E-03	4,41E-03	2,21E-03	6,19E-03	3,10E-03
Scuola Materna Parrocchiale Zaira Sgorbati	Borgonovo Val Tidone	2,63E-03	3,57E-03	2,73E-08	3,84E-05	1,78E-03	4,45E-03	2,22E-03	6,23E-03	3,12E-03
Scuola Elementare E Media	Borgonovo Val Tidone	2,70E-03	3,66E-03	2,81E-08	3,97E-05	1,83E-03	4,57E-03	2,29E-03	6,40E-03	3,20E-03
Ente Nazionale Don Orione	Borgonovo Val	2,73E-03	3,70E-03	2,85E-08	4,03E-05	1,85E-03	4,62E-03	2,31E-03	6,47E-03	3,23E-03

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		NO ₂	PM2.5	CO	NH ₃	PM10	Hazard Index	Incertezza (±)	Hazard Index	Incertezza (±)
Formazione Aggiornamento Professionale	Tidone									
Scuole elementari Salvo D'acquisto	Ospedaletto Lodigiano	2,71E-03	3,34E-03	2,78E-08	4,03E-05	1,67E-03	4,43E-03	2,21E-03	6,10E-03	3,05E-03
Istituto Comprensivo Chignolo Po	Chignolo Po	3,13E-03	4,04E-03	3,34E-08	4,95E-05	2,02E-03	5,20E-03	2,60E-03	7,22E-03	3,61E-03
Scuola Materna	Santa Cristina e Bissone	3,18E-03	4,08E-03	3,32E-08	4,93E-05	2,04E-03	5,27E-03	2,64E-03	7,32E-03	3,66E-03
Scuole elementari	Santa Cristina e Bissone	3,28E-03	4,18E-03	3,42E-08	5,10E-05	2,09E-03	5,42E-03	2,71E-03	7,51E-03	3,76E-03
Centro medico	Corteolona e Genzone	3,20E-03	4,11E-03	3,34E-08	4,93E-05	2,05E-03	5,30E-03	2,65E-03	7,35E-03	3,68E-03
Scuola dell'infanzia	Corteolona e Genzone	3,26E-03	4,18E-03	3,40E-08	5,04E-05	2,09E-03	5,40E-03	2,70E-03	7,49E-03	3,75E-03
Scuola Media	Corteolona e Genzone	3,18E-03	4,09E-03	3,32E-08	4,91E-05	2,05E-03	5,28E-03	2,64E-03	7,32E-03	3,66E-03
Scuola elementare	Monticelli Piavese	5,98E-03	6,70E-03	5,93E-08	9,53E-05	3,35E-03	9,43E-03	4,71E-03	1,28E-02	6,39E-03

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1.4 Fase 2 – Territori Comunali

Comune	Hazard Quotient					Effetti a lungo termine in condizioni di normale esercizio sui nodi del reticolo considerando le polveri come <u>PM 10</u>		Effetti a lungo termine in condizioni di normale esercizio sui nodi del reticolo considerando le polveri come <u>PM 2.5</u>	
	NO ₂	PM2.5	CO	NH ₃	PM10	Hazard Index	Incertezza (±)	Hazard Index	Incertezza (±)
Arena Po	1,73E-02	2,25E-02	1,81E-07	3,92E-04	1,12E-02	2,90E-02	1,45E-02	4,02E-02	2,01E-02
Badia Pavese	6,43E-03	1,01E-02	7,54E-08	1,59E-04	5,06E-03	1,17E-02	5,83E-03	1,67E-02	8,36E-03
Borgonovo Val Tidone	4,37E-03	7,96E-03	5,61E-08	1,19E-04	3,98E-03	8,47E-03	4,24E-03	1,25E-02	6,23E-03
Bosnasco	4,39E-03	7,75E-03	5,42E-08	1,12E-04	3,88E-03	8,38E-03	4,19E-03	1,23E-02	6,13E-03
Calendasco	1,07E-02	1,59E-02	1,25E-07	2,63E-04	7,94E-03	1,89E-02	9,45E-03	2,68E-02	1,34E-02
Castel San Giovanni	1,91E-02	2,42E-02	1,96E-07	4,17E-04	1,21E-02	3,16E-02	1,58E-02	4,37E-02	2,19E-02
Chignolo Po	5,55E-03	8,61E-03	6,46E-08	1,35E-04	4,31E-03	9,99E-03	5,00E-03	1,43E-02	7,15E-03
Corteolona e Genzone	4,30E-03	7,27E-03	5,15E-08	1,08E-04	3,63E-03	8,05E-03	4,02E-03	1,17E-02	5,84E-03
Costa de' Nobili	6,19E-03	9,68E-03	7,16E-08	1,51E-04	4,84E-03	1,12E-02	5,59E-03	1,60E-02	8,01E-03
Gragnano Trebbiense	5,10E-03	9,30E-03	6,79E-08	1,42E-04	4,65E-03	9,89E-03	4,94E-03	1,45E-02	7,27E-03
Livraga	2,90E-03	5,17E-03	3,62E-08	7,50E-05	2,59E-03	5,56E-03	2,78E-03	8,15E-03	4,08E-03
Miradolo Terme	3,18E-03	5,73E-03	3,98E-08	8,31E-05	2,86E-03	6,12E-03	3,06E-03	8,99E-03	4,49E-03
Monticelli Pavese	1,50E-02	2,09E-02	1,69E-07	3,57E-04	1,05E-02	2,58E-02	1,29E-02	3,63E-02	1,81E-02
Orio Litta	4,43E-03	7,15E-03	5,24E-08	1,10E-04	3,57E-03	8,11E-03	4,05E-03	1,17E-02	5,84E-03
Ospedaletto Lodigiano	3,22E-03	5,50E-03	3,93E-08	8,19E-05	2,75E-03	6,05E-03	3,03E-03	8,80E-03	4,40E-03
Pieve Porto Morone	1,69E-02	2,11E-02	1,72E-07	3,65E-04	1,05E-02	2,78E-02	1,39E-02	3,83E-02	1,92E-02
Rottofreno	1,26E-02	1,84E-02	1,46E-07	3,09E-04	9,19E-03	2,21E-02	1,11E-02	3,13E-02	1,57E-02
Rovescala	2,99E-03	5,01E-03	3,33E-08	6,79E-05	2,51E-03	5,56E-03	2,78E-03	8,07E-03	4,03E-03
San Colombano al Lambro	2,96E-03	5,46E-03	3,78E-08	7,89E-05	2,73E-03	5,76E-03	2,88E-03	8,49E-03	4,25E-03
San Damiano al Colle	3,15E-03	5,96E-03	4,02E-08	8,24E-05	2,98E-03	6,21E-03	3,11E-03	9,19E-03	4,60E-03
San Zenone al Po	9,96E-03	1,36E-02	1,03E-07	2,19E-04	6,78E-03	1,70E-02	8,48E-03	2,37E-02	1,19E-02
Santa Cristina e Bissone	5,32E-03	8,99E-03	6,52E-08	1,39E-04	4,49E-03	9,96E-03	4,98E-03	1,45E-02	7,23E-03
Sarmato	1,89E-02	2,55E-02	2,09E-07	4,42E-04	1,27E-02	3,20E-02	1,60E-02	4,48E-02	2,24E-02
Senna Lodigiana	6,38E-03	9,90E-03	7,50E-08	1,57E-04	4,95E-03	1,15E-02	5,74E-03	1,64E-02	8,22E-03
Zerbo	1,36E-02	1,82E-02	1,44E-07	3,12E-04	9,12E-03	2,30E-02	1,15E-02	3,21E-02	1,61E-02
Ziano Piacentino	4,44E-03	6,07E-03	4,16E-08	8,58E-05	3,04E-03	7,56E-03	3,78E-03	1,06E-02	5,30E-03

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1.5 Fase 2 – Recettori rappresentativi

Recettore	Hazard Quotient					Effetti a lungo termine in condizioni di normale esercizio sui nodi del reticolo considerando le polveri come <u>PM10</u>		Effetti a lungo termine in condizioni di normale esercizio sui nodi del reticolo considerando le polveri come <u>PM2.5</u>	
	NO2	PM2.5	CO	NH3	PM10	Hazard Index	Incertezza (±)	Hazard Index	Incertezza (±)
Badia Pavese	6,74E-02	7,94E-02	6,68E-07	1,45E-03	3,97E-02	1,09E-01	5,43E-02	1,48E-01	7,41E-02
Santa Cristina	3,17E-02	5,20E-02	3,55E-07	7,46E-04	2,60E-02	5,85E-02	2,92E-02	8,45E-02	4,22E-02
San Zenone al Po	1,34E-01	1,65E-01	1,43E-06	3,08E-03	8,26E-02	2,20E-01	1,10E-01	3,02E-01	1,51E-01
Miradolo Terme	2,87E-02	4,71E-02	3,21E-07	6,52E-04	2,35E-02	5,29E-02	2,64E-02	7,64E-02	3,82E-02
Monticelli Pavese	5,94E-02	7,27E-02	6,44E-07	1,32E-03	3,64E-02	9,71E-02	4,85E-02	1,33E-01	6,67E-02
Pieve Porto Morone	1,30E-01	1,05E-01	9,35E-07	1,97E-03	5,25E-02	1,85E-01	9,23E-02	2,37E-01	1,18E-01
Chignolo Po	3,39E-02	5,89E-02	3,52E-07	7,50E-04	2,94E-02	6,41E-02	3,20E-02	9,35E-02	4,68E-02
Corteolona	2,86E-02	3,76E-02	2,87E-07	6,13E-04	1,88E-02	4,80E-02	2,40E-02	6,69E-02	3,34E-02
Costa de' Nobili	1,23E-01	8,44E-02	8,37E-07	1,56E-03	4,22E-02	1,67E-01	8,33E-02	2,09E-01	1,04E-01
Zerbo	1,53E-01	1,45E-01	1,24E-06	2,72E-03	7,27E-02	2,29E-01	1,14E-01	3,01E-01	1,51E-01
Gragnano Trebbiense	3,21E-02	7,08E-02	4,04E-07	8,25E-04	3,54E-02	6,83E-02	3,41E-02	1,04E-01	5,18E-02
Sarmato	5,85E-02	7,84E-02	6,52E-07	1,38E-03	3,92E-02	9,91E-02	4,95E-02	1,38E-01	6,91E-02
Castel San Giovanni	5,00E-02	6,63E-02	4,79E-07	1,06E-03	3,32E-02	8,42E-02	4,21E-02	1,17E-01	5,87E-02
Rottofreno	4,61E-02	6,50E-02	5,45E-07	1,17E-03	3,25E-02	7,98E-02	3,99E-02	1,12E-01	5,61E-02
Borgonovo Valtidone	1,92E-02	3,25E-02	2,28E-07	5,26E-04	1,63E-02	3,60E-02	1,80E-02	5,22E-02	2,61E-02
Orio Litta	3,39E-02	3,96E-02	3,06E-07	6,13E-04	1,98E-02	5,43E-02	2,72E-02	7,41E-02	3,71E-02
Ospedaletto Lodigiano	2,48E-02	3,37E-02	2,56E-07	5,28E-04	1,68E-02	4,22E-02	2,11E-02	5,90E-02	2,95E-02
Senna Lodigiana	3,27E-02	4,07E-02	2,95E-07	6,17E-04	2,04E-02	5,37E-02	2,69E-02	7,41E-02	3,70E-02
Bruciate	3,11E-02	3,48E-02	2,64E-07	5,83E-04	1,74E-02	4,91E-02	2,46E-02	6,66E-02	3,33E-02
Fornello	2,83E-02	2,97E-02	2,25E-07	4,58E-04	1,49E-02	4,37E-02	2,18E-02	5,85E-02	2,93E-02
Bissone	4,94E-02	7,63E-02	5,68E-07	1,15E-03	3,81E-02	8,87E-02	4,43E-02	1,27E-01	6,34E-02
Camporinaldo	3,26E-02	4,98E-02	3,04E-07	6,50E-04	2,49E-02	5,82E-02	2,91E-02	8,31E-02	4,15E-02
Fabbrica	6,28E-02	6,35E-02	5,40E-07	1,06E-03	3,17E-02	9,56E-02	4,78E-02	1,27E-01	6,37E-02
Ripaldina	6,32E-02	1,07E-01	7,49E-07	1,60E-03	5,35E-02	1,18E-01	5,91E-02	1,72E-01	8,59E-02
Cardazzo	7,16E-02	6,48E-02	5,62E-07	1,10E-03	3,24E-02	1,05E-01	5,25E-02	1,37E-01	6,87E-02
Casoni	8,36E-02	9,54E-02	7,91E-07	1,65E-03	4,77E-02	1,33E-01	6,65E-02	1,81E-01	9,03E-02
Alberone	6,43E-02	7,17E-02	6,24E-07	1,31E-03	3,58E-02	1,01E-01	5,07E-02	1,37E-01	6,86E-02
Lambrinia	6,18E-02	6,07E-02	5,02E-07	1,12E-03	3,03E-02	9,32E-02	4,66E-02	1,24E-01	6,18E-02
Mariotto	4,36E-02	4,42E-02	3,47E-07	7,64E-04	2,21E-02	6,64E-02	3,32E-02	8,86E-02	4,43E-02
Campremoldo Sotto	4,02E-02	8,00E-02	4,83E-07	9,99E-04	4,00E-02	8,12E-02	4,06E-02	1,21E-01	6,06E-02

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	NO2	PM2.5	CO	NH3	PM10	Hazard Index	Incertezza (±)	Hazard Index	Incertezza (±)
Centora	3,91E-02	7,40E-02	4,60E-07	9,28E-04	3,70E-02	7,70E-02	3,85E-02	1,14E-01	5,70E-02
Gragnanino	2,61E-02	5,75E-02	3,75E-07	8,24E-04	2,87E-02	5,57E-02	2,79E-02	8,45E-02	4,22E-02
Bosco Tosca	1,77E-01	2,08E-01	1,82E-06	3,84E-03	1,04E-01	2,84E-01	1,42E-01	3,88E-01	1,94E-01
Creta-Bruciate	3,25E-02	3,66E-02	2,82E-07	6,21E-04	1,83E-02	5,14E-02	2,57E-02	6,97E-02	3,48E-02
Fontana Pradosa	5,27E-02	7,39E-02	5,59E-07	1,19E-03	3,69E-02	9,08E-02	4,54E-02	1,28E-01	6,39E-02
Ganaghello	3,35E-02	3,84E-02	3,06E-07	6,50E-04	1,92E-02	5,33E-02	2,67E-02	7,25E-02	3,62E-02
Pievetta-Dogana Po	1,62E-01	2,02E-01	1,71E-06	3,71E-03	1,01E-01	2,66E-01	1,33E-01	3,67E-01	1,84E-01
Centora	4,12E-02	7,68E-02	4,83E-07	9,75E-04	3,84E-02	8,05E-02	4,03E-02	1,19E-01	5,95E-02
Sant'Imento	1,13E-01	1,17E-01	1,06E-06	2,16E-03	5,83E-02	1,74E-01	8,69E-02	2,32E-01	1,16E-01
Mottaziana	5,39E-02	7,43E-02	5,85E-07	1,39E-03	3,72E-02	9,25E-02	4,62E-02	1,30E-01	6,48E-02
Boscone Cusani	4,61E-02	5,74E-02	4,48E-07	9,49E-04	2,87E-02	7,58E-02	3,79E-02	1,05E-01	5,23E-02
Sant'Imento	1,11E-01	1,14E-01	1,04E-06	2,11E-03	5,70E-02	1,70E-01	8,50E-02	2,27E-01	1,14E-01
Corte Sant'Andrea	5,44E-02	5,03E-02	4,74E-07	9,27E-04	2,52E-02	8,05E-02	4,02E-02	1,06E-01	5,28E-02
Guzzafame	3,15E-02	4,57E-02	3,17E-07	6,45E-04	2,29E-02	5,50E-02	2,75E-02	7,78E-02	3,89E-02

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1.6 Fase 2 – Recettori sensibili

Recettore	Comune	Hazard Quotient					Effetti a lungo termine in condizioni di normale esercizio sui nodi del reticolo considerando le polveri come <u>PM 10</u>		Effetti a lungo termine in condizioni di normale esercizio sui nodi del reticolo considerando le polveri come <u>PM 2.5</u>	
		NO ₂	PM2.5	CO	NH ₃	PM10	Hazard Index	Incertezza (±)	Hazard Index	Incertezza (±)
Ospedale Civile di Castel San Giovanni	Castel San Giovanni	4,24E-03	7,50E-03	5,24E-08	1,10E-04	3,75E-03	8,10E-03	4,05E-03	1,18E-02	5,92E-03
Istituto Superiore di II° Grado Alessandro Volta	Castel San Giovanni	4,00E-03	7,12E-03	4,95E-08	1,03E-04	3,56E-03	7,67E-03	3,83E-03	1,12E-02	5,62E-03
Scuola elementare	Castel San Giovanni	4,12E-03	7,29E-03	5,08E-08	1,06E-04	3,65E-03	7,87E-03	3,93E-03	1,15E-02	5,76E-03
Scuola Paritaria dell'infanzia San Francesco	Castel San Giovanni	4,37E-03	7,66E-03	5,37E-08	1,12E-04	3,83E-03	8,31E-03	4,16E-03	1,21E-02	6,07E-03
Scuola media Giuseppe Mazzini	Castel San Giovanni	4,37E-03	7,67E-03	5,38E-08	1,13E-04	3,83E-03	8,32E-03	4,16E-03	1,22E-02	6,08E-03
Scuola elementare P. Maserati	Sarmato	4,94E-03	8,73E-03	6,30E-08	1,31E-04	4,37E-03	9,43E-03	4,72E-03	1,38E-02	6,90E-03
Scuola media Guido Moia	Sarmato	5,25E-03	9,22E-03	6,62E-08	1,40E-04	4,61E-03	1,00E-02	5,00E-03	1,46E-02	7,31E-03
Scuola Primaria di Rottofreno	Rottofreno	5,97E-03	1,04E-02	7,78E-08	1,63E-04	5,22E-03	1,14E-02	5,68E-03	1,66E-02	8,29E-03
Asilo Materno comunale di Rottofreno	Rottofreno	5,89E-03	1,03E-02	7,69E-08	1,61E-04	5,16E-03	1,12E-02	5,61E-03	1,64E-02	8,19E-03
Istituto Comprensivo San Nicolò Rottofreno	Gragnano Trebbiense	3,21E-03	6,08E-03	4,22E-08	8,68E-05	3,04E-03	6,33E-03	3,17E-03	9,37E-03	4,69E-03
Casa della Salute Borgonovo	Borgonovo Val Tidone	2,43E-03	4,71E-03	3,14E-08	6,33E-05	2,36E-03	4,85E-03	2,42E-03	7,20E-03	3,60E-03
Istituto Tecnico Commerciale Statale Alessandro Volta	Borgonovo Val Tidone	2,38E-03	4,62E-03	3,09E-08	6,20E-05	2,31E-03	4,75E-03	2,38E-03	7,06E-03	3,53E-03
Scuola dell'infanzia Statale	Borgonovo Val Tidone	2,54E-03	4,94E-03	3,30E-08	6,69E-05	2,47E-03	5,08E-03	2,54E-03	7,55E-03	3,77E-03
Scuola Materna Parrocchiale Zaira Sgorbati	Borgonovo Val Tidone	2,57E-03	4,95E-03	3,30E-08	6,71E-05	2,47E-03	5,11E-03	2,55E-03	7,58E-03	3,79E-03
Scuola Elementare E Media	Borgonovo Val Tidone	2,65E-03	5,10E-03	3,41E-08	6,96E-05	2,55E-03	5,27E-03	2,64E-03	7,82E-03	3,91E-03
Ente Nazionale Don Orione Formazione Aggiornamento Professionale	Borgonovo Val Tidone	2,68E-03	5,16E-03	3,45E-08	7,05E-05	2,58E-03	5,34E-03	2,67E-03	7,92E-03	3,96E-03
Scuole elementari Salvo D'acquisto	Ospedaletto Lodigiano	2,76E-03	4,80E-03	3,39E-08	7,04E-05	2,40E-03	5,23E-03	2,62E-03	7,63E-03	3,82E-03
Istituto Comprensivo Chignolo Po	Chignolo Po	3,29E-03	6,01E-03	4,21E-08	8,81E-05	3,00E-03	6,38E-03	3,19E-03	9,39E-03	4,69E-03

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		NO ₂	PM2.5	CO	NH ₃	PM10	Hazard Index	Incertezza (±)	Hazard Index	Incertezza (±)
Scuola Materna	Santa Cristina e Bissone	3,30E-03	6,01E-03	4,15E-08	8,74E-05	3,00E-03	6,39E-03	3,20E-03	9,39E-03	4,70E-03
Scuole elementari	Santa Cristina e Bissone	3,42E-03	6,18E-03	4,29E-08	9,04E-05	3,09E-03	6,60E-03	3,30E-03	9,69E-03	4,85E-03
Centro medico	Corteolona e Genzone	3,30E-03	5,99E-03	4,14E-08	8,67E-05	3,00E-03	6,38E-03	3,19E-03	9,38E-03	4,69E-03
Scuola dell'infanzia	Corteolona e Genzone	3,37E-03	6,10E-03	4,23E-08	8,85E-05	3,05E-03	6,51E-03	3,26E-03	9,56E-03	4,78E-03
Scuola Media	Corteolona e Genzone	3,28E-03	5,98E-03	4,13E-08	8,64E-05	2,99E-03	6,35E-03	3,18E-03	9,34E-03	4,67E-03
Scuola elementare	Monticelli Pavese	6,53E-03	9,91E-03	7,52E-08	1,57E-04	4,95E-03	1,16E-02	5,82E-03	1,66E-02	8,30E-03

VALUTAZIONE DI IMPATTO SANITARIO

Progetto di installazione di una Nuova Unità a gas

DATA
Ottobre 2020PROGETTO
20530IPAGINA
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