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Figure S1. Distribution of nitrogen oxide uptake per area.

Table S1. Municipal stormwater fees per area of impervious surface.

Table S2. Net present value for model framework.

Table S1. Municipal stormwater fees per area of impervious surface.

City	State	Annual Rate (2006$/m^2)	Green Roof Benefit	Notes	Source
Ann Arbor	MI	0.37	--	2006 Stormwater fees. New 2007 policy evaluated separately.	(36)
Atlanta	GA	0.08	--	Rate applies to Gwinnett County	(37)
Bellevue	WA	0.09-0.38	--	Varies according to degree of imperviousness.	(38)
Boulder	CO	0.06-0.08	--	Residential rates based on parcel size.	(39)
Gainesville	FL	0.35	--		(40)
Minneapolis	MN	0.06-0.09	50%	50% reduction for control of 10-year, 24 hr storm. 100% for control of 100-yr, 24 hr storm.	(22)
Portland	OR	0.07	35%	35% fee reduction.	(41)
Seattle	WA	0.04-0.36	--	Varies according to degree of imperviousness.	(42)
Takoma	WA	0.21	--		(43)
Washington	DC	0.03	--	Residential rate used.	(44)

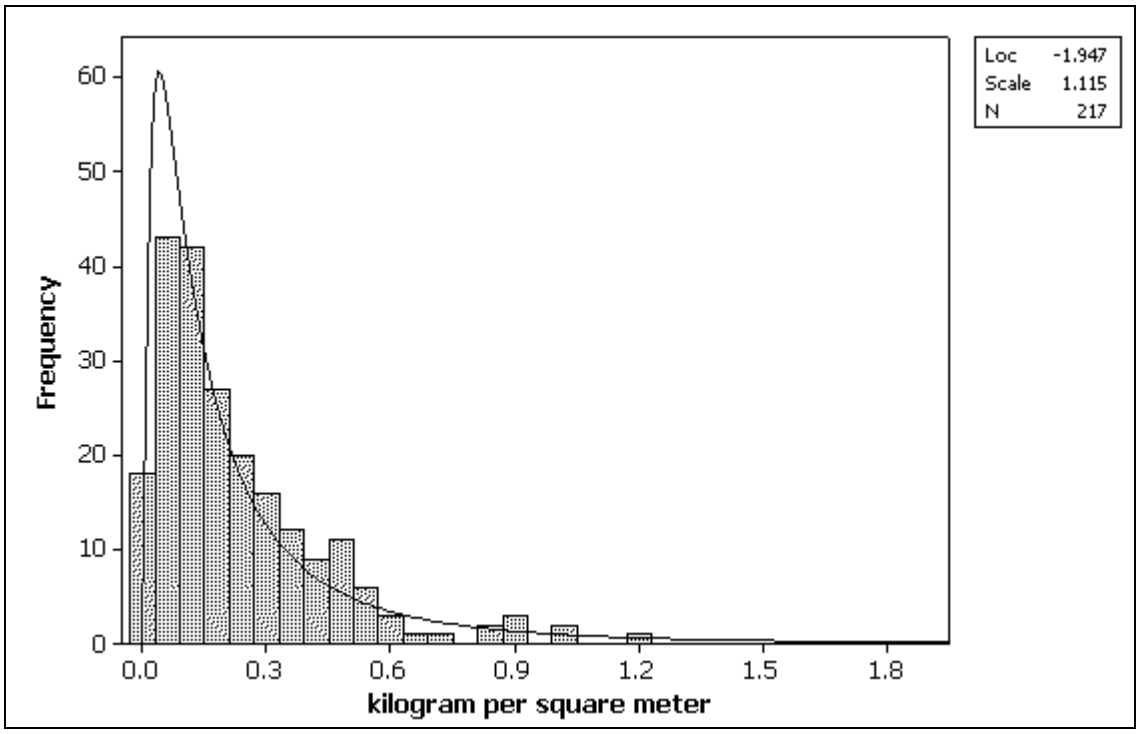

Figure S1. Distribution (frequency) of assumed annual NOx uptake potentials (kg/m²) from 217 plant taxa under green house conditions (32).

Table S2. Net present value for model framework.

Conventional roof installation and replacement net present value

$$NPV_{conventional} = C_{installation} + \sum_{n=20,40} \frac{C_{replacement}}{(1+i_d)^n} \cdot (1+i_f)^n$$

Green roof installation net present value

$$NPV_{green\ roof} = C_{installation}$$

Net present value of benefits due to reduced stormwater fees

$$NPV_{stormwater} = \sum_{n} \frac{C_{stormwater}}{(1+i_d)^n} \cdot (1+i_f)^n$$

Net present value of benefits due to reduced energy consumption

$$NPV_{energy\ savings} = \sum_{n} \frac{C_{energy\ savings}}{(1+i_d)^n} \cdot (1+i_f)^n$$

Net present value of benefits due to improved air quality

$$NPV_{air\ pollution} = \sum_{n} \frac{C_{air\ pollution}}{(1+i_d)^n} \cdot (1+i_f)^n$$

where n is number of years, i_d is discount rate, and i_f is the inflation rate.