

THE "1-15" SUSTAINABILITY REPORT CARD

This Sustainability Report Card has been abstracted from the recently published *Sustainability Concepts Paper* "Cities as Forces for Good in the Environment: Sustainability in the Water Sector" (by M. B. Beck, 2011) which may be accessed in [full and downloaded online](#).

We all make judgments. We are always comparing, ranking, and creating league tables. And we do so according to certain indexes, criteria, or indicators. Famously, there is the [urban ecological footprint](#) and its younger sibling, the [water footprint](#). Thus are the green-ness and sustainability of cities judged and ranked ([Siemens](#); [Home Depot](#)). Veolia Environnement has a [Water Impact Index](#) (WIIX). Equally famously, there is the Triple Bottom Line. [Sustainable Asset Management](#) (SAM) uses such criteria to identify leaders amongst business entities in the sustainability of their (environmental) performance. The website [Global 100](#) publishes a league table of the 100 "Most Sustainable Corporations in the World". The laggards, we presume, are conspicuous by their absence from such citations.

This "1-15 Report Card" is organized according to the Triple Bottom Line ([Chapter 5, Sustainability Concepts Paper](#)): **1** for the over-arching notion of Sustainability; 15 for the facets thereof, circling around from the local and personal (T1) to the big and the global (T14), and back — together with a Topmost Line (T0) (or TmL). The Card's purpose is to draw attention to the "best-in-class" performers. To do so is to have answered this question:

Which entities — from all walks of life (private-sector business, public-sector agency, civil-society actor, and so on) — are best attending to the "local and

personal”, or the “big and the global”, or to the intents of any of the other thirteen facets of Sustainability, *in practice*?

We judge that the performance of the entities and enterprises cited in the Report Card, for the ways in which they have acted, is exemplary and to be lauded. For the time-being, these exemplars are drawn predominantly from the Water Sector. They are not ranked one to another. Nor is it to be expected that any single enterprise should be the best in *all* classes. Over time, we plan to add further exemplars to each category of *Best in Class*.

To understand the template of this “1-15 Report Card” and how it was developed, the following supporting materials are available (in successively increasing depth and volume):

- i. The all-encompassing [Screen-shot](#) (from the [Sustainability Essentials](#)) expands somewhat upon the “story-line” of the cryptic *Narrative* column of the Card.
- ii. The 8 [Takes on Sustainability Essentials](#), in which the [Screen-shot](#) is embedded, are distillates of the conceptual essences of Sustainability, i.e., a compression of the large volume of the [Sustainability Concepts Paper](#) into a pocket-book handful of pages.
- iii. [Chapter 6 of the Sustainability Concepts Paper](#) elaborates fully upon the *Best-in-Class* exemplars cited in this first issue of the Report Card, as entities performing at the frontiers of the various facets of Sustainability and the Triple Bottom Line, i.e., entities at the *TBL_{frontier}* in short.
- iv. [Chapter 5 of the Sustainability Concepts Paper](#) establishes the conceptual basis of the fifteen facets of the Report Card and summarizes how that framing within the Triple Bottom Line would generally be understood today (*TBL_{now}*) — and how it might be conceived of in the more distant future (*TBL_{future}*).
- v. And then there is the [Sustainability Concepts Paper](#) itself.

The Report Card (attached table), as much as the over-arching notion of Sustainability, contains within it the seeds of its own future re-organization and adaptation — as line item (T0), our Topmost Line (TmL).

M Bruce Beck

Line Item	Narrative	Best in Class	Web
(T0) ORGANIZATIONAL LEARNING	To lead to learn, beyond having learned to lead : “Always Learning, Never Getting It Right”; “Sometimes Getting It Better”. To acquire <i>deliberately</i> , step-by-step, an appropriate mental complexity, sufficient to grapple with the labyrinthine and comprehensively irreducible complexity of Sustainability.	Yarra Valley Water has a Learning and Development Manager; the company seeks change through organizational learning.	YVW
(T1) Personal Aspirations	To survive. To aspire to a life with good health. To attain a growing sense of well-being, sufficient to dare to challenge and question the merits of Sustainability itself.	Sulabh Sanitation & Social Reform Movement (New Delhi, India) elevates women scavengers through the Nai Disha Rehabilitation Initiative to promenading the catwalk of high fashion at UN Headquarters.	SSSRM
(T2) Citizen Participation	For the “powers that be”: to grant a debate. For the citizen, having questioned: to speak, to be heard in the debate, hence to participate — in some way meaningful to the individual — in determining a path to becoming less UnSustainable.	San Francisco Public Utilities Commission (SFPUCC) holds itself accountable in respect of (a) engagement of stakeholders from conceptual stage of major planning programs and (b) feedback on this stakeholder input.	SFPUCC
(T3) Social Bonds	To apprehend the plurality of disputatious views on the world, in particular, on the Man-Nature relationship. To recognize and address accordingly the awkwardness of these plural rationalities, <i>never</i> the comfort of consensus. “Government”, “Business”, and “Civil Society” have their	Severn Trent plc recognizes a number of community segments. Veolia frames multiple styles of management according to different ways	STPLC-a VEO-a

	own ways of problem-framing and their own means of problem-solving. To benefit then from the richness of plural wisdoms on how Man should live with Nature and, likewise, on how Man should get along with his fellow Man.	or organizing.	
		Mutually benefitting synergy amongst Clean Water Services (public utility), Ostara (private start-up), and the Clean Water Institute (not-for-profit) is the result of organizational adaptation and evolution.	CWS
(T4) Quality in Governance	To experiment with the nature of governance while “governancing”, hence to learn: to identify and discriminate those elements of governance that enable innovation and change — away from UnSustainability — from those that stifle them.	Nepal Water Conservation Foundation is pursuing a clumsy institutional structure for managing the Kathmandu-Bagmati system.	NWCF
(T5) Ethics and Equity	To relate to more than the self in the world and to care about the conduct of such relationships: Man-to-Man; Man-to-Nature; individual-to-group; present-to-future generation; present-to-past generation; seller-to-buyer; and so on.	Sydney Water uses “inter-generational equity” as a matter of routine in assessing its projects.	SW
		Cheryl Davis (employee of SFPUC) comprehensively addresses ethical dilemmas of water recycling.	CDA
(T6) Valuation	To write a final environmental will and testament. To value expressly those things that are cherished: in minimizing the costs to Man of the materials consumed in building and operating urban infrastructure (for a clean water environment, for instance); in the commerce of citizens	Over 300 installations of its Water Health Centers signal the success of Water Health International’s business model for bringing affordable, safe drinking water to small, scattered communities.	WHI

	benefitting from Nature, in consuming oysters, for example, now and in the future; and in Nature-to-Nature relationships, as in valuing the natural capital of oysters for doing for <i>themselves</i> what preserves <i>their</i> future capital and prosperity (not Man’s).		
(T7) Environment Within the Language of Business	To treat natural capital on a par with all other forms of capital in business. To treat ecosystem services on a par with the services rendered by electricity, process chemicals, and human labor. To assess the risks to business through the bankruptcy (failure) of ecosystem service providers in the supply-value chain.		
(T8) Supply-Value Chains	To exercise the power of all these principles of Sustainability ((T0) through (T14)), hence to propagate them along ever more extended webs of supply-value chains. To apprehend that “what goes around comes around” — in the backlash inherent in a supply-value <i>circle</i> . The lowliest of supplier employees may reject the products and services of the highest and mightiest businesses.	Some 50 cities committed to the UN Global Compact, with its protocols for protecting human rights.	UNGC-a UNGC-b
		CH2MHill, Halcrow, GDF-SUEZ, and Athens (Greece) Water & Sewerage Company are signatories of the Global Compact’s CEO Water Mandate	UNGC-c
(T9) Commercial Sectors	To recognize the inadequacy of a water-centric view of the world. To seek out cross-sectoral synergies and avoid antagonisms. To resist any form of centrism. Making cities less UnSustainable is no more a matter of water-centrism than it is of nitrogen-centrism, or phosphorus-centrism, or energy-centrism, or any other single economic sector-	Veolia Environnement offers itself as a sole provider of multiple services, such as management of water, waste, transport, and energy utilities; Veolia Water UK describes itself as a “Multi-utility Services Company” (or MUSCO).	VEO-a VEO-b

	centrism.	
(T10) Space	To assess behavior and performance: inwards from within the factory fence-line to the public and private spaces of individual behavior; and outwards and beyond the fence-line, to “thinking globally”. To account for cross-scale interactions, in knowing that “for want of the smallness a nail the largeness of the kingdom was lost” — and <i>vice versa</i> , every bit as much.	DHV Group (Consulting Engineers) “blurs the line between sewage treatment and river habitat” (between city and watershed) in re-engineering Soerendonk Sewage Treatment Plant in the Netherlands. The Natural Step provided training for DHV employees. NS-a , NS-b
(T11) Life Cycle and Time	To conceive of the stages of the life cycle from cradle to <i>cradle</i> . To recognize the significance of cross-stage interactions. To invest penetrating <i>forethought</i> in priming from birth the project’s — the technology’s, the institution’s — capacity to learn, hence adapt its function across the adulthood of its operation.	The Natural Step works with Yarra Valley Water on concepts and techniques of Life Cycle Analysis (LCA). YVW
(T12) Function	Simply, and from the outset, to appreciate how brief are the stages of planning, design, construction, disassembly, and reincarnation in the cycle of things and, by contrast, how long and enduring is that of operation (in real time).	Within IBM’s Smarter Planet and Smarter City portfolio are various Smarter Water Management applications, including the SmartBay project of Galway, Ireland. IBM
(T13) Gauging Environmental Benignity	To seek not merely ever tighter pollution control and greater eco-efficiency, wherein Man decreasingly benefits at the expense of Nature. In the metaphor of biomimicry, cities have appetites, metabolisms, <i>and</i> the pulse-rate of its 24-7 rhythms — Man tunes Nature to his liking. To achieve resource recovery, therefore, with instead the wit and deftness of smart urban infrastructure stewardship,	Ostara Nutrient Recovery Technologies, Clean Water Services (Durham, Oregon), and the British Columbia Conservation Foundation are partnering to issue recovered nutrient supplements to restore declining salmon populations. OST

for Nature to benefit from the rhythms of life in the city.

DHV Engineering Group's re-engineering of Soerendonk Sewage Treatment Plant generates rhythmic flow variations to enhance watershed ecosystem services.

[DHV](#)

PUB, Singapore's National Water Agency, funds research into biomimetic membranes that seek to emulate behavior of micro-organism cell membranes.

[PUB-a](#)

[PUB-b](#)

(T14) *Cycling of Materials*

"What goes around, indeed, comes around." To strive to better the aesthetic of natural circularity in the "goings-around" of one material-energy while not worsening that of the goings-around of others — from the global of Earth Systems Analysis to the local, personal, and intimate.

Severn Trent plc bemoans the lack of policy joining up considerations of the carbon cycle with those of the water cycle.

[STPLC-b](#)

Resources Centres on Urban Agriculture & Food Security (RUAf) promote Sustainable Urban Nutrient Management coupling aqueous and nutritious human residuals.

[RUAf](#)