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Green Roots Strategic Plan Report 2012-2013

Lawrence University

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Lawrence University Committee on Sustainability – “Green Roots”
Report on progress and challenges of the Strategic Plan – Strategies for Implementation
2012-2013

Since the “Sustainable Lawrence Initiative” was launched at the Matriculation Convocation in 2008, sustainability has become an embedded value on the campus. As represented on the home page of the University Committee on Sustainability, the values and challenges related to sustainability are expressed in all areas of the campus.

The committee established in the spring of 2010, the University Committee on Environmental Sustainability, or Green Roots, was created with an expectation that:

“The form and function of this committee will be reviewed after three years by the President, the Faculty Committee on University Governance, and the committee itself. At that time, this ad hoc review group will recommend a long-term structure to ensure the continuance of environmental sustainability efforts at Lawrence.”

This report summarizes activities of the committee over the past year and addresses some of the challenges presented by the 2010-2020 Strategic Plan. The criteria used to rate sustainability achievements developed by the American Association for Sustainability in Higher Education’s STARS reporting system are useful as a measure of our sustainability achievements, and we do well to consider them when we evaluate progress toward implementation of the Strategic Plan.

Members of the Committee 2012-2013

Kathleen Isaacson, Chair- Library

Judith Humphries- Biology, Neuroscience

Martyn Smith- Religious Studies and International Studies

Matt Jeanquart- Associate Director of Facility Services, Safety Director

Greg Griffin- Director of the Warch Campus Center

Ellie Crean- Residence Hall Director

Student Members: Austin Federa, Chelsea Johnson, and Hannah Plummer

To say that “sustainability has become an embedded value” is not to say that our work here is done. To confirm that our practices are shaped by our values, and in order to set goals for improvement, we need to assess our sustainability efforts and promote sustainability in all areas of campus life. The 2010-2020 Strategic Plan – Strategies for Implementation incorporates the categories involved in carrying out this process. This report outlines the proposed strategies and describes accomplishments and ongoing challenges.

Improve Lawrence’s “green” profile as reported by organizations such as Sierra Magazine, Sustainable Endowments Institute, AASHE, and Peterson’s Guide.

Data were gathered from many departments on campus to supply information to Sierra Magazine and the American Association for Sustainability in Higher Education STARS ranking. The resulting STARS rating was 54.97, which is in the Silver range. We would need to score at least 65 to rank at the Gold level.

A “snapshot” of our profile was provided to Sierra Magazine in April. The “Cool Schools 2013” ranking is published in the September/October 2013 issue. Lawrence University ranked 52nd of 162 schools included in the complete rankings.

<http://www.sierraclub.org/sierra/201309/cool-schools/complete-rankings.aspx>

In spite of a great deal of effort on the part of the committee, staff and faculty to document our data and improvements, there are a few categories where Lawrence scored lower than the survey’s possible points: investments, energy, instruction/research, transportation, and water. Quite a few categories require documentation on the campus web site, and that should be a focus for improvement in our ranking as well as for our public profile.

The Lawrence Research Administration office provides data for the “Common Data Set,” which *Peterson’s Guide* uses for its annual compilation. The criteria reported in that data set do not include the term “sustainability.” In order to improve our visibility in other college guides and web searches we could identify an environmental sustainability officer, include more references to sustainability on the campus web site and publications, use “sustainability” keywords more often in course names and descriptions, and also fund programs that support and highlight activities and research related to sustainability.

The Sustainable Endowments Institute has suspended its *College Sustainability Report Card* as of March 30, 2012.

Develop a sustainability statement in accord with Lawrence’s Mission Statement.

A diverse committee of faculty who teach courses listed within the Environmental Studies curriculum, in conjunction with the sustainability committee agreed on a definition of sustainability as follows: “Sustainability means shaping human cultural, economic and political systems to harmonize with other processes in the natural world, in order to maintain the vigor and resilience of both. The study of sustainability includes learning from the past, evaluating the present, and improving the environment for the future.”

Using this definition of sustainability the Environmental Studies department was able to identify twenty-five sustainability-focused and –related courses that are offered on a consistent basis, and thus include them in our STARS report. However, since those courses did not total a full ten percent of our courses, we still did not rate very high in that category. Further use of this definition might be made by asking staff to evaluate how their work contributes to

sustainability on campus. Facility services already tracks energy use, water consumption, and waste disposal among other sustainability categories.

Create a culture of conservation via collaboration, education, and incentives.

Members of the committee worked with their constituencies and gathered data from other groups in order to encourage conservation, find out what incentives were working and where more educational opportunities could be found. The film, *Chasing Ice* was shown on campus with financial support from the Fox Cities Book Festival. Staff in Technology Services developed an application to monitor and display electrical consumption in the residence halls so that comparisons could be made between halls as well as over time. Digital displays in Plantz and Trever Halls highlighted comparative energy consumption during the Earth Week hall competition. The actual real-time energy statistics can be found at https://www.lawrence.edu/info/green_roots/energy_at_lawrence With the help of Technology Services, the larger residence halls now have live results of their energy consumption via digital displays and the Green Roots web site. Other departments could be asked – “what can we do to improve sustainability in the ways we carry out our responsibilities?”

Support academic and community engagement projects that promote innovative sustainability efforts.

Three innovations are included in our STARS report this year: the LUCC Sustainability Fee, the residence hall energy competition, and a live website capable of tracking electricity usage in campus buildings. In the annual Recyclemania competition, in the pounds per capita category measuring mixed recyclables and cardboard, Lawrence improved its ranking from 19th last year to 15th this year. For the total reported recycling during the competition, carbon dioxide emissions were reduced by the equivalent of 126 metric tons according to the formula provided at recyclemania.org. (Appended RecycleManiaCompetitionTop50.pdf)

In addition, the students in ART220 Printmaking mounted a show related to these questions: “What does *Consumerism* mean to you? What kind of fingerprint are you making/leaving on this world? Choose a topic and state your claim.” Students were rewarded with portfolios paid for by a Recyclemania stipend. Images created by the students are available at https://www.lawrence.edu/info/green_roots/student_projects

Integrate educational opportunities with sustainability efforts.

We should encourage faculty and staff to participate in workshops such as this, at UW Oshkosh in August, 2013, on sustainability across the curriculum.
<http://www.aashe.org/events/workshops/next-steps-for-campus-sustainability>

Additionally, the University should consider hiring students as work-study sustainability assistants to collect and report data, engage with the Career Center to identify sustainability careers and study opportunities, coordinate a campus sustainability web site and social media program, and incorporate sustainability into student life on campus.

Consider the environmental impact of new campus initiatives.

For any initiative under consideration, the effect on energy and carbon, maintenance, waste and recycling, composting, water consumption, residential living, and even the curriculum may need review. The question, will the initiative have a positive effect on sustainability, should be central to the planning process. A sustainability coordinator could play an important role in such planning.

Promote and support waste reduction and recycling.

The committee frequently observed that it would be highly desirable to identify a sustainability coordinator who would initiate and oversee efforts in sustainability on campus, and to help author action plans for reductions in green-house gas emissions, water consumption, and waste reduction. Might there be new opportunities to reduce waste that are cost-effective? Are there new developments locally that would make composting on a larger scale a possibility?

A few examples of waste reduction and recycling currently include: print stations in computer labs and in the library have signs reminding students to print only when necessary and printers default to double-sided printing, recycling posters printed for distribution to the residence halls and other buildings on campus, signs and digital displays were used to publicize recycling, and the committee worked to help promote Greenfire Earth Week 2013. (Appended Earth Week Poster.pdf)

Promote Lawrence at regional and national sustainability conferences.

Funds were not available to support registration and travel to national conferences but there are regional meetings such as those sponsored by the American Association for Sustainability in Higher Education that might fall within a reasonable budget.

Implement ongoing assessment of sustainability efforts.

The data gathered for STARS include most categories that measure sustainability. The STARS checklist is useful as a reminder of the many categories involved in tracking progress toward sustainability. (Appended stars_1.2_credit_checklist.pdf) Rating for the spring 2013 report is at <https://stars.aashe.org/institutions/lawrence-university-wi/report/2013-06-17/> It should be noted that compiling the data for STARS involves a great deal of time on the part of faculty and staff, and it would be helpful if a sustainability coordinator were appointed to assume responsibility for assessment.

Assist the university in reducing use of fossil fuel-derived energy (or carbon footprint) by 25% of the 2003-2008 average. (with Facilities Services)

Water

Data accumulated for the STARS report show that water consumption decreased from baseline year 2005 – 554,821 gallons to 2012 – 400,940 gallons, which is a very significant 27% reduction.

Low flow shower heads have been installed in residence halls, and the Environmental Responsibility Committee arranged for shower timers to be installed in residence halls. Appropriate plant selection, mulches, and maintenance have reduced the need for irrigation.

Energy

Wind turbine. Power generated by the wind tower is enough to have supplied needs of nineteen homes in 2012.

In 2012 there was a decrease/savings of 41% which equals out to a savings of \$8,425 before turbine maintenance costs (\$2,500 per year). (Appended Bjorklunden Electricity Comparison 2011-2012.pdf)

All buildings on the main campus are heated by natural gas. Of the electrical energy supplied by WE Energies, the fuel sources have several components:

Fuel Sources	Percentage of fuel types used to produce electricity		
	2010	2011	2012
Coal	53.9%	63.0%	45.0%
Nuclear	27.7%	23.0%	29.0%
Gas	11.0%	10.0%	20.7%
Oil	0.0%	0.0%	0.0%
Other purchases	4.0%	0.0%	0.0%
Hydroelectric	1.0%	1.0%	0.9%
Biomass	0.8%	0.0%	0.1%
Landfill gas	0.0%	1.0%	0.9%
Wind	1.6%	2.0%	3.4%

Energy monitoring via the Lawrence web site development was slowed by conversion to new site, but one of the highlights was the live display of energy use for large residence halls. A one-week competition was displayed on digital monitors at two of the halls , which brought attention to energy use. http://www.lawrence.edu/info/green_roots/energy_at_lawrence

Lighting

Wherever lighting needs to be replaced LEDs are used. The use of timed lighting is being explored wherever it can be installed with existing circuitry, or where remodeling offers an opportunity for its consideration.

Computer purchasing and printing

All computers, printers, and monitors purchased in the last year are EPEAT Gold certified. It is the stated policy of Technology Services as part of their "Green Initiative". Other parts of this initiative include mandated power-saving settings in campus computer labs, default double-sided printing, the replacement of all CRT monitors with Energy Star LCD monitors, the purchase of recycled toner cartridges, and end-of-life recycling for all electronics and spent printer/toner cartridges.

All copier/printer paper, including letterhead, is now 100% recycled. A comparison of printing for the past two years shows a reduction in printing at student print release stations. Page counts for print release stations show 621,510 pages for 2011-12 and 537,431 pages for 2012-2013.

Increase the purchase of locally grown foods to 20% by 2015.

Food services reports that we have passed that point as of 2013.

At its final meeting in June 2013 the faculty voted to continue the current structure of the Committee on Environmental Sustainability for another year.

Per Capita Classic, Organized by Rank

2013 Recyclemania Competition

School	Rank Top 50	Lbs. per Capita
California State University-San Marcos	1	53.105
Barton College	2	48.965
Kalamazoo College	3	48.909
Westfield State University	4	48.495
Loyola Marymount University	5	48.408
Boston College	6	47.93
United States Military Academy	7	43.867
Franklin W. Olin College of Engineering	8	43.773
University of Southern Indiana	9	41.523
Drew University	10	41.476
University of Wisconsin-Eau Claire	11	38.841
University of Mary Washington	12	37.544
Ursinus College	13	36.932
Massachusetts Maritime Academy	14	36.588
Lawrence University	15	34.944
Franklin College	16	33.079
Rider University	17	32.893
Catholic University of America	18	32.784
Randolph College	19	32.338
Rutgers University	20	32.317
Union College	21	31.639
Minneapolis College of Art and Design	22	31.447
Franklin and Marshall College	23	31.417
Rochester Institute of Technology	24	30.219
Duke University	25	30.14
University of Rochester	26	29.678
Bucknell University	27	29.401
Rhode Island School of Design	28	29.212
University of California-Irvine	29	28.612
Harvard University	30	28.481
Saint Joseph's University	31	28.414
University of San Diego	32	28.237
Bowdoin College	33	27.86
New Mexico State University-Main Campus	34	27.856
Amherst College	35	27.158
Washington University in St Louis	36	26.765
The University of Tennessee-Martin	37	26.736
Wesleyan University	38	26.687
Guilford College	39	26.355
Stanford University	40	25.613
Endicott College	41	25.047
Denison University	42	25.002

The University of Texas Medical Branch	43	24.313
Bryant University	44	24.306
Knox College	45	24.231
Baldwin-Wallace College	46	23.812
Stark State College of Technology	47	23.388
Colorado College	48	23.323
Juniata College	49	23.182
Elizabeth City State University	50	22.524
San Francisco State University	51	21.927

14 We OWN It: Cooperatives Build a Better World:
Join LU alum Cathy Statz, Education Director for Wisconsin Farmers Union and Margaret Bau, USDA Coop.Development Specialist as they share the near-mystic powers of cooperative organization for community and planetary health! 1pm - Kramer Room

16 Chasing Ice Film Screening:
Watch James Balog's award-winning documentary with us! Chasing Ice captures rapidly-increasing glacial ice melt and glacier calving on film as very visual reminders of climate change. 7pm - Cinema

Sponsored by Fox Cities Book Festival

18 Build it Better, Build it Green:
Join Ed Gulick, architect for High Plains Architects as he talks about green building and why it's a critical component to achieving sustainability as a society. Topics include value, aesthetics, and performance. 8pm - Youngchild121

21 Stopping Civilization's Violence to the Earth:
Join Lierre Kieth, writer, radical feminist, food activist and environmentalist as she speaks on civilization's violence to the earth, male violence against women, and the need for serious resistance to both. 1pm - Steitz 102

23 Moving Forward in the Environmental Movement:
Join Winona LaDuke, internationally acclaimed author and environmental and indigenous activist as she speaks on how connections to the land can help us move our societies and economies forward to a better environmental future. 7pm - Youngchild 121

Co-sponsored by OMA

27 Greenfire's Annual Earth Day Fest!
Join Greenfire and dozens of campus organizations for our earth day festival where we celebrate the earth and continue to explore how our actions can protect it and our communities. Drop in throughout the event and bring a friend! 1-3pm - Warch

Greenfire Presents...

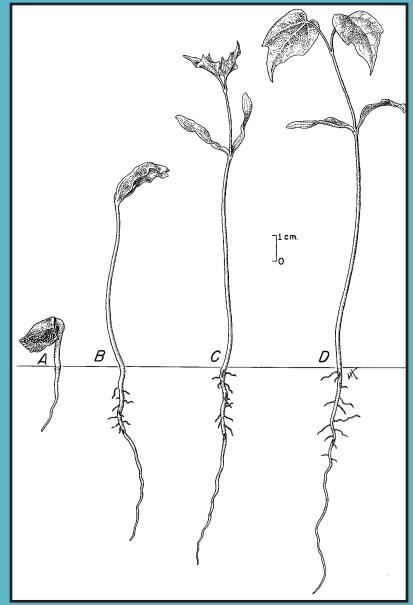
EARTH WEEK 2013!

APRIL 14-27

14 Co-op Talk Sun.	15	16 Chasing Ice Film	17	18 Green Building Talk	19	20 Sat.
21 Radical Activism Talk Sun.	22 Happy Earth Day!	23 Winona LaDuke, Speech and Q&A	24	25	26	27 Earth Fest! Sat.

From Thought to Action

This year, we choose events that focused on turning thought into positive, meaningful action. Earth Day can sometimes seem too fleeting for real lifestyle or societal change. This Earth Day, we're hoping you engage with these events or other things that inspire you and turn those thoughts into actions that heal and protect people and this planet.



More events on Greenfire's Facebook page!

STARS 1.2 Credit Checklist

Category 1: Education & Research (ER)

Credit Number	Credit Title	Possible Points
Co-Curricular Education		
ER 1	Student Sustainability Educators Program	5
ER 2	Student Sustainability Outreach Campaign	5
ER 3	Sustainability in New Student Orientation*	2
ER 4	Sustainability Materials and Publications	4
Co-Curricular Education Tier Two Credits		
ER T2-1	Student Group	0.25
ER T2-2	Organic Garden*	0.25
ER T2-3	Model Room in Residence Hall*	0.25
ER T2-4	Themed Housing*	0.25
ER T2-5	Sustainable Enterprise	0.25
ER T2-6	Sustainability Events	0.25
ER T2-7	Outdoor Program	0.25
ER T2-8	Themed Semester or Year*	0.25
Co-Curricular Education Total Points		18
Curriculum		
ER 5	Sustainability Course Identification	3
ER 6	Sustainability-Focused Courses	10
ER 7	Sustainability-Related Courses	10
ER 8	Sustainability Courses by Department*	7
ER 9	Sustainability Learning Outcomes*	10
ER 10	Undergraduate Program in Sustainability*	4
ER 11	Graduate Program in Sustainability*	4
ER 12	Sustainability Immersive Experience*	2
ER 13	Sustainability Literacy Assessment	2
ER 14	Incentives for Developing Sustainability Courses	3
Curriculum Total Points		55
Research		
ER 15	Sustainability Research Identification*	3
ER 16	Faculty Engaged in Sustainability Research*	10
ER 17	Departments Engaged in Sustainability Research*	6
ER 18	Sustainability Research Incentives*	6
ER 19	Interdisciplinary Research in Tenure and Promotion*	2
Research Total Points		27
Total ER Points		100
* credit does not apply to all institutions		

STARS 1.2 Credit Checklist

Category 2: Operations (OP)

Credit Number	Credit Title	Possible Points
Buildings		
OP 1	Building Operations and Maintenance	7
OP 2	Building Design and Construction*	4
OP 3	Indoor Air Quality	2
Buildings Total Points		13
Climate		
OP 4	Greenhouse Gas Emissions Inventory	2
OP 5	Greenhouse Gas Emissions Reduction	14
Climate Tier Two Credits		
OP T2-1	Air Travel Emissions	0.25
OP T2-2	Local Offsets Program	0.25
Climate Total Points		16.5
Dining Services		
OP 6	Food and Beverage Purchasing*	6
Dining Services Tier Two Credits		
OP T2-3	Trayless Dining	0.25
OP T2-4	Vegan Dining	0.25
OP T2-5	Trans-Fats	0.25
OP T2-6	Guidelines for Franchisees	0.25
OP T2-7	Pre-Consumer Food Waste Composting	0.25
OP T2-8	Post-Consumer Food Waste Composting	0.25
OP T2-9	Food Donation	0.25
OP T2-10	Recycled Content Napkins	0.25
OP T2-11	Reusable Container Discounts	0.25
OP T2-12	Reusable To-Go Containers	0.25
Dining Services Total Points		8.5
Energy		
OP 7	Building Energy Consumption	8
OP 8	Clean and Renewable Energy	7
Energy Tier Two Credits		
OP T2-13	Timers for Temperature Control	0.25
OP T2-14	Lighting Sensors	0.25
OP T2-15	LED Lighting	0.25
OP T2-16	Vending Machine Sensors	0.25
OP T2-17	Energy Management System	0.25
OP T2-18	Energy Metering	0.25
Energy Total Points		16.5

Grounds		
OP 9	Integrated Pest Management*	2
Grounds Tier Two Credits		
OP T2-19	Native Plants*	0.25
OP T2-20	Wildlife Habitat*	0.25
OP T2-21	Tree Campus USA*	0.25
OP T2-22	Snow and Ice Removal*	0.25
OP T2-23	Landscape Waste Composting*	0.25
Grounds Total Points		3.25
Purchasing		
OP 10	Computer Purchasing	2
OP 11	Cleaning Product Purchasing	2
OP 12	Office Paper Purchasing	2
OP 13	Vendor Code of Conduct	1
Purchasing Tier Two Credits		
OP T2-24	Historically Underutilized Businesses	0.25
OP T2-25	Local Businesses	0.25
Purchasing Total Points		7.5
Transportation		
OP 14	Campus Fleet	2
OP 15	Student Commute Modal Split	4
OP 16	Employee Commute Modal Split	3
Transportation Tier Two Credits		
OP T2-26	Bicycle Sharing	0.25
OP T2-27	Facilities for Bicyclists	0.25
OP T2-28	Bicycle and Pedestrian Plan	0.25
OP T2-29	Mass Transit Programs	0.25
OP T2-30	Condensed Work Week	0.25
OP T2-31	Telecommuting	0.25
OP T2-32	Carpool/Vanpool Matching	0.25
OP T2-33	Cash-out Parking	0.25
OP T2-34	Carpool Discount	0.25
OP T2-35	Local Housing	0.25
OP T2-36	Prohibiting Idling	0.25
OP T2-37	Car Sharing	0.25
Transportation Total Points		12

Waste		
OP 17	Waste Reduction	5
OP 18	Waste Diversion	3
OP 19	Construction and Demolition Waste Diversion*	1
OP 20	Electronic Waste Recycling Program	1
OP 21	Hazardous Waste Management	1
Waste Tier Two Credits		
OP T2-38	Materials Exchange	0.25
OP T2-39	Limiting Printing	0.25
OP T2-40	Materials Online	0.25
OP T2-41	Chemical Reuse Inventory	0.25
OP T2-42	Move-In Waste Reduction*	0.25
OP T2-43	Move-Out Waste Reduction*	0.25
Waste Total Points		12.5
Water		
OP 22	Water Consumption	7
OP 23	Stormwater Management	2
Water Tier Two Credits		
OP T2-44	Waterless Urinals	0.25
OP T2-45	Building Water Metering*	0.25
OP T2-46	Non-Potable Water Usage	0.25
OP T2-47	Xeriscaping*	0.25
OP T2-48	Weather-Informed Irrigation*	0.25
Water Total Points		10.25
Total OP Points		100
* credit does not apply to all institutions		

STARS 1.2 Credit Checklist

Category 3: Planning, Admin. & Engagement (PAE)

Credit Number	Credit Title	Possible Points
Coordination and Planning		
PAE 1	Sustainability Coordination	3
PAE 2	Strategic Plan*	6
PAE 3	Physical Campus Plan*	4
PAE 4	Sustainability Plan	3
PAE 5	Climate Action Plan	2
Coordination and Planning Total Points		18
Diversity and Affordability		
PAE 6	Diversity and Equity Coordination	2
PAE 7	Measuring Campus Diversity Culture	2
PAE 8	Support Programs for Underrepresented Groups	2
PAE 9	Support Programs for Future Faculty	4
PAE 10	Affordability and Access Programs	3
Diversity and Affordability Tier Two Credits		
PAE T2-1	Gender Neutral Housing*	0.25
PAE T2-2	Employee Training Opportunities	0.25
PAE T2-3	Student Training Opportunities	0.25
Diversity and Affordability Total Points		13.75
Human Resources		
PAE 11	Sustainable Compensation	8
PAE 12	Employee Satisfaction Evaluation	2
PAE 13	Staff Professional Development in Sustainability	2
PAE 14	Sustainability in New Employee Orientation	2
PAE 15	Employee Sustainability Educators Program	5
Human Resources Tier Two Credits		
PAE T2-4	Childcare	0.25
PAE T2-5	Employee Wellness Program	0.25
PAE T2-6	Socially Responsible Retirement Plan	0.25
Human Resources Total Points		19.75
Investment		
PAE 16	Committee Investor Responsibility*	2
PAE 17	Shareholder Advocacy*	5
PAE 18	Positive Sustainability Investments*	9
Investment Tier Two Credits		
PAE T2-7	Student-Managed Sustainable Investment Fund*	0.25
PAE T2-8	Sustainable Investment Policy*	0.25
PAE T2-9	Investment Disclosure*	0.25
Investment Total Points		16.75

Public Engagement		
PAE 19	Community Sustainability Partnerships	2
PAE 20	Inter-Campus Collaboration on Sustainability	2
PAE 21	Sustainability in Continuing Education*	7
PAE 22	Community Service Participation	6
PAE 23	Community Service Hours	6
PAE 24	Sustainability Policy Advocacy	4
PAE 25	Trademark Licensing *	4
Public Engagement Tier Two Credits		
PAE T2-10	Graduation Pledge	0.25
PAE T2-11	Community Service on Transcripts	0.25
PAE T2-12	Farmer's Markets	0.25
Public Engagement Total Points		31.75
<i>Total PAE Points</i>		
		100
* credit does not apply to all institutions		

STARS 1.2 Credit Checklist

Category 4: Innovation (IN)

Credit Number	Credit Title	Value
IN 1	Innovation Credit 4	1
IN 2	Innovation Credit 4	1
IN 3	Innovation Credit 4	1
IN 4	Innovation Credit 4	1
<i>Total IN Points</i>		4

Bjorklunden Electricity Comparison

