CITY OF ALBANY
PLANNING AND ZONING AGENDA
STAFF REPORT

Agenda date: 5/26/09
Prepared by: AC
Reviewed by: JB

ITEM/ 6e

SUBJECT: **Review of current Green Building program and related public handouts**

STAFF RECOMMENDATION

Direct staff to make appropriate revisions to implementation of program and handouts.

BACKGROUND AND DISCUSSION

The City Council adopted three new ordinances related to environmental issues on December 4, 2006, which included the following: "Green Building and Bay Friendly Landscaping," "Construction and Demolition Debris," and "Water Reuse" Ordinances.

The Green Building Ordinance was implemented as a mandatory program beginning July 1, 2007. Approximately 35 projects that were approved in 2008 were subject to the green building ordinance. Approximately 12 project have been approved in calendar year 2009, which have been subject to the green building ordinance.

The Planning and Zoning Commission reviewed the Green Building program on November 28, 2008 where the Commission voted to require that the checklist be required as part of the building permit submittal package, seismic upgrade points will be reduced to 15pts, and an increase of 20% over title 24 is mandatory for the project area (see attachment 3).

Generally, staff has found that pre application submittal meetings coupled with information about the green points checklist from stopwaste.org that applicants have not had difficulty in understanding or meeting the green points requirements. For larger projects meeting the required 50pts appears to be easily accomplished.

Staff recommends that since the program has been implemented for approximately two years that the Commission discuss the green building program and direct staff to make appropriate revisions to implementation of program and handouts.

Attachments:

1. Green Building Standards of Compliance
2. Green points checklist for Residential remodel and new construction
3. Planning and Zoning Commission Staff Report dated 11/28/2008

City of Albany Green Building Standards of Compliance

Proposed Standards: Effective July 3, 2007

Project Description		Building Improvements		
		Checklist Required	Minimum Threshold	Third-party Verification
City Sponsored Projects	New construction **less** than 5,000 sq ft	LEED-NC Checklist (Version 2.2)	Maximum points practicable	At plan check only
	New construction **more** than 5,000 sq ft		Gold (39 points)	US Green Bldg Council
	Renovation **less** than 5,000 sq ft	LEED-CI Checklist (Version 2.0)	Maximum points practicable	At plan check only
	Renovation **more** than 5,000 sq ft		Gold (32 points)	US Green Bldg Council
Commercial Construction & Renovation Projects	New construction **less** than 5,000 sq ft	LEED-NC Checklist (Version 2.2)	Maximum points practicable	At plan check only
	New construction **more** than 5,000 sq ft		Gold (39 points)	US Green Bldg Council
	Renovation **less** than 5,000 sq ft	LEED-CI Checklist (Version 2.0)	Maximum points practicable	At plan check only
	Renovation **more** than 5,000 sq ft		Gold (32 points)	US Green Bldg Council
Single Family Residential	New construction	Single-Family Greenpoint Checklist (2006 Edition)	50 Points	At plan check only
	Renovation subject to Design Review	Green Points Rating System for Remodeling projects (2004 version + City Point Incentives)	50 Points	
Multi-family Residential	New construction or renovation of **less** than 5 units	Multifamily Greenpoint Checklist (2005 Edition version v.2)	Maximum points practicable	City Staff and/or certified 3rd party inspection
	New construction or renovation of **more** than 5 units		Minimum Points Standard	
Mixed Use	Consult with Planning Divison staff			

Prepared for City Council Review: July 2, 2007

ATTACHMENT # 1

City of Albany

Green Building Program Rating System for Remodeling Projects
Supplemental Application Form

Project Address: _____

Checklist Prepared By: _____

Date Prepared: _____

	INPUT	Resources	Energy	IAQ/Health
A. Site				
1. Recycle Job Site Construction & Demolition Waste 65% = 1 point; 75% = 2 points; 80% = 4 points	up to 4 Resource pts			
2. Salvage Reusable Building Materials	4 Resource pts y=yes			
3. Remodel for Mixed Use, Adaptive Reuse, and Historic Preservation	4 Resource pts y=yes			
4. Protect Native Soil	2 Resource pts y=yes			
5. Minimize Disruption of Existing Plants & Trees	1 Resource pt y=yes			
6. Implement Construction Site Stormwater Practices	2 Resource pts y=yes			
7. Protect Water Quality with Landscape Design	2 Resource pts y=yes			
8. Design Resource-Efficient Landscapes and Gardens	4 Resource pts y=yes			
9. Reuse Materials/Use Recycled Content Materials for Landscape Areas	2 Resource pts y=yes			
10. Install High-Efficiency Irrigation Systems	2 Resource pts y=yes			
11. Provide for On-Site Water Catchment / Retention	2 Resource pts y=yes			
B. Foundation				
1. Incorporate Recycled Flyash in Concrete 25% Recycled Flyash = 2 points; Add 1 point for every 10% increase of flyash, up to 5 points	up to 5 Resource pts			
2. Use Recycled Content Aggregate	2 Resource pts y=yes			
3. Insulate Foundation/Slab before backfill	3 Energy pts y=yes			
C. Structural Frame				
1. Substitute Solid Sawn Lumber with Engineered Lumber	3 Resource pts y=yes			
2. Use FSC Certified Wood for framing (For every 10% of FSC lumber used = 2 points, up to 10)	up to 10 Resource pts.			
3. Use Wood I-Joists for Floors and Ceilings	2 Resource pts y=yes			
4. Use Web Floor Trusses	2 Resource pts y=yes			
5. Design Energy Heels on Trusses 6" or more	2 Energy pts y=yes			
6. Use Finger-Jointed Studs for Vertical Applications	2 Resource pts y=yes			
7. Use Engineered Studs for Vertical Applications	2 Resource pts y=yes			
8. Use Recycled Content Steel Studs for Interior Framing	2 Resource pts y=yes			
9. Use Structural Insulated Panels (SIPs)				
a. Floors	3 Energy pts y=yes			
b. Wall	3 Energy pts y=yes			
c. Roof	3 Energy pts y=yes			
10. Apply Advanced Framing Techniques	4 Resource pts y=yes			

2004 Checklist Modified by City of Albany Incentives - Approved July 2, 2007

ATTACHMENT #2

		INPUT	Resources	Energy	IAQ/Health
11. Use Reclaimed Lumber for Non Structural Applications	3 Resource pts y=yes				
12. Use OSB					
a. Subfloors	1 Resource pt y=yes				
b. Sheathing	1 Resource pt y=yes				
D. Exterior Finish					
1. Use Sustainable Decking Materials					
a. Recycled content	3 Resource pts y=yes				
b. FSC Certified Wood	3 Resource pts y=yes				
2. Use Treated Wood That Does Not Contain Chromium/Arsenic	1 IAQ/Health pt y=yes				
3. Install House Wrap under Siding	1 IAQ/Health pt y=yes				
4. Use Fiber-Cement Siding Materials	1 Resource pt y=yes				
E. Plumbing					
1. Install Water Heater Jacket	1 Energy pt y=yes				
2. Insulate Hot and Cold Water Pipes	2 Energy pts y=yes				
3. Retrofit all Faucets and Showerheads with Flow Reducers					
a. Faucets (1 point each, up to 2 points)	Up to 2 Resource pts.				
b. Showerheads (1 point each, up to 2 points)	Up to 2 Resource pts.				
4. Replace Toilest with Ultra-Low Flush Toilets (1 point each, up to 3 points)	Up to 3 Resource pts.				
5. Install Chlorine Filter on Showerhead	1 IAQ/Health pt y=yes				
6. Convert Gas to Tankless Water Heater	4 Energy pts y=yes				
7. Install Water Filtration Units at Faucets (2 points each, up to 4 points)	Up to 4 IAQ/Health pts.				
8. Install On-Demand Hot Water Circulation Pump	4 Resource pts y=yes				
F. Electrical					
1. Install Compact Fluorescent Light Bulbs (CFLs) (6 bulbs=2 points, 10 bulbs =3 points, 12 bulbs = 4 points)	Up to 4 Energy pts.				
2. Install IC-AT Recessed Fixtures with CFLs (1 point each, up to 5 points)	Up to 5 Energy pts.				
3. Install Lighting Controls (1 point per fixture, up to 4 points)	Up to 4 Energy pts.				
4. Install High Efficiency Ceiling Fans with CFLs (1 point each, up to 4 points)	Up to 4 Energy pts.				
G. Appliances					
1. Install Energy Star Dishwasher	1 Energy pt y=yes				
2. Install Washing Machine with Water and Energy Conservation Features	1 Energy pt y=yes				
3.Install Energy Star Refrigerator	1 Energy pt y=yes				
4. Install Built-In Recycling Center	3 Resource pts y=yes				
H. Insulation					
1. Upgrade Insulation to Exceed Title 24 Requirements					
a. Walls	2 Energy pts y=yes				
b. Ceilings	2 Energy pts y=yes				
2. Install Floor Insulation over Crawl Space	4 Energy pts y=yes				
3. Install Recycled-Content, Fiberglass Insulation with No Added Formaldehyde	3 IAQ/Health pts y=yes				

			INPUT	Resources	Energy	IAQ/Health
4. Use Advanced Infiltration Reduction Practices	2 Energy pts	y=yes				
5. Use Cellulose Insulation						
a. Walls	4 Resource pts	y=yes				
b. Ceilings	4 Resource pts	y=yes				
6. Alternative Insulation Products (Cotton, spray-foam)						
a. Walls	4 Resource pts	y=yes				
b. Ceilings	4 Resource pts	y=yes				
I. Windows						
1. Install Energy-Efficient Windows						
a. Double-Paned	1 Energy pt	y=yes				
b. Low-Emissivity (Low-E)	2 Energy pts	y=yes				
c. Low. Conductivity Frames	2 Energy pts	y=yes				
2. Install Low Heat Transmission Glazing	1 Energy pt	y=yes				
J. Heating Ventilation and Air Conditioning						
1. Use Duct Mastic on All Duct Joints	2 Energy pts	y=yes				
2. Install Ductwork within Conditioned Space	3 Energy pts	y=yes				
3. Vent Range Hood to the Outside	1 IAQ/Health pt	y=yes				
4. Clean all Ducts Before Occupancy	2 IAQ/Health pts	y=yes				
5. Install Solar Attic Fan	2 Energy pts	y=yes				
6. Install Attic Ventilation Systems	1 Energy pt	y=yes				
7. Install Whole House Fan	4 Energy pts	y=yes				
8. Install Sealed Combustion Units						
a. Furnaces	3 IAQ/Health pts	y=yes				
b. Water Heaters	3 IAQ/Health pts	y=yes				
9. Replace Wall-Mounted Electric and Gas Heaters with Through-the-Wall Heat Pumps	3 Energy pts	y=yes				
10. Install 13 SEER/11 EER or higher AC with a TXV	3 Energy pts	y=yes				
11. Install AC with Non-HCFC Refrigerants	2 Resource pts	y=yes				
12. Install 90% Annual Fuel Utilization Efficiency (AFUE) Furnace	2 Energy pts	y=yes				
13. Retrofit Wood Burning Fireplaces						
a. Install EPA certified wood stoves/inserts	1 IAQ/Health pt	y=yes				
b. Install/Replace Dampers	1 Energy pt	y=yes				
c. Install Airtight Doors	1 Energy pt	y=yes				
14. Install Zoned, Hydronic Radiant Heating	3 Energy pts	y=yes				
15. Install High Efficiency Filter	4 IAQ/Health pts	y=yes				
16. Install Heat Recovery Ventilation Unit (HRV)	5 IAQ/Health pts	y=yes				
17. Install Separate Garage Exhaust Fan	3 IAQ/Health pts	y=yes				
K. Renewable Energy and Roofing						
1. Pre-Plumb for Solar Water Heating	4 Energy pts	y=yes				
2. Install Solar Water Heating System	10 Energy pts	y=yes				
3. Pre-Wire for Future Photovoltaic (PV) Installation	4 Energy pts	y=yes				
4. Install Photovoltaic (PV) System (1.2 kw = 6 points, 2.4 kw = 12 points, 3.6 kw = 18 points)	Up to 18 Energy pts					
6. Select Safe and Durable Roofing Materials	1 Resource pt	y=yes				
7. Install Radiant Barrier	3 Energy pts	y=yes				

2004 Checklist Modified by City of Albany Incentives - Approved July 2, 2007

		INPUT	Resources	Energy	IAQ/Health
L. Natural Heating and Cooling					
1. Incorporate Passive Solar Heating	5 Energy pts y=yes				
2. Install Overhangs or Awnings over South Facing Windows	3 Energy pts y=yes				
3. Plant Deciduous Trees on the West and South Sides	3 Energy pts y=yes				
M. Indoor Air Quality and Finishes					
1. Use Low/No-VOC Paint	1 IAQ/Health pts y=yes				
2. Use Low VOC, Water-Based Wood Finishes	2 IAQ/Health pts y=yes				
3. Use Low/No VOC Adhesives	3 IAQ/Health pts y=yes				
4. Use Salvaged Materials for Interior Finishes	3 Resource pts y=yes				
5. Use Engineered Sheet Goods with no added Urea Formaldehyde	6 IAQ/Health pts y=yes				
6. Use Exterior Grade Plywood for Interior Uses	1 IAQ/Health pts y=yes				
7. Seal all Exposed Particleboard or MDF	4 IAQ/Health pts y=yes				
8. Use FSC Certified Materials for Interior Finish	4 Resource pts y=yes				
9. Use Finger-Jointed or Recycled-Content Trim	1 Resource pts y=yes				
10. Install Whole House Vacuum System	3 IAQ/Health pts y=yes				
N. Flooring					
1. Select FSC Certified Wood Flooring	8 Resource pts y=yes				
2. Use Rapidly Renewable Flooring Materials	4 Resource pts y=yes				
3. Use Recycled Content Ceramic Tiles	4 Resource pts y=yes				
4. Install Natural Linoleum in Place of Vinyl	5 IAQ/Health pts y=yes				
5. Use Exposed Concrete as Finished Floor	4 Resource pts y=yes				
6. Install Recycled Content Carpet with Low VOCs	4 Resource pts y=yes				
O. City of Albany Incentives					
1. Additions less than 50% increase in floor area	20 Resource pts y=yes				
2. Additions les than 200sq.ft. or resulting in less than 1,500sq.ft.	10 Resource pts y=yes				
3. Seismic upgrade of existing building	25 Resource pts y=yes				
4.For having a hybrid or zero emissions vehicle	2 IAQ/Health pts y=yes				
5. For having no automobile	5 Resource pts y=yes				
6. Plant more than one street tree when feasible	2 IAQ/Health pts y=yes				
7. Earhquake kit	2 IAQ/Health pts y=yes				

TOTAL POINTS REQUIRED: 50

G:data/progs/greenbuildingguidelines/remodelers/greenpointsfinal2.12.04protected.xls

City of Albany

New Home Green Points Checklist
Supplemental Application Form

Project Address: _____

Checklist Prepared By: _____

Date Prepared: _____

ENTER PROJECT NAME	Community	Energy	IAQ/Health	Resources	Water
A. SITE	Possible Points				
1. Protect Native Soil and Minimize Disruption of Existing Plants & Trees					
☐ a. Protect Native Topsoil from Erosion and Reuse after Construction	1				1
☐ b. Limit and Delineate Construction Footprint for Maximum Protection					1
☐ **2. Deconstruct Instead of Demolishing Existing Buildings On Site**				3	
3. Recycle Job Site Construction Waste (Including Green Waste)					
☐ *a. Minimum 50% Waste Diversion by Weight (Recycling or Reuse) - Required*				R	
b. Minimum 65% Diversion by Weight (Recycling or Reuse)				2	
☐ c. Minimum 80% Diversion by Weight (Recycling or Reuse)				2	
4. Use Recycled Content Aggregate (Minimum 25%)					
☐ a. Walkway and Driveway				1	
☐ b. Roadway Base				1	

B. LANDSCAPING	Possible Points				
1. Construct Resource-Efficient Landscapes					
☐ a. No Invasive Species Listed by Cal-IPC Are Planted					1
☐ b. No Plant Species Will Require Hedging				1	
☐ c. 75% of Plants Are California Natives or Mediterranean Species					1
☐ **2. Use Fire-Safe Landscaping Techniques**	1				
3. Minimize Turf Areas in Landscape Installed by Builder					
☐ a. All Turf Will Have a Water Requirement Less than or Equal to Tall Fescue					2
☐ b. Turf Shall Not Be Installed on Slopes Exceeding 10% or in Areas Less than 8 Feet Wide					2
☐ c. Turf is <33% of Landscaped Area					2
☐ d. Turf is <10% of Landscaped Area					2
☐ **4. Plant Shade Trees**		1			1
☐ **5. Implement Hydrozoning: Group Plants by Water Needs**					1
6. Install High-Efficiency Irrigation Systems					
☐ a. System Uses Only Low-Flow Drip, Bubblers, or Low-flow Sprinklers					1
☐ b. System Has Smart (Weather-Based) Controllers					2
☐ **7. Apply Two Inches of Compost in the Top 6 to 12 Inches of Soil**					2
☐ **8. Mulch All Planting Beds to the Greater of 2 Inches or Local Water Ordinance Requirement**					1
☐ **9. Use 50% Salvaged or Recycled-Content Materials for 50% of Non-Plant Landscape Elements**				1	
☐ **10. Reduce Light Pollution by Shielding Fixtures and/or Directing Light Downward**	1				

C. FOUNDATION	Possible Points				
1. Incorporate Recycled Flyash in Concrete					
☐ a. Minimum 20% Flyash				1	
☐ b. Minimum 25% Flyash (1 pt)				1	
☐ **2. Use Frost-Protected Shallow Foundation in Cold Areas (C.E.C. Climate Zone 16)**				3	
☐ **3. Use Radon Resistant Construction (In At-Risk Locations Only)**			1		

D. STRUCTURAL FRAME & BUILDING ENVELOPE	Possible Points				
1. Apply Optimal Value Engineering					
☐ a. 2x4 Studs at 24-Inch On Center Framing				1	
☐ b. Door and Window Headers Sized for Load				1	
☐ c. Use Only Jack and Cripple Studs Required for Load				1	
2. Use Engineered Lumber					
☐ a. Beams and Headers				1	
☐ b. Insulated Engineered Headers		1			
☐ c. Wood I-Joists or Web Trusses for Floors				1	
☐ d. Wood I-Joists for Ceilings				1	
☐ e. Engineered or Finger-Jointed Studs for Vertical Applications				1	
3. Use FSC-Certified Wood					
☐ a. Dimensional Studs: Minimum 40%				2	
☐ b. Dimensional Studs: Minimum 75%				2	
☐ c. Panel Products: Minimum 40%				1	
☐ d. Panel Products: Minimum 70%				1	
☐ ☐ **4. Design Energy Heels on Trusses (75% of Attic Insulation Height at Outside Edge of Exterior Wall)**		1			
5. Design Trusses to Accommodate Ductwork		1			
6. Use Oriented Strand Board (OSB)					
☐ a. Subfloor				1	
☐ b. Sheathing				1	
☐ **7. Use Recycled-Content Steel Studs for 90% of Interior Wall Framing**				1	
8. Use Solid Wall Systems (Includes SIPs, ICFs, & Any Non-Stick Frame Assembly)					
☐ a. Floors		2		2	
☐ b. Walls		2		2	
☐ c. Roofs		2		2	
☐ **9. Thermal Mass Walls: 5/8-Inch Drywall on All Interior Walls or Walls Weigh more than 40 lb/cu.ft.**		1			
10. Design and Build Structural Pest Controls					
☐ a. Install Termite Shields & Separate All Exterior Wood-to-Concrete Connections by Metal or Plastic Fasteners/Dividers				1	
☐ b. All New Plants Have Trunk, Base, or Stem Located At Least 36 Inches from Foundation				1	
11. Reduce Pollution Entering the Home from the Garage					
☐ a. Tightly Seal the Air Barrier between Garage and Living Area			1		
☐ b. Install Separate Garage Exhaust Fan			1		
12. Install Overhangs and Gutters					
☐ a. Minimum 16-Inch Overhangs and Gutters				1	
☐ b. Minimum 24-Inch Overhangs and Gutters		1			

E. EXTERIOR FINISH	Possible Points				
☐ **1. Use Recycled-Content (No Virgin Plastic) or FSC-Certified Wood Decking**				2	
☐ **2. Install a Drainage Plane (Rain Screen Wall System)**				2	
☐ **3. Use Durable and Non-Combustible Siding Materials**				1	
☐ **4. Select Durable and Non-Combustible Roofing Materials**				2	

F. PLUMBING	Possible Points				
1. Distribute Domestic Hot Water Efficiently					
☐ a. Insulate Hot Water Pipes from Water Heater to Kitchen					1
☐ b. Insulate All Hot Water Pipes OR Install On-Demand Hot Water Circulation System in conjunction with F.1.a Insulate Hot Water Pipes from Water Heater to Kitchen		1			1
☐ c. Locate the Water Heater within 25 feet of All Hot Water Fixtures and Appliances					1
☐ d. Use Engineered Parallel Piping		1			
☐ **2. Install Only High Efficiency Toilets (Dual-Flush or <=1.3 gpf)**					3

G. APPLIANCES	Possible Points				
1. Install ENERGY STAR Dishwasher					
☐ a. ENERGY STAR		1			
☐ b. Dishwasher Uses No More than 6.5 Gallons/Cycle		1			1
☐ **2. Install ENERGY STAR Clothes Washing Machine with Water Factor of 6 or Less**		1			3
3. Install ENERGY STAR Refrigerator					
☐ a. ENERGY STAR: 15% above Federal Minimum		1			
☐ b. Super-Efficient Home Appliance Tier 2: 25% above Federal Minimum		1			
☐ **4. Install Built-In Recycling Center**				2	

H. INSULATION	Possible Points				
1. Install Insulation with 75% Recycled Content					
☐ a. Walls and/or Floors				1	
☐ b. Ceilings				1	
2. Install Insulation that is Low-Emitting (Certified Section 01350)					
☐ a. Walls and/or Floors			1		
☐ b. Ceilings			1		
☐ **3. Pre-Drywall Inspection Shows Quality Installation of Insulation**		1			

I. HEATING, VENTILATION & AIR CONDITIONING	Possible Points				
☐ **1. Design and Install HVAC System to ACCA Manual J, D, and S Recommendations**		4			
2. Install Sealed Combustion (Direct Vent) Units in Conditioned Space					
☐ a. Furnaces			2		
☐ b. Water Heaters			2		
☐ **3. No Fireplace or Sealed Gas Fireplace with Efficiency Rating Not Less Than 60%**			1		
☐ **4. Install ENERGY STAR Ceiling Fans with CFLs in Living Areas and Bedrooms**		1			
5. Install Ventilation System for Nighttime Cooling					
☐ a. Whole House Fan		1			
☐ b. Automatically Controlled Integrated System		2			
☐ c. Integrated System with Variable Speed Control		3			
☐ **6. Install Air Conditioning with Non-HCFC Refrigerants**	1				
7. Design and Install Effective Ductwork					
☐ a. Install HVAC Unit and Ductwork within Conditioned Space		3			
☐ b. Use Duct Mastic on All Duct Joints and Seams		1			
☐ c. Install Ductwork under Attic Insulation (Buried Ducts)		1			
☐ d. Pressure Balance the Ductwork System for Master Bedroom		1			
☐ e. Protect Ducts during Construction and Clean All Ducts before Occupancy			1		
☐ **8. Install High Efficiency HVAC Filter (MERV 6+)**			1		
☐ **9. Install Zoned, Hydronic Radiant Heating with Slab Edge Insulation**		1	1		

	10. Install Mechanical Ventilation System						
☐	a. Any Whole House Ventilation System That Meets ASHRAE 62.2		1	2			
☐	b. Install ENERGY STAR Bathroom Fan			1			
☐	c. All Bathroom Fans Are on Timer or Humidistat			1			
☐	**11. Use Low-Sone Range Hood Vented to the Outside**			1			
☐	**12. Install Carbon Monoxide Alarm(s)**			1			

J. BUILDING PERFORMANCE		Possible Points				
☐ 0%	**1. Design and Build High Performance Homes (2 points for each 1% above T-24, up to 30 pts)** *Enter the percent above Title 24 in the cell at left. Any value over 15% will automatically earn 30 points.*	30				
	2. House Obtains ENERGY STAR with Indoor Air Package Certification			5	2	
	3. Inspection and Diagnostic Evaluations					
☐	a. Third Party Energy and Green Building Review of Home Plans		1	1	1	
☐	b. Blower Door Test Performed		1			
☐	c. House Passes Combustion Safety Backdraft Test			1		

K. RENEWABLE ENERGY		Possible Points				
☐	**1. Pre-Plumb for Solar Hot Water Heating**	4				
☐	**2. Install Solar Water Heating System**	10				
☐	**3. Install Wiring Conduit for Future Photovoltaic Installation & Provide 200 ft² of South-Facing Roof**	2				
	4. Install Photovoltaic (PV) Panels					
☐	a. 1.2 kW System	6				
☐	b. 2.4 kW System	6				
☐	c. 3.6 kW or more	6				

L. FINISHES		Possible Points				
☐	**1. Provide Permanent Walk-Off Mats and Shoe Storage at Home Entrances**			1		
	2. Use Low/No-VOC Paint					
☐	a. Low-VOC Interior Wall/Ceiling Paints (<50 gpl VOCs (Flat) and <150 gpl VOCs (Non-Flat))			1		
☐	b. Zero-VOC: Interior Wall/Ceiling Paints (<5 gpl VOCs (Flat))			3		
☐	**3. Use Low VOC, Water-Based Wood Finishes (<150 gpl VOCs)**			2		
☐	**4. Use Low-VOC Construction Adhesives (<70 gpl VOCs) for All Adhesives**			2		
☐	**5. Use Recycled-Content Paint**				1	
	6. Use Environmentally Preferable Materials for Interior Finish: A) FSC-Certified Wood, B) Reclaimed Lumber, C) Rapidly Renewable D) Recycled-Content or E) Finger-Jointed					
	At Least 50% of Each Material (1 pt each):					
☐	a. Cabinets				1	
☐	b. Interior Trim				1	
☐	c. Shelving				1	
☐	d. Doors				1	
☐	e. Countertops				1	
☐	**7. Reduce Formaldehyde in Interior Finish (Section 01350) for At Least 50% of Each Material Below:**					
	a. Cabinets			1		
☐	b. Interior Trim			1		
☐	c. Shelving			1		
☐	d. Subfloor			1		
☐	**8. After Installation of Finishes, Test of Indoor Air Shows Formaldehyde Level <27ppb**			3		

M. FLOORING	Possible Points				
1. Use Environmentally Preferable Flooring: A) FSC-Certified or Reclaimed Wood, B) Rapidly Renewable Flooring Materials, C) Recycled-Content Ceramic Tiles, D) Exposed Concrete as Finished Floor or E) Recycled-Content Carpet. *Note: Flooring Adhesives Must Have <50 ppl VOCs.*					
☐ a. Minimum 15% of Floor Area			1		
☐ b. Minimum 30% of Floor Area			1		
☐ c. Minimum 50% of Floor Area			1		
☐ d. Minimum 75% of Floor Area			1		
☐ **2. Thermal Mass Floors: Floor Covering Other than Carpet on 50% or More of Concrete Floors**	1				
☐ **3. Flooring Meets Section 01350 or CRI Green Label Plus Requirements (50% Minimum)**			2		

N. OTHER	Possible Points				
☐ ***1. Incorporate Green Points Checklist in Blueprints - Required***				R	
☐ **2. Develop Homeowner Manual of Green Features/Benefits**	1	1			1

Summary

Points Achieved from Specific Categories						
Total Points Achieved						

City of Albany
Planning and Zoning Commission
STAFF REPORT

Meeting Date: November 25, 2008

Agenda Item: 6e

Subject: **Green Building Program Update on ordinance adopted on December 6, 2006 and Implemented on July 1, 2007.**

Recommendation: **Open the public hearing, take testimony from the public, and provide direction to staff on any appropriate changes or revisions to the standards of compliance or residential greenpoints checklist.**

Background:

The City Council adopted three new ordinances related to environmental issues on December 4, 2006, which included the following: "Green Building and Bay Friendly Landscaping," "Construction and Demolition Debris," and "Water Reuse" Ordinances.

The Green Building Ordinance was to be implemented as a mandatory program beginning July 1, 2007. The Commission discussed standards of compliance and the various greenpoints checklists (see attachments 1 and 2) over a series of three public hearings where program details, including local incentive points, and mandatory participation for projects that require discretionary review were approved. In 2006 the Commission discussed and adopted preliminary Green Building standards of compliance.

Discussion:

Since the programs implementation the Commission has reviewed thirty-five (35) projects that have been subject to green building requirements. As expected, based on city land uses, the majority of projects were for low to medium density residential developments. The majority of project applicants have been thoughtful and appear to have made sincere efforts to not only attain the minimum threshold of 50 points but to exceed the requirement. See attachment 3 for examples of previously reviewed and approved greenpoints checklist for residential projects.

At this time staff recommends that the Commission consider revising the local incentive points for single-family residential projects. As shown in attachment 3 the first three example checklists accomplish the required 50 greenpoints with over half or more of the points awarded through local incentives. The latter two examples show how with some thoughtfulness in combination with local incentive points an applicant can accomplish more than double the required points. Staff believes that local incentive points are

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important to both reflect the City's priorities and to expand upon a comprehensive list created by stopwatste.org.

The green building program has been introduced and implemented in the community for over a year. Staff recommends that the Commission consider taking the implementation of the green building a "step further" by requiring that the a green points checklist be either added as a separate sheet to building plans, see attachment 4 for an example from the City of Palo Alto, or to have the green building measures called out as another required detail on building plans. This would be beneficial for two reasons: 1) It would allow staff to review for consistency between the greenpoint measures approved during planning review with what is proposed during building permit review; 2) The green building measures would be noted on "official building permit plans" thus requiring construction/implementation.

Field check was discussed in previous meeting; however, staff believes that implementation of the green building program should be incremental with new steps introduced once previous ones have been familiarized with both staff and the community. Perhaps a discussion of field verification should occur after a year of requiring a greenpoints checklist submittal with building permit plans has been implemented.

Attachments:

1. Green Building Standards of Compliance
2. Green Points Checklist for Residential Projects, based of stopwaste.org template.
3. Examples of greenpoint checklist from previously reviewed and approved projects
4. City of Palo Alto documentation requirements for green building during building permit review