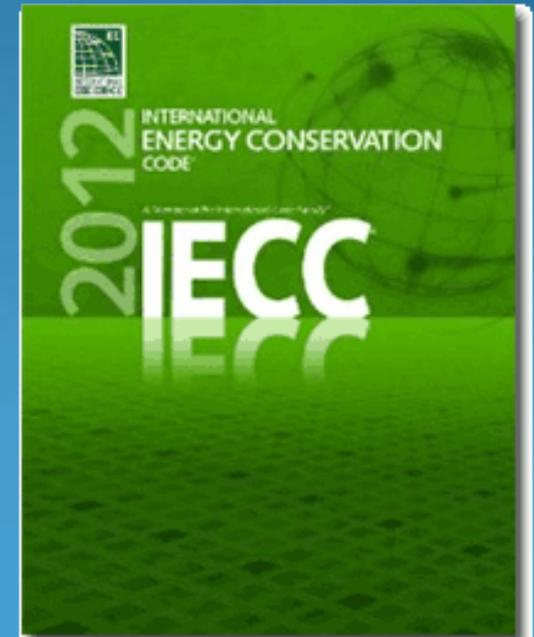


2012 International Energy Conservation Code in Virginia

Intergovernmental Green Building Group

Steve Walz, Director, Regional Energy Planning
Northern Virginia Regional Commission

November 8, 2012



National Adoption

- International Code Commission
- 3-year cycle
- Consensus process
 - Northern Virginia localities participation
 - Representation on national committees
 - Fairfax, Arlington
- Primary Energy Components
 - 2012 International Energy Conservation Code
 - 2012 International Residential Code – Chapter 11 –
Now same as IECC



National Capital Region

	District of Columbia	Maryland	Virginia
OVERVIEW		State allows each jurisdiction to make local amendments to the code provided the amendments do not weaken the code requirements	The VA Board of Housing and Community Development (BHCD), a Governor-appointed board, has authority to adopt changes to the Unified State Building Code (USBC).
Timeline of cycle	Every 3 years	Every 3 years	Every 3 years
RESIDENTIAL			
Current Code	2006 IECC with Amendments	2012 IECC/ASHRAE 90.1-2010	2009 IECC with Amendments
Amendments	Amendments include provisions that make it approximately equivalent in stringency to the 2009 IECC		
Adoption Process	The D.C. Energy Conservation Code is updated regularly as model codes are revised or if a change is proposed by local code enforcement officials, industry, design professionals, or other interested parties. The DC Construction Codes Coordinating Board advises the mayor and DC Council on all code matters; Proposals are initiated by the Board; Proposals are published and public hearings are held. DC Council has final approval of all proposed code changes.		government (cities, counties). Compliance for non-state buildings is demonstrated through plan review and inspection at the local level.
		Effective Date 10/10/08	1/1/12 3/1/11
		COMMERCIAL	
		Current Code 2006 IECC with 1 Amendment	2012 IECC/ASHRAE 90.1-2010 2009 IECC
		Amendments Reference to ASHRAE 90.1-2007	References to ASHRAE 90.1-2007
		Adoption Process See residential process.	Same as residential
		Approved Compliance Tool See residential process.	COMcheck Can use COMcheck See residential for process.
		Approximate Energy Efficiency Equivalent to ASHRAE 90.1-2007	Equivalent to 2012 IECC
		Effective Date 12/26/2009	1/1/2012 1/1/12
Approved Compliance Tool/Compliance Process	Compliance is determined by plan review and field inspection	ADDITIONAL INFORMATION ASHRAE 90.1-2007 Mandatory December 2011, the DC Construction Codes Coordinating Board (CCCB) voted to adopt the 2012 IECC, including the 2012 IgCC. The code will now enter administrative review and legislative process with likely adoption in the second half of 2013.	Mandatory Meets or exceeds ASHRAE 90.1 or equivalent Department of Housing and Community Development (DHCD) is currently in the process of amending the Energy Code to include additional legislative updates in addition to adopting the IgCC. These amendments should be in place in October of 2012.
			ASHRAE 90.1-2007 Mandatory
			Montgomery Co. – 2012 IECC/IBC/IRC Jurisdictions Frederick County – 2012 IECC/IBC/IRC City of Frederick – 2012 IECC/IBC/IRC Gaithersburg – 2009 IECC with amendments Prince George's – 2006 IECC/IBC/IRC Rockville – 2012 IECC/2009 IBC



Code Adoption in Virginia

- Regulation of the Board of Housing and Community Development
 - Notice of Regulatory Intent
 - Work Committees
 - Draft published in Virginia Register of Regulations
 - 60-day public comments
 - Final published in Virginia Register of Regulations
 - 30-days to become final
- Building Code Implementation
 - One-year phase in – use old or new code
 - Local plan review & inspections
 - State appeals



Department of Housing and Community Development

- Key Staff
 - Emory Rogers,
Deputy Director, Division of Building & Fire Regulation
- Four Workgroups
 1. Includes administrative, regulatory technical, other
 2. Includes IECC
 3. Includes IRC
 4. Includes water conservation & grey water
- Participation
 - Meetings
 - Code Change Request Form
 - Comments
- Consensus issues – then issues without



Virginia IECC Issues

- Residential
 - Blower door & duct blaster or visual inspection
 - Insulation
 - Wall requires 2x4 plus foam sheathing or 2x6
 - Ceiling requires modifications at wall top plates
- Commercial
 - Uses ASHRAE 2010
 - Mostly in use, less controversy
- Cost of implementation
 - DOE estimate – Pacific Northwest National Labs
 - Savings estimate – 30 years: \$5,836 – Annual: \$388
 - Simple payback 5.2 years
 - Cash flow positive in first year



Northern Virginia Regional Commission

- Resolution 13-05 Adopted October 25, 2012
 - 15% improvement in energy performance compared to the 2009 Code; 30% improvement as compared to the 2006 Code
 - NVRC members have goals to substantially reduce energy and resulting emissions
 - Building-based energy use accounts for $\approx 2/3$ of energy use in Northern Virginia
 - Homeowners recover + construction costs in 20 months
 - Added construction costs of \$2,179 for average new home; increased down payment of \$440;
 - Increase of \$8 in monthly mortgage payments; Average monthly energy savings of \$31
 - Reduces the peak demand for energy; Lessens need to increase rates to pay for investments in new electric generation % other energy systems
 - Increase the efficiency of the building stock; Creates a level minimum standard for construction across the Northern Virginia region, the state, and the National Capital Region;
 - Recommends adoption of the 2012 International Energy Conservation Code as the basis of the energy provisions of the Uniform Statewide Building Code
 - Recognizes the need for amendments for clarifications or enforcement

