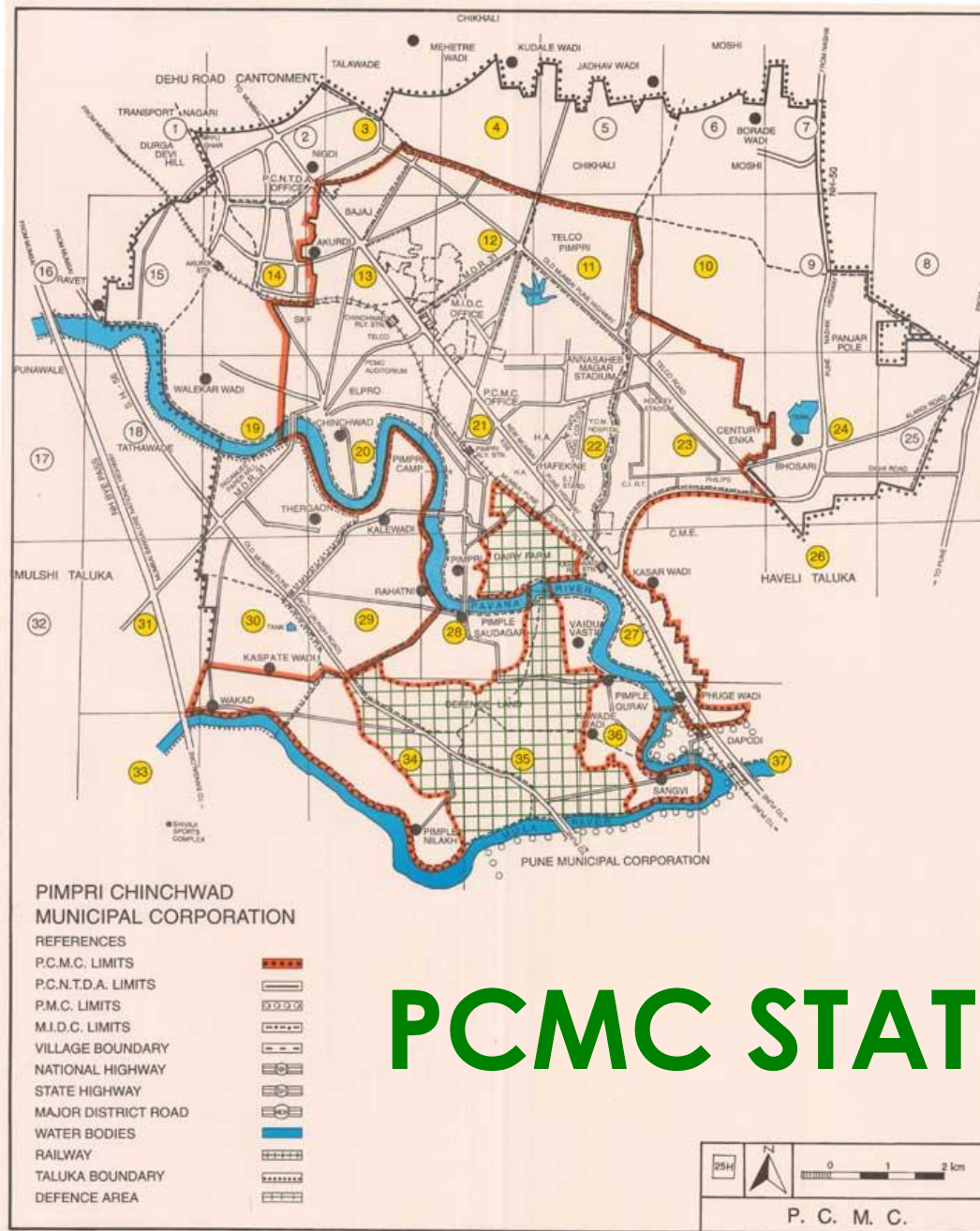




PCMC GRIHA MODEL

A Green Building Initiative of Pimpri Chinchwad Municipal Corporation

Ar Poorva Keskar
Sustainability Initiatives
GRIHA Evaluator and Trainer



PCMC STATUS OF AFFAIRS

PCMC GRIHA MODEL

WATER POLLUTION



PUNE MIRROR

TUESDAY, DECEMBER 21, 2011 2

city

Temperature
max 27.4 6.5
min 27.4 7.7
avg 27.0 6.7

Rainfall Humidity
max 95 60
min 78
avg 78

Forecast for today
sky conditions: mostly clear
Average temperature
17.1°C



The team collecting water samples

Weeds, algae point to pollution in the Pavana

On Day Two, the expert team on water pollution toured several villages and collected samples. They say presence of certain water plants indicates nitrogen content, which enters water through untreated drainage released into the river

Tanya Huma

After spending the night at Shivajinagar village, the Pavana team returned to the river bank at the Pavana and collected samples. They say presence of certain water plants indicates nitrogen content, which enters water through untreated drainage released into the river

ing the river bank. Above which no full batch of grass and wheat, but, did and small fish. Then no full batch of fish.

First signs of pollution

The team was in the village at around 3 pm. In the village, the team collected samples from the river bank. Above which no full batch of grass and wheat, but, did and small fish. Then no full batch of fish.

After having collected the samples, the team returned to the river bank. Above which no full batch of grass and wheat, but, did and small fish. Then no full batch of fish.

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From poppy to cash crops, Afghan profs here to learn new tech

A 14-member team of teachers from Afghanistan are at College of Agriculture to learn new tech

Tanya Huma

While most of the world has been a land of cash crops, Afghanistan is a land of opium. But now, a team of 14 teachers from Afghanistan are at the College of Agriculture to learn new tech.

In the past, the teachers from Afghanistan were at the College of Agriculture to learn new tech.

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The degree of pollution in the rivers, specifically Mula and Pawana, is significantly high. The high level of pollution is due to the disposal of untreated domestic sewage and industrial effluent flowing in from various locations. Also dumping of waste adds to this pollution.



The 14-member team of teachers from Afghanistan are at College of Agriculture to learn new tech

PCMC GRIHA MODEL

Water Availability and Distribution



- Low pressure in supply is observed specifically in areas where the distribution network is old or where the areas are farthest from the servicing ESR. Also, most of the newly added areas where the distribution network is yet to be completely provided, are facing the problem of low pressure in supply.
- The existing system with its head works at Ravet was designed for 228 MLD to cater to the population of 2011.
- Identification of sources other than Pawana river to cater to the demand beyond 2031



TNN Apr 7, 2003, 02.19am IST

- **PUNE:** In a bid to ensure sufficient water for the current summer season, the Pimpri- Chinchwad Municipal Corporation has decided to borrow water from the Maharashtra Industrial Development Corporation, if the need arises. The civic body has also decided to prepare a special plan to ensure water supply in the area.

AGITATION - WATER SHARING



At the root of the agitation that led to police firing on farmers in Pune district on Tuesday, leaving three of the agitators dead, is a pipeline project that aims to enhance water supply to Pimpri - Chinchwad but which, the farmers fear, will rob them of water they use for irrigation.

Solid Waste



- PCMC has a dumping site at Moshi Village at a distance of 15 km. on an area of 25 hectares.
- No scientific method of disposal is followed and the waste is dumped on open ground. The present disposal site does not cater to future needs; there is an immediate requirement for the acquisition of a new disposal site for engineered landfill having all basic infrastructure.
- About 157 acres of land would be required to cater to the needs of the population of year 2031.

Section-wise Expenditure



Table 32. Section-wise establishment expenditure

Section/ Department	2000-01	2001-02	2002-03	2003-04	2004-05
<i>Actuals in Rs. lakhs</i>					
General Admin & Tax Collection	1,781	2,003	2,599	2,709	2,802
Water supply & Sewerage	624	702	687	828	854
Solid Waste Mgmt	1,611	1,682	1,685	1,953	2,059
Public Works	492	533	551	641	659
Street Lighting	381	427	447	528	538
Urban Poor (Public health, Edu., Slum Clearance)	3,878	4,091	4,726	4,921	5,074
Town Planning	44	58	62	73	77
Miscellaneous	518	564	581	672	691
Total	9,330	10,060	11,339	12,324	12,734
<i>Share in Rev Exp (%)</i>	<i>62</i>	<i>63</i>	<i>65</i>	<i>63</i>	<i>58</i>
<i>Annual growth rate (%)</i>		<i>7.8</i>	<i>12.7</i>	<i>8.7</i>	<i>3.3</i>

Table 33. Section wise O & M Expenditure

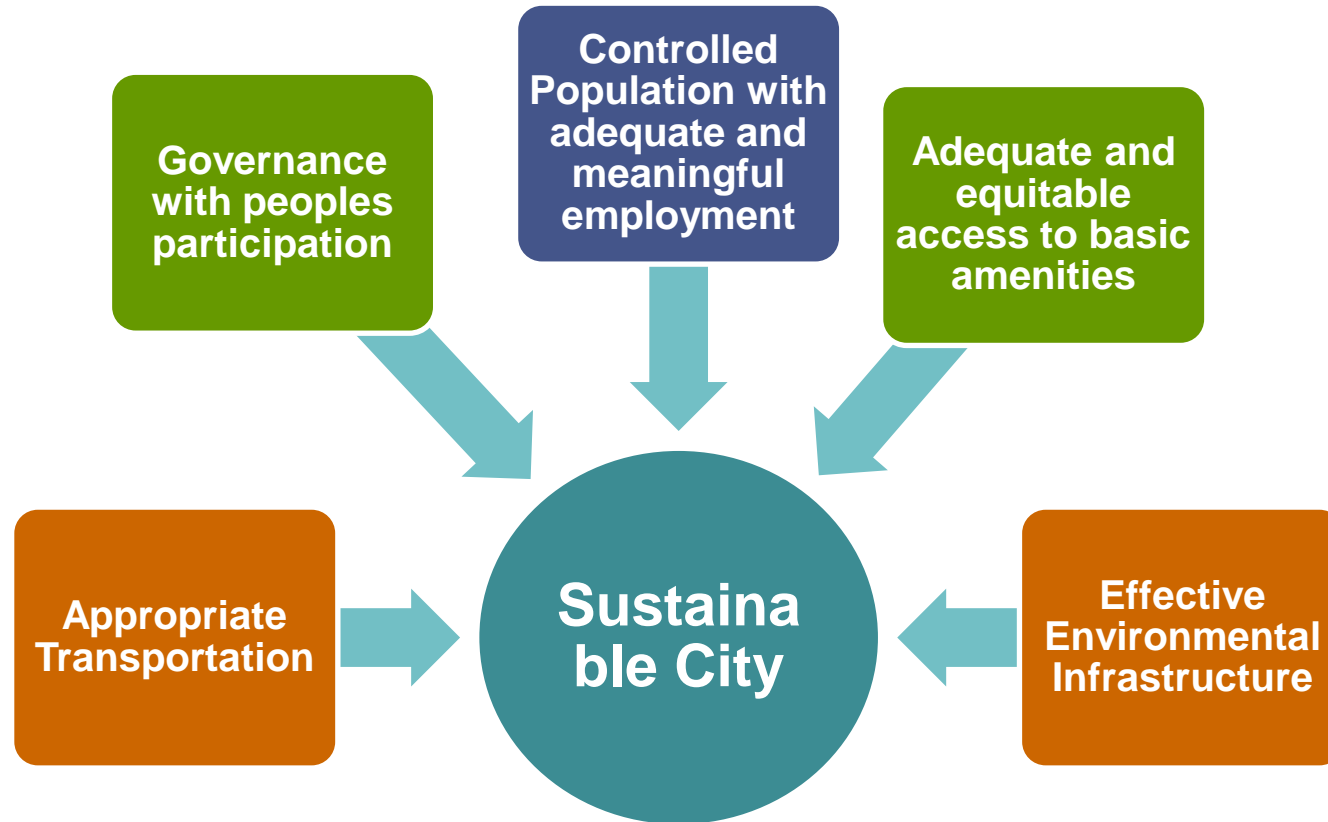
Items	2000-01	2001-02	2002-03	2003-04	2004-05	Share	CAGR
<i>Actuals in Rs. Lakhs</i>						%	%
General Admin & Tax Coll	713	848	773	1133	1265	16%	15
Water Supply	1691	1731	1515	1703	1861	29%	2
Sewerage & Sanitation	217	322	291	296	406	5%	17
Solid Waste Management	346	424	527	664	727	9%	20
Roads, Drains & Bldgs	24	22	20	34	55	1%	24
Street Lighting	837	612	526	568	683	11%	(5)
Urban Poor	804	970	1037	1875	2075	23%	27
Others	287	335	326	363	397	6%	3
Total	4917	5263	5014	6636	7469	100%	11

PCMC VISION



*“**Pimpri-Chinchwad** will be the place to live, spend and entertain. It will contribute towards maintaining and sustaining the vibrant economic growth of the region through a modern & systematized administration, an optimum level of services and enriched environment”*

To achieve the Vision, PCMC targets



Way Forward-PCMC Commitment



- To encourage development which will treat and reuse wet solid waste and divert the dry waste into the recycling stream.
- *This will reduce the need to invest in the collection, transportation and treatment of solid waste at the ULB level.*
- To encourage treatment of waste water and reuse it for non potable uses like landscaping and flushing.
- *This will reduce the need to look for alternative sources of potable water as well as reduce considerably expenditure on laying of water supply and sewerage lines as well as treatment costs on STPs*



- To encourage onsite renewable energy generation
- *This will reduce the need for further generation of electricity at the National Level as well as reduce the pollution at the place of generation.*
- To encourage **GREEN BUILDINGS** by incentivizing **GRIHA Certified Buildings** in **PCMC** jurisdiction.



Why was PCMC interested in encouraging GRIHA rated projects?

- Indigenous system that is developed for the Indian Context
- Considers the National priorities and hence refers to National Standards and Codes.
- System can rate most of the project types i.e. residential, commercial and institutional
- Promoted by Ministry Of New and Renewable Energy
- Fast track Environment Clearance for GRIHA Pre Certified Projects

The Process



- Meeting with stakeholders for a consultative dialogue
- Interaction of the PCMC officials with GRIHA representatives for tailoring the process for GRIHA Certification to accommodate the PCMC procedures
- Green Building Initiative approval from the General Body
- Setting up of the Environment Cell of PCMC
- Announcement of the PCMC GRIHA MODEL



वाचले.

- १) मा.आयुक्त यांचेकडील मंजूर प्रस्ताव दि.३०/१२/२०१०
- २) मा.स्थायी समिती सभा ठराव क्र. १२७२२ दि. २३/११/२०१०
- ३) मा.महापालिका सभा ठराव क्र. १०४० दि. २०/०१/२०११

सुधारीत आदेश

पिंपरी चिंचवड महानगरपालिका
पिंपरी ४११ ०१८
पर्यावरण अभियांत्रिकी कक्ष
जा.क्र.पअक/कावि/३२५ /२०११
दिनांक २९ /०९/२०११

विषय — पिंपरी चिंचवड महानगरपालिका गृहप्रकल्पांमध्ये ग्रीन बिल्डींग रेटिंग सिस्टिम राबविणेच्या धोरणाची अंमलबजावणी करणे.

संदर्भ — यापूर्वीचा आदेश क्रमांक जा.क्र/पअक/कावि/२०९/२०११ दि.२५/०७/२०११

पिंपरी चिंचवड महानगरपालिकाक्षेत्रात पर्यावरण संवर्धन व संरक्षणास चालना देणेचे दृष्टीने ग्रीन बिल्डींग रेटिंग सिस्टिम राबविणे विचाराधीन होते. भारत सरकारच्या नवीन आणि नवीकरणीय उर्जा मंत्रालय (MNRE) व TERI यांचे ADaRSH संस्थेमार्फत GRIHA ही “ ग्रीन रेटिंग सिस्टिम ” विकसित करणेत आली आहे. पर्यावरणपूरक इमारतींना प्रोत्साहन मिळणेच्या दृष्टीने पिंपरी चिंचवड महानगरपालिकेने GRIHA ची ग्रीन बिल्डींग रेटिंग सिस्टिम राबविण्याचे प्रस्तावास उपरोक्त वाचले क्र. १ नुसार मा. आयुक्त यांनी मान्यता दिलेली असून महानगरपालिकेच्या मा.स्थायी समिती व मा.महापालिका सभेने वाचले क्र. २ व ३ अन्वये मान्यता दिलेली आहे. सदरच्या धोरणाची अंमलबजावणी खालीलप्रमाणे करणेत येईल.

प्रथमतः विकसन कर्त्यांनी ग्रीन बिल्डींग प्रकल्प करण्याचे निश्चित केल्यानंतर म.न.पा.च्या “www.pcmcindia.gov.in” या वेब पोर्टलवर सुविधा दिलेनुसार GRIHA या संस्थेकडे नोंदणी (Registration) करावे लागेल. यासाठी आवश्यक ती नोंदणी फी GRIHA कडे भरावी लागेल. नोंदणी झालेनंतर GRIHA संस्थे मार्फत विकसनकर्त्याला आवश्यक ते सर्व मार्गदर्शन / ट्रेनिंग देणेत येईल.

त्यानंतर ग्रीन बिल्डींग बाबतचा सविस्तर प्रस्ताव योग्य त्या कागद पत्रासह बांधकाम परवानगीसाठी दोन प्रतीत पिंपरी चिंचवड महानगरपालिकेकडे सादर करावा लागेल.. यामधील एक प्रत बांधकाम परवानगी विभागाकडे देण्यात येईल व दुसरी प्रत पर्यावरण अभियांत्रिकी कक्षा मार्फत GRIHA या संस्थेकडे पुढील छाननी व तपासणीसाठी जाईल.

GRIHA या संस्थेमार्फत संपुर्ण प्रकल्पाची निर्धारित केलेल्या मानांकाप्रमाणे छाननी करून योग्य ते गुणांकन दिले जाईल.

प्राप्त गुणांकन नुसार योग्य ते स्टार रेटिंग देणेत येईल व मा. महापालिका सभेने मान्यता दिलेनुसार बांधकाम परवानगी देताना आकारण्यात येणा-या प्रिमियम मध्ये खालीलप्रमाणे सवलत देय राहील.



Incentives offered by PCMC to GRIHA Rated Projects

For Developers

- GRIHA 5 star: 50% rebate on Premium
- GRIHA 4 star: 40% rebate on Premium
- GRIHA 3 star: 30% rebate on Premium
- GRIHA 2 star: 20% rebate on Premium
- GRIHA 1 star: 10% rebate on Premium

For Occupiers

- 10-15% rebate on property tax

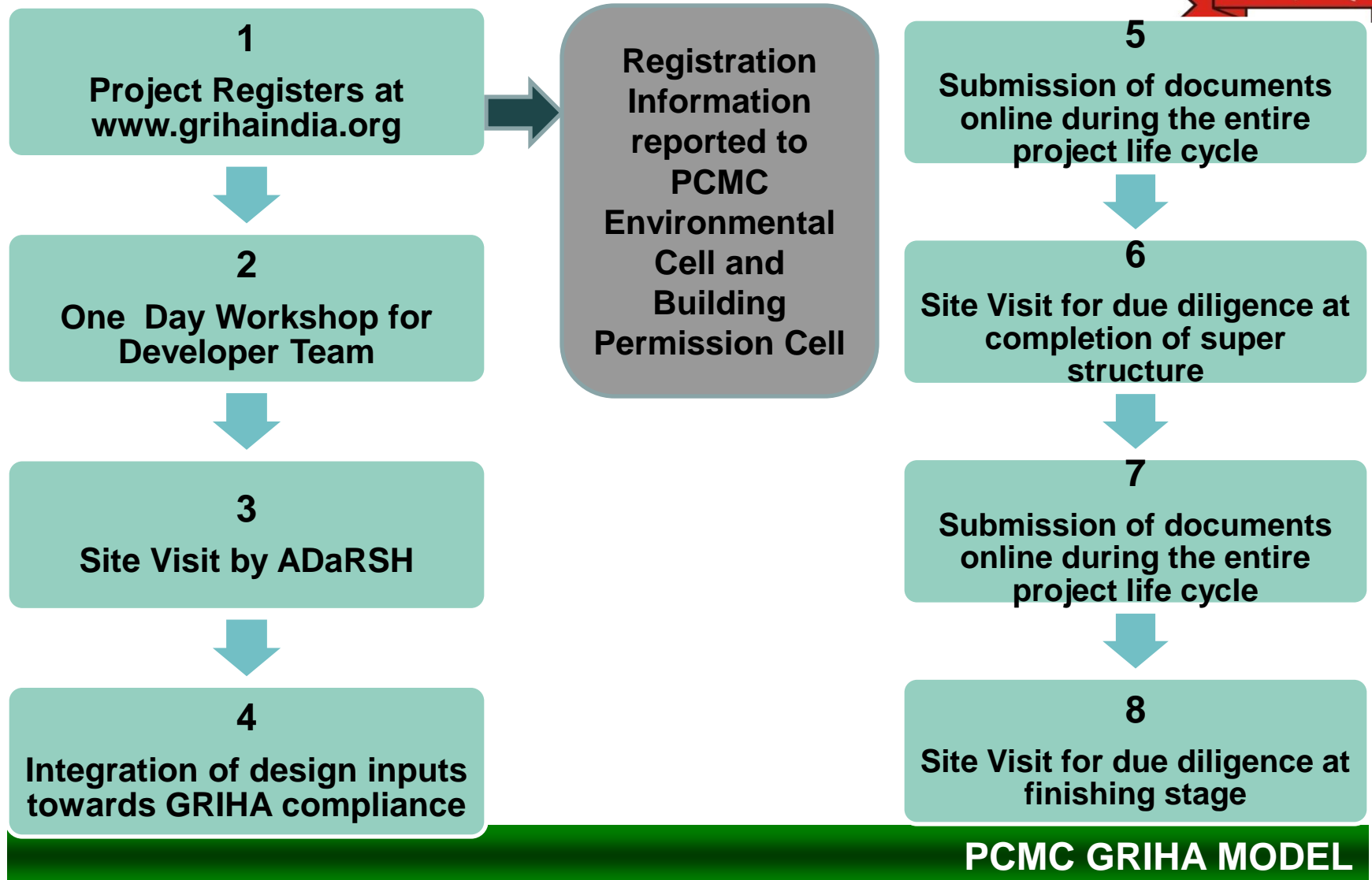
The Process



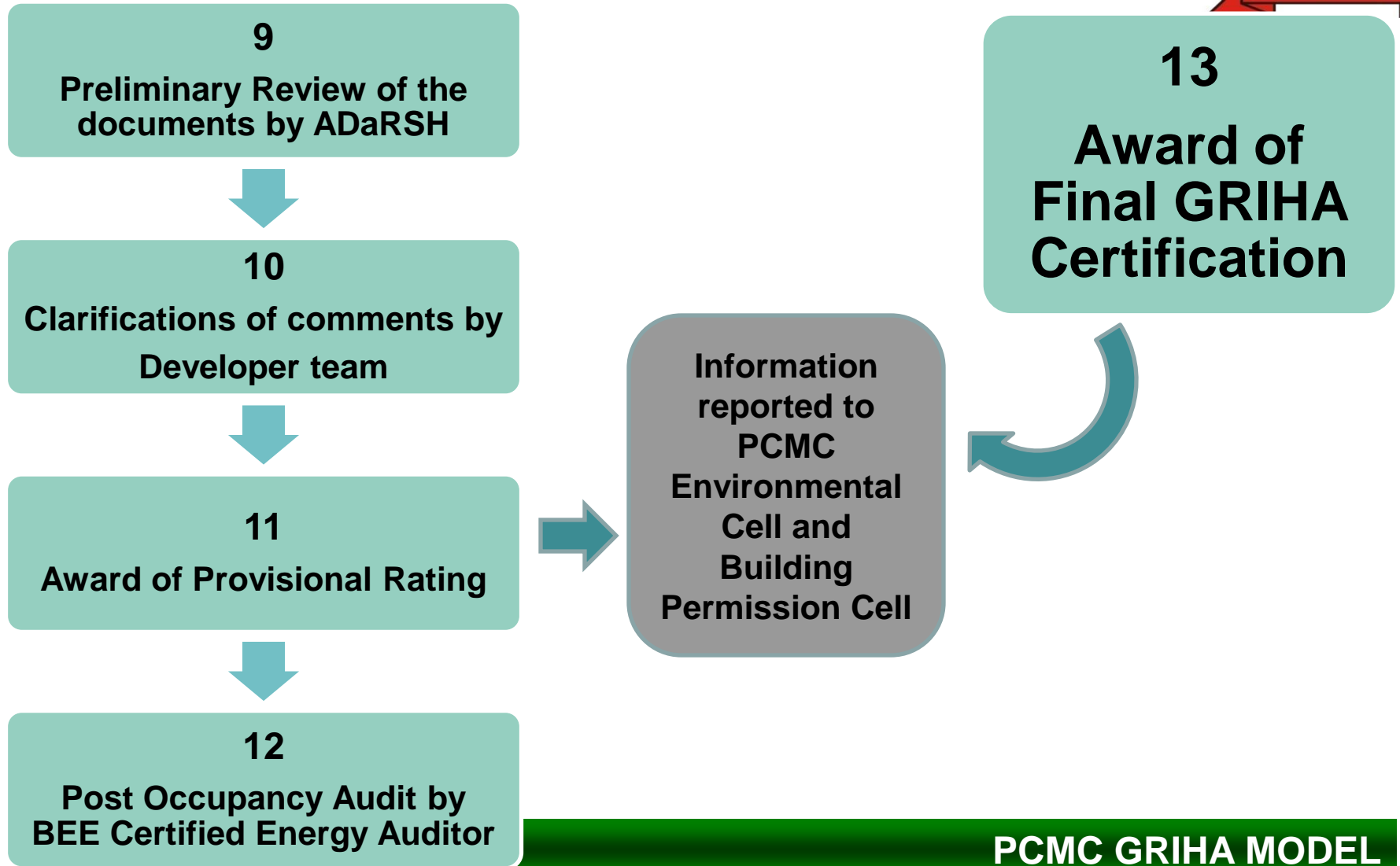
- Web link on PCMC Website under the Building Permission Department
- Acceptance of projects for GRIHA Certification



PCMC-GRIHA PROCCCESS

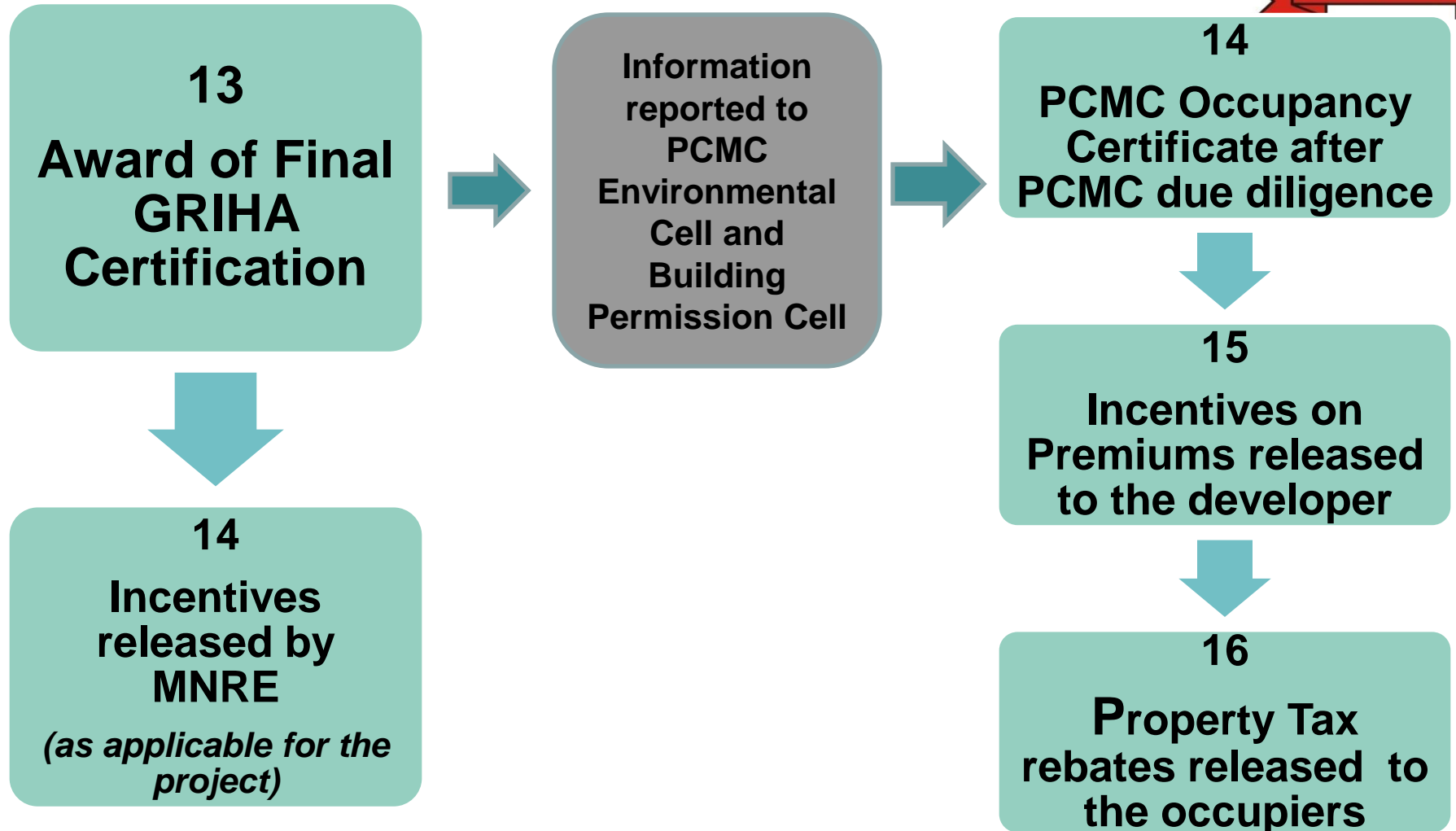


PCMC-GRIHA PROCCCESS



PCMC GRIHA MODEL

PCMC-GRIHA PROCCCESS



PCMC GRIHA MODEL



NEXT STEPS

- To conduct awareness programs to promote GRIHA Rating for projects in PCMC jurisdiction
- To make available the technical GRIHA criteria in an easy to understand, regional language
- To conduct advanced training programs for professionals
- To document best practices adopted by projects to achieve the intent of GRIHA Criteria
- To encourage the developers to adopt the GRIHA Criteria right at the conceptual level.
- To adopt the GRIHA Criteria for upcoming PCMC buildings



***Let us join hands to work towards
Sustainable Cities through promotion
of Green Buildings.***

Thank you

pkeshkar@sustainability-initiatives.org



PCMC GRIHA MODEL