



Decentralized waste-to-energy project in Naga City

Integrated resource management
using Nexus approach

Regional Workshop on Integrated Resource Management in Asian Cities
3-4 December 2013 | Bangkok, Thailand

Outline

- The setting
- Project planning (June 2013)
- Expert rapid field appraisal (Sept 2013)
- Challenges and opportunities

Context



- ❑ **Not centrally located**
 - ❑ 377 kms south of Manila (national capital), 380 kms north of Cebu (2nd biggest urban center)
- ❑ **The core of Metro Naga**
 - ❑ A fast-growing area comprised of 15 municipalities and Naga City belonging to Metro Naga Development Council (MNDC)
- ❑ **A small city**
 - ❑ 170,000+ population (2010 est.). 48.9% Male; 51.1% Female.
 - ❑ Daytime population of around 300-400,000

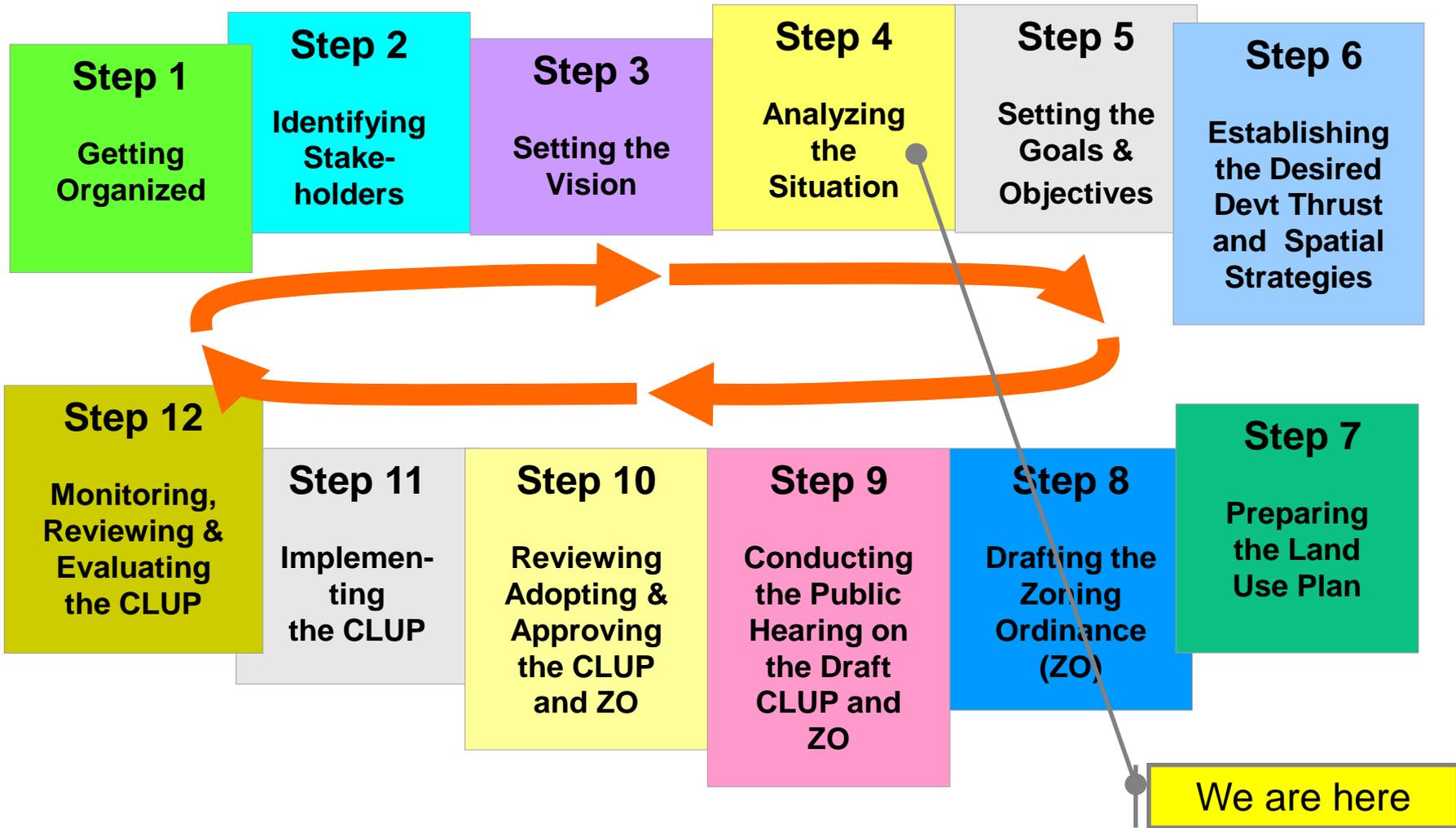
Potential Nexus projects

- Top priority
 - **Decentralized waste-to-energy project in Del Rosario, Naga City**
- Others
 - **Peri-urban farming, energy production linked to MNWD septage plant**
 - Applying integrated resource management (Nexus) principles in the 2016-30 Comprehensive Land Use Plan of Naga City

Project background:
Nexus-inspired CLUP

- Executive Order No. 2013-006 issued on Feb 20, 2013 initiated process of formulating successor land use plan for Naga
- Planning team has been organized
- Visioning workshop conducted last May 24, 2013
- Should be completed by end of 2014

Updating the CLUP



Project background:

Peri-urban farming + biogas

- Peri-urban farming linked to sludge treatment plant
 - Being established by the Metro Naga Water District (Naga City + 4 other adjacent towns)
 - Capacity of 56 cum per day
 - Explore possibility of generating energy, fertilizer from sludge

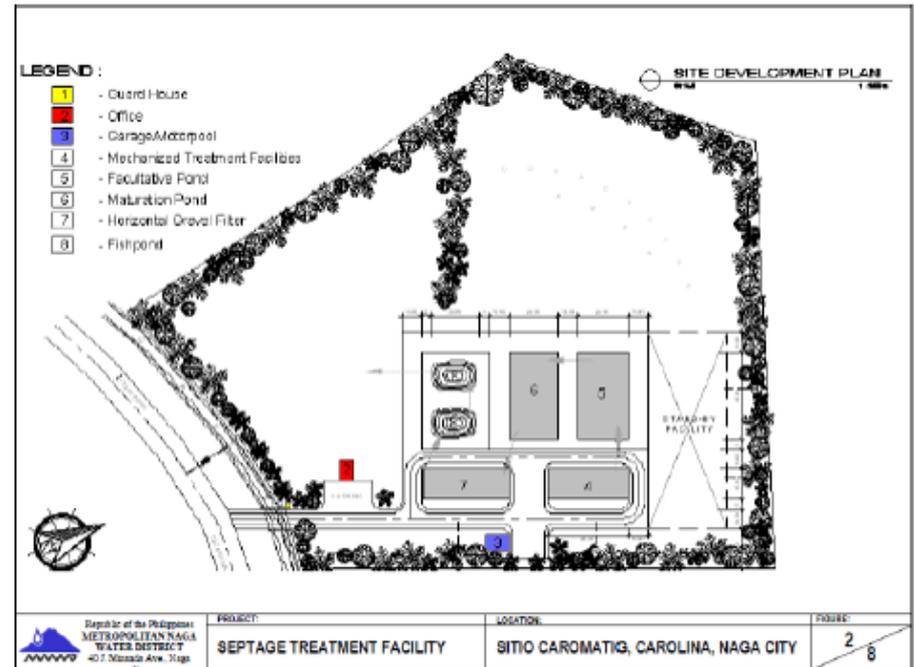


Figure 4.5: Layout of sludge treatment facility

Project goal

- Promote integrated resource management (“Nexus”) practices in Naga City
- Implement pilot decentralized waste-to-energy project/s in Naga City

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_5878

