



MANIPAL
UNIVERSITY JAIPUR

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GREEN CREDITS

Management



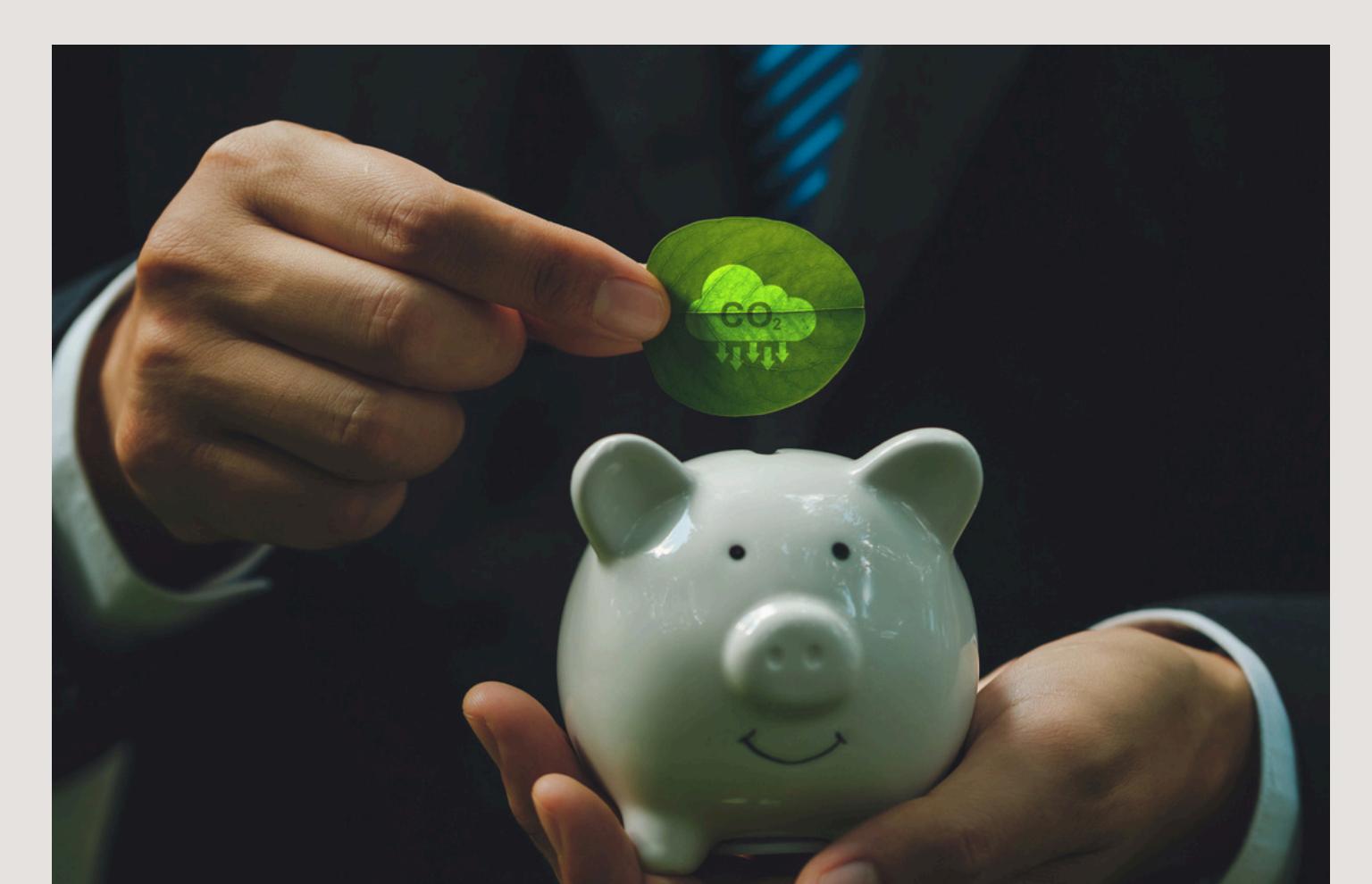
13 October

**MISSION LIFE – LIFESTYLE
FOR ENVIRONMENT**

COP 28

WHAT IS GREEN CREDITS

Green Credit refers to a unit of incentive provided to individuals and entities engaged in activities that deliver a positive impact on the environment. It is a voluntary program initiated by the government to incentivize various stakeholders in contributing to environmental preservation and sustainable practices.



PROBLEM STATEMENT

Our project aims to create a marketplace for Green Credits. We are developing a Green Credit Management System (GCMS), a web-based platform that creates a streamlined marketplace for green credits. GCMS will facilitate the registration, management, and secure trading of green credits, providing businesses with detailed analytics and reports. This solution will enhance transparency, ensure regulatory compliance, and encourage broader participation in sustainable practices, ultimately benefiting both businesses and the environment.

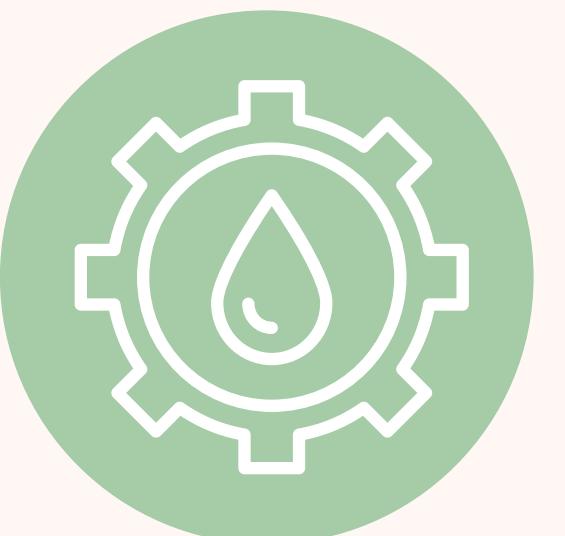


TREE
PLANTATION



MANGROVE
CONSERVATION

MEASURES TO EARN GREEN CREDITS



WATER
MANAGEMENT



SUSTAINABLE
AGRICULTURE



WASTE
MANAGEMENT



AIR POLLUTION
REDUCTION



SUSTAINABLE BUILDING
AND INFRASTRUCTURE

IMPORTANCE OF GREEN CREDIT

Green credits play a crucial role in promoting environmental sustainability by incentivizing positive environmental actions and providing tangible economic benefits to businesses. the involvement of two key entities -

- Gc owner
- Gc buyer

This collaboration between plantation owners and construction companies not only promotes sustainable practices but also creates a symbiotic relationship where both parties benefit economically and environmentally.

Green Credit (GC) Owner:

- Earns 1 GC per tree planted, showing commitment to sustainability.
- Tree planting benefits environment by reducing carbon footprints and enhancing biodiversity.
- Economic Benefits:
 - Tax Subsidies: Reduce tax burden for sustainable practices.
 - Cheaper Loans: Financial incentives for green initiatives with lower interest rates.

Construction companies can compensate for tree cutting by purchasing green credits from local plantation owners, saving time on environmental compliance and promoting sustainable development.

OVERVIEW OF OUR PROJECT

Objectives of Green Credit Management by CodeCatalysts

- **Promote Sustainable Practices:**
 - Facilitate green credit trading between plantation owners and buyers.
- **Simplify Processes:**
 - **Registration:** Easy sign-up for both GC appliciers and buyers.
 - **Trading:** Efficiently connect GC owners with buyers.
 - **Verification:** Ensure the authenticity of green credits.

Key Features:

- User registration for both GC appliciers and buyers.
- Secure login for account safety.
- Trading dashboard for managing and trading GCs.
- Verification requests for GC appliciers.
- Wallet management for tracking credits and transactions.
- City-based matching for localized trading

PROBLEMS IDENTIFIED

Creating Demand
Fear of Failure & Collapsing
Risk of Greenwashing
Verification and Validation Complexity
Compatibility with Carbon Credits
Accounting for Regional Differences
Green Credit Mechanism Approach

SOLUTIONS

to problems identified



CREATING DEMAND

1. Educational campaign and public awareness events
2. Partnerships with business and public awareness events



RISK OF GREEN-WASHING

1. Collaboration with NGOs and civil society
2. Geotagged photo and registry of the land
3. Audits and Compliance Checks



REGIONAL DIFFERENCES

Checking Parameters:

- Depending on the air quality
- Green area
- Water pollution

SNIPPETS OF OUR CODE

```
include('includes/db.php');

if($_SERVER['REQUEST_METHOD'] == 'POST'){
    $username = $_POST['username'];
    $password = password_hash($_POST['password'], PASSWORD_DEFAULT);
    $email = $_POST['email'];
    $trees_planted = $_POST['trees_planted'];
    $gc_left = $_POST['gc_left'];
    $city = $_POST['city'];
    $plantation_size = $_POST['plantation_size'];
    $gc_cost = $_POST['gc_cost'];

    $stmt = $conn->prepare("INSERT INTO users (username, password, email, trees_planted, gc_left, city, plantation_size, gc_cost) VALUES (?, ?, ?, ?, ?, ?, ?, ?)");
    $stmt->bind_param("ssssssss", $username, $password, $email, $trees_planted, $gc_left, $city, $plantation_size, $gc_cost);
    $stmt->execute();
}
```

```
<!DOCTYPE html>
<html charset="UTF-8">
<head>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Trade - Green Credit Applier</title>
    <link rel="stylesheet" href="css/styles.css">
</head>
<body>
    <div class="container">
        <h1>Green Credit Applier Trade Page</h1>
        <p>Username: <?php echo $username; ?><br/>
        <p>Wallet Balance: $<?php echo $wallet; ?><br/>
        <p>Plantation Size: <?php echo $plantation_size; ?><br/>
        <p>Number of Trees Planted: <?php echo $trees_planted; ?><br/>
        <p>Green Credits Cost: $<?php echo $gc_cost; ?><br/>
        <p>Green Credits Left: <?php echo $gc_left; ?><br/>
        <a href="verify.php">Apply for Verification</a>
        <a href="withdraw.php">Withdraw</a>
    </div>
</body>
</html>
```

```
if($_POST['user_id']) || $_POST['action'] == 'login') {
    include('includes/db.php');

    if($_SERVER['REQUEST_METHOD'] == 'POST') {
        // Logic to handle verification request, e.g., send verification code
        $message = "Verification request sent.";
        header("Location: trade_applier.php?message=" . urlencode($message));
        exit();
    }
}
```



Green Credits

THANKING YOU

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